



Missouri Department of Natural Resources
Air Pollution Control Program

PART 70

PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2013-025
Expiration Date: APR 23 2018
Installation ID: 510-0096
Project Number: 2006-12-070

Installation Name and Address

Elantas PDG, Inc.
5200 North Second Street
St. Louis, MO 63147

Parent Company's Name and Address

Altana AG
Abelstr. 45
46483 Wesel, Germany

Installation Description:

Elantas PDG develops and manufactures specialty polymers for application in the electrical and electronic industries. These polymers are used as electrical insulation in various household appliances, heavy-duty electrical equipment, and for automotive applications. The facility is located in north St. Louis City. The potential to emit of this facility exceeds the Part 70 Installation thresholds for oxides of nitrogen, volatile organic compounds and hazard air pollutants.

APR 24 2013

Effective Date

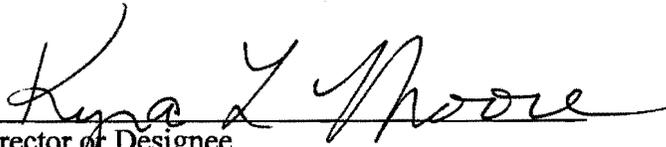

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

The Elantas PDG, Inc. facility located in north St. Louis, Missouri, manufactures specialty polymers and coatings for the electrical and electronics industry, including wire varnish, wire enamel, and potting compounds.

Reported Air Pollutant Emissions, tons per year¹					
Pollutants	2011	2010	2009	2008	2007
Particulate Matter ≤ Ten Microns (PM ₁₀)	0.4	0.3	1.1	1.4	2.2
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	0.4	0.3	1.1	1.4	2.2
Sulfur Oxides (SO _x)	0.0	0.2	0.0	0.0	0.0
Nitrogen Oxides (NO _x)	5.4	3.7	3.9	4.7	4.8
Volatile Organic Compounds(VOC)	7.0	9.5	7.3	38.3	45.2
Carbon Monoxide (CO)	4.0	3.1	3.0	3.7	3.9
Lead (Pb)	-- ²	--	--	--	--
Hazardous Air Pollutants (HAPs) ³	0.0	0.0	0.0	0.0	0.0
Ammonia (NH ₃)	0.1	0.1	0.1	0.3	0.3

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emit air pollutants and that are identified as having unit-specific emission limitations.

ID	Location	Unit Description
RX1	B3900	Dry Loading Station 1; Resin Reactor
RX2	B3900	Dry Loading Station 1; Resin Reactor 2
RX5	B3900	Dry Loading Station 1; Resin Reactor 5
T1	B3900	Process Tank 1

¹ All values rounded to one decimal digit.

² "--" indicates that the value was below the threshold, undetectable or otherwise not reported.

³ Some HAPs may be reported as PM₁₀ or VOC.

ID	Location	Unit Description
T2	B3900	Process Tank 2
T3	B3900	Process Tank 3
T4	B3900	Process Tank 4
T24	B5100	Process Tank 24
T14	B3900	Process Tank 14
T15	B3900	Process Tank 15
T16	B3900	Process Tank 16
T5	B3900	Process Tank 5
T6	B3900	Process Tank 6
T7	B3900	Process Tank 7
T9	B3900	Process Tank 9
T11	B3900	Process Tank 11
T12	B3900	Process Tank 12
T13	B3900	Process Tank 13
T10	B3900	Process Tank 10
T22	B3900	Process Tank 22
T26	L2500	Process Tank 26
T29	L2500	Process Tank 29
T27	L2500	Storage Tank
T320	B3900	Storage Tank 320
T337	L2500	Storage Tank
T338	L2500	Storage Tank
T339	L2500	Storage Tank
T31	B5100	Process Tank 31
T32	B5100	Process Tank 32
RX6	B5100	Resin Reactor 6
RX7	B5100	Resin Reactor 7
T36	B5100	Overflow Tank
T325	B3900	Storage Tank 325
T301	B3000	Storage Tank 301
T305	B3000	Storage Tank 305
T306	B3000	Storage Tank 306
T307	B3000	Storage Tank 307
T308	B3000	Storage Tank 308
T309	B3000	Storage Tank 309

ID	Location	Unit Description
T310	B3000	Storage Tank 310
T311	B3000	Storage Tank 311
T312	B3000	Storage Tank 312
T313	B3000	Storage Tank 313
T44	B3900	Overflow Tank
RX3	B4100	Pilot Plant Reactor P-1
T701	B4100	Process Tank 701
T702	B4100	Process Tank 702
T6501	B6500	Process Tank
T6502	B6500	Process Tank
T6503	B6500	Process Tank
T6504	B6500	Process Tank
T6505	B6500	Process Tank
T6506	B6500	Process Tank
T6507	B6500	Process Tank
T6508	B6500	Process Tank
T6509	B6500	Process Tank
T6510	B6500	Process Tank
T6511	B6500	Process Tank
T6512	B6500	Process Tank
T6513	B6500	Process Tank
T6514	B6500	Process Tank
T6515	B6500	Process Tank
T6516	B6500	Process Tank
F Steam Boiler	B4100	Steam Boiler 41 (aka F)
R2 Therminol Burner	B3900	Therminol Burner R2
Therminol Burner for Bldg. 51	L2500	Therminol Burner 51
Boiler 56-01	B5600	Burnham Steam Boiler 25; AKA Boiler 56
Boiler 56-02	B5600	Cleaver-Brooks boiler, 12.25 MMBtu per hour natural gas or fuel oil boiler when NG curtailed
Building 39/51 Cooling Tower	B3900	Therminol cooling tower
T61	TF51	Storage Tank 61
T62	TF51	Storage Tank 62
T63	TF51	Storage Tank 63
T64	TF51	Storage Tank 64

ID	Location	Unit Description
T66	TF51	Storage Tank 66
T67	TF51	Storage Tank 67
T68	TF51	Storage Tank 68
T69	TF51	Storage Tank 69
T70	TF51	Storage Tank 70
T71	TF51	Storage Tank 71
T72	TF51	Storage Tank 72
T73	TF51	Storage Tank 73
T74	TF51	Storage Tank 74
T75	TF51	Storage Tank 75
T76	TF51	Storage Tank 76
T77	TF51	Storage Tank 77
T78	TF51	Storage Tank 78
T79	TF51	Storage Tank 79
T80	TF51	Storage Tank 80
T81	TF51	Storage Tank 81
T82	TF51	Storage Tank 82
T83	TF51	Storage Tank 83
T84	TF51	Storage Tank 84
T85	TF51	Storage Tank 85
T86	TF51	Storage Tank 86
T87	TF51	Storage Tank 87
T88	TF51	Storage Tank 88
T89	TF51	Storage Tank 89
T90	TF51	Storage Tank 90
T91	TF51	Storage Tank 91
T92	TF51	Storage Tank 92
T200	TF53	Storage Tank 200
T201	TF53	Storage Tank 201
T202	TF53	Storage Tank 202
T203	TF53	Storage Tank 203
T204	TF53	Storage Tank 90
T205	TF53	Storage Tank 205
T206	TF53	Storage Tank 206
T208	TF53	Storage Tank 208

ID	Location	Unit Description
T209	TF53	Storage Tank 209
T210	TF53	Storage Tank 210
T213	TF53	Storage Tank 213
T214	TF53	Storage Tank 214
T216	TF53	Storage Tank 216
Ribbon Mixer	B4500	Ribbon Mixer (500 Gallon)
Cowles Mixer 45-1	B4500	Cowles Mixer
Cowles Mixer 45-2	B4500	Cowles Mixer
DA600 Mixer	B4500	Deaerating Mixer
DA-110 mixer	B4500	Deaerating Mixer
DA-350 mixer	B4500	Deaerating Mixer
QS 800 Mixer	B4500	Deaerating Mixer
DA900 Mixer	B4500	Mixer
EM600 Mixer	B4500	Mixer
T481	B4500	Process Tank
T484	B4500	Process Tank
T408	B4500	Storage Tank
T409	B4500	Storage Tank
Large Dough Mixer	B4600	Mixer
Cowles Mixer 1	B4600	Mixer
Cowles Mixer 3	B4600	Mixer
Cowles Mixer 6	B4600	Mixer
RTO	L2500	Regenerative Thermal Oxidizer
B39 Emergency Generator	B5600	Emergency Generator
B51 Emergency Generator	L3000	Emergency Generator
Cold Parts Cleaners	Various	Parts Washer
ETO	B6600	RCRA Resource Recovery Unit: Evaporative Thermal Oxidizer

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Unit Description
Refrigerant Units (Comfort Heaters/Coolers)
Fuel Oil Tank (for use in boilers)
Process Tank 420 (Abandoned in Place)
Process Tank 421 (Abandoned in Place)
Process Tank 423 (Abandoned in Place)
Process Tank 424 (Abandoned in Place)
Mill 5 (Kady Mill) (Abandoned in Place)
Storage tank 60A, B1400, 200 gallon, gasoline
Steam Boiler 46 (a.k.a. 28) (Abandoned in Place)
Building 45 Mixers (2) (All emissions are fugitive)
Building 45 Electric Mixer (Non-VOC & non-HAP, < 250 gal capacity)
Building 45 Air Mixer (Non-VOC & non-HAP, < 250 gal capacity)
Building 46 Filling Stall (Non-VOC & non-HAP, < 250 gal capacity)
Barnstead/Thermolyne Pyro Clean Pyrolyzer – B1000
20-25 various small ovens – B1000
Pilot Plant Reactor –B1000
Fuel Oil Tank – B5600
Pilot Plant Cooling Tower – B4100
B10/B11 Cooling Tower – L0200
Cowles Mixer 5, B4600, Mixer (AIP)
Small Cowles Mixer – B3400
Mortar Mixers, B4500, two (2) at 80 gallon each
Big Cowles Mixer, B3400, Sheer Dispenser (55 Gallon)
Hobart Mixer 1, B3400, Hobart Mixer (15 Gallon)
Hobart Mixer 2, B3400, Hobart Mixer (15 Gallon)
Shar Mixer – B3400 – sheer dispenser, 5 gal
Kitchen Aid Mixer – B3400 – drum mixer, 5 gal
Air Mixer - Cell – B3400
Vacuum Tank – B3400
Drum Air Mixer – Repack – B3300
Tote Air Mixer – Repack – B3300
Compactor South - B1400 - Bag Compactor 1

Unit Description
Compactor North - B2100 - Bag Compactor 2
T46, B2600, RCRA Storage Tank
S & W Mill 200, B4500, Two Mills (S&W 12) (Abandoned in Place)
T483, B4500, Process Tank
T2400, B4500, Process Tank
T2401, B4500, Process Tank
Small Dough Mixer, B4600, Mixer
Cowles Mixer 2, B4600, Mixer (Abandoned in Place)
R&D Wire Coating Oven, B1000, R&D Wire Coating Oven
R&D Wire Coating Tower, B1000, R&D Wire Coating Tower
Aumann DLH 280 Wire Coating Machine, B1000, R&D Wire Coating Oven
Building 39 Heat Exchange Cooling Tower, B3900, Cooling water for condensers
T65, TF51, Storage Tank 65
T207, TF53, Storage Tank 207
T60A, B1400, Gasoline Storage Tank
Diesel Tank, B1400, Storage Tank (Diesel fuel 2)
T417, B4500, Storage Tanks
T418, B4500, Storage Tanks
Meyers Mixer 750, B4600, Twin Shaft Mixer (AIP)
Meyers Mixer 1200, B4600, Twin Shaft Mixer (AIP)
Kady Mill 6, B4600, 125 gal Mill (AIP)
Pebble Ball Mill 18, B4600, Mill
Pebble Ball Mill 1, B4600, Mill
Cowles Mixer 5, B4600, Mixer (Abandoned in Place)
S & W Mill 100, B4500, Two Mills (S&W 11) (Abandoned in Place)
Storage Tank 34, B5100, 1,000 Gallon

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) 94-09-089
- 2) 94-11-132→135R1
- 3) 97-06-066SC
- 4) 97-07-077A
- 5) 98-01-004SC
- 6) 98-07-039SC

- 7) 10-20-99 Settlement Agreement
- 8) 00-04-018PM
- 9) 01-11-034
- 10) 03-09-017PM
- 11) 04-04-007
- 12) 1/7/2005 Letter (RE: Permit No. 04-04-007)
- 13) 04-12-024
- 14) 04-12-025
- 15) 04-04-007PM, 04-12-024PM, and 04-12-025PM
- 16) 06-01-001
- 17) 042007-012
- 18) 07-12-027 (also related letter received by STLAPCP 9/11/2008 Subject: Minor Change to Permit to Construct 07-12-027 – Tank Numbers)
- 19) 08-03-005
- 20) Permit Matter 09-05-012
- 21) Construction Permit 122011-010,
- 22) The permittee's written inspection procedures.
- 23) Resource Recovery Certification RR0075, Classification U, issued to Elantas PDG, Incorporated, dated June 18, 2010, signed by Richard A. Nussbaum, P.E., R.G., Chief, Permits Section, Missouri Department of Natural Resources, Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65102-0176

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

The following requirements apply to *all conditions* in this permit, unless otherwise noted.

Monitoring:

The permittee shall calibrate, maintain and operate all instruments and control equipment according to the manufacturer's recommendations or according to good engineering practices.

Recordkeeping:

The permittee shall record all required recordkeeping (i.e. inspections and corrective actions) in an appropriate format. Records may be kept electronically using database or workbook systems, as long as all required information is readily available for compliance determinations. The permittee's written inspection procedures shall be made available to department personnel upon request.

Reporting⁴:

- 1) The permittee shall report any exceedance of any of the terms imposed by this permit, or any malfunction which could cause an exceedance of any of the terms imposed by this permit, no later than ten (10) days after the exceedance or event causing the exceedance (unless otherwise specified in the specific condition), to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102
- 2) The permittee shall submit an annual certification⁵ that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. These certifications shall be submitted annually by **April 1st**, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to Environmental Protection Agency, Region 7, 11201 Renner Boulevard, Lenexa, KS 66219 and the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.

Permit Condition PW001

10 CSR 10-6.400

Control of Emission of Particulate Matter From Industrial Processes

Operational Limitation/Equipment Specifications:

The permittee shall conduct good operating, inspection, and maintenance practices on all sources of particulate matter and any associated control devices. All control devices must be in operation whenever the emission unit is in use.

Recordkeeping:

The permittee shall maintain a record of the inspections, including date, time of observation and description of any corrective action required or performed. Attachment D contains a log that may be used for these recordkeeping requirements. This log or an equivalent log created by the permittee must be used to certify compliance with this requirement.

⁴ Refer to General Permit Requirements, 10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements, page 55, for additional details, including semi-annual reporting of monitoring data.

⁵ Refer to General Permit Requirements, 10 CSR 10-6.065(6)(C)3 Compliance Requirements, page 57, for more details.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

Visible Emission Sources
Description
All sources of visible emissions

Permit Condition 1 Visible Emission Sources 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants 10 CSR 10-6.060 Construction Permits Required Permit 04-12-025 and 04-12-025PM

Emission Limitations:

The permittee shall not discharge into the ambient air from any source, not exempted under 10 CSR 10-6.220, any air contaminant of opacity greater than twenty (20%) percent. A source with a 20% opacity limit may emit air contaminants with opacity over 20%, but not greater than 40% for an aggregate length of time not to exceed six (6) minutes in any 60 minutes. Where the presence of uncombined water is the only reason for failure of an emission to meet the opacity requirements, the opacity requirements shall not apply.

Monitoring / Recordkeeping:

The permittee will follow the monitoring and recordkeeping requirements listed in Core Permit Requirements for 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants, starting on page 50.

Thermal Oxidizer Group		
ID	Description	Location
RTO	Regenerative thermal oxidizer control device; final discharge point to the atmosphere for all units; (Fusion Environmental, Model 206, 2.44 MMBtu/hr., 6,000 scfm)	L2500
RX1	Resin Reactor 1 ⁶	B3900
RX2	Resin Reactor 2	B3900
RX5	Resin Reactor 5	B3900
T1 A	Process Tank 1	B3900
T2 A	Process Tank 2	B3900
T3 A	Process Tank 3	B3900
T4 A	Process Tank 4	B3900
T14	Process Tank 14	B3900
T15	Process Tank 15	B3900
T16	Process Tank 16	B3900
T5	Process Tank 5	B3900

⁶ Dry loading to reactors is noted as a separate particulate source of emissions that is not vented to the RTO, but is captured and controlled through baghouses. Please refer to the *Dry Loading Group*.

Thermal Oxidizer Group		
ID	Description	Location
T6	Process Tank 6	B3900
T7	Process Tank 7	B3900
T9	Process Tank 9	B3900
T11	Process Tank 11	B3900
T12	Process Tank 12	B3900
T13	Process Tank 13	B3900
T10	Process Tank 10	B3900
T22	Process Tank 22	B3900
T24	Process Tank 24	B5100
T26	Process Tank 26	L2500
T31	Process Tank 31	B5100
T32	Process Tank 32	B5100
RX6	Resin Reactor 6	B5100
RX7	Resin Reactor 7	B5100
T44	Overflow Tank	B3900
T6501	Process Tank ⁷	B6500
T6502	Process Tank	B6500
T6503	Process Tank	B6500
T6504	Process Tank	B6500
T6505	Process Tank	B6500
T6506	Process Tank	B6500
T6507	Process Tank	B6500
T6508	Process Tank	B6500
T6510	Process Tank	B6500
T6511	Process Tank	B6500
T6512	Process Tank	B6500
T6513	Process Tank	B6500
T6514	Process Tank	B6500
T6515	Process Tank	B6500
T6516	Process Tank	B6500

Permit Condition 1

RX1, RX2, RX5, T1, T2, T3, T4, T14, T15, T16, T5, T6, T7, T9, T11, T12, T13, T10, T22, T26, T31, T32,
 RX6, RX7, T44

10 CSR 10-6.060 Construction Permits Required Permit 05-11-011

10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and
 Other Allied Surface Coating Products⁸

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart A General Provisions and Subpart FFFF National Emission Standards for Hazardous
 Air Pollutants: Miscellaneous Organic Chemical Manufacturing

⁷ Dry loading to process tanks 6501 through 6516 is a separate source of particulate emissions that do not go through the RTO and are listed in a separate emission unit group. Please refer to the *Dry Loading Group*.

⁸ The requirements of 10 CSR 10-5.390 are less stringent than the requirements of 40 CFR Part 63 Subpart FFFF. The department considers compliance with 40 CFR Part 63 Subpart FFFF as compliance with 10 CSR 10-5.390.

Emission Limitations:

- (1) The exhaust streams of units RX1, RX2, RX5, T1, T2, T3, T4, T14, T15, T16, T5, T6, T7, T9, T11, T12, T13, T10, T22, T26, T31, T32, RX6, RX7, T44 shall be vented to the thermal oxidizer (RTO) at all times except during start-up, shut down, and malfunction.
- (2) The permittee must reduce collective uncontrolled organic HAP emissions from units RX1, RX2, RX5, T1, T2, T3, T4, T14, T15, T16, T5, T6, T7, T9, T11, T12, T13, T10, T22, T26, T31, T32, RX6, RX7, T44 by $\geq 98\%$ by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices.
- (3) The oxidizer's **Average Chamber Temperature** shall not operate at a temperature less than 1600 degrees Fahrenheit averaged over a block one-hour period (i.e. 12:00AM to 01:00AM, 01:00 to 02:00AM, etc. represent block one-hour periods). The oxidizer's **Average Chamber Temperature** consists of the sum of the two (2) combustion chamber temperatures divided by two (2). A block one-hour period would be the sum of sixty (60) one-minute oxidizer's **Average Chamber Temperatures** divided by sixty (60)⁹.

Monitoring:

- (1) The oxidizer's **Average Chamber Temperature** shall be continuously monitored.
- (2) The oxidizer shall be inspected periodically during preventive maintenance according to the permittee's written inspection procedures, to verify proper function when the associated equipment is in operation.
- (3) The permittee shall conduct a performance test on the oxidizer every five years to verify control efficiency using the methodologies set forth in 40 CFR Part 60 Appendix A, Methods 1 through 4 and 25A.

Recordkeeping:

- (1) The permittee shall record the **Average Chamber Temperature** no less frequent than every 15 minutes. Samples of the recordkeeping format are provided in Attachment J.
- (2) The permittee shall maintain operating and maintenance records for the oxidizer using Attachment D (or its equivalent) which records the following:
 - (A) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - (B) Maintenance activities, with inspection schedule, repair actions, and replacements or additions of components.

⁹ A valid one-hour period consists of no fewer than forty (40) **Average Chamber Temperatures**. The average value would then be the sum of the one-hour **Average Chamber Temperatures** divided by the number of one-hour **Average Chamber Temperatures**.

Permit Condition 2

T6501, T6502, T6503, T6504, T6505, T6506, T6507, T6508, T6510, T6511, T6512, T6513, T6514, T6515, T6516

10 CSR 10-6.060 Construction Permits Required Permit 05-11-011

10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products¹⁰

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Emission Limitations:

- (1) The exhaust streams of units T6501, T6502, T6503, T6504, T6505, T6506, T6507, T6508, T6510, T6511, T6512, T6513, T6514, T6515, T6516 shall be vented to the thermal oxidizer (RTO) at all times except during start-up, shut down, and malfunction.
- (2) The permittee must reduce collective uncontrolled organic HAP emissions from units T6501, T6502, T6503, T6504, T6505, T6506, T6507, T6508, T6510, T6511, T6512, T6513, T6514, T6515, T6516 by $\geq 75\%$ by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices.
- (3) The oxidizer's **Average Chamber Temperature** shall not operate at a temperature less than 1600 degrees Fahrenheit averaged over a block one-hour period (i.e. 12:00AM to 01:00AM, 01:00 to 02:00AM, etc. represent block one-hour periods).

Monitoring:

- (1) The oxidizer's **Average Chamber Temperature** shall be continuously monitored.
- (2) The oxidizer shall be inspected periodically during preventive maintenance according to the permittee's written inspection procedures, to verify proper function when the associated equipment is in operation.
- (3) The permittee shall conduct a performance test on the oxidizer every five years to verify control efficiency using the methodologies set forth in 40 CFR Part 60 Appendix A, Methods 1 through 4 and 25A.

Recordkeeping:

- (1) The permittee shall record the **Average Chamber Temperature** no less frequent than every 15 minutes. The oxidizer's **Average Chamber Temperature** consists of the sum of the two (2) combustion chamber temperatures divided by two (2). A block one-hour period would be the sum of sixty (60) one-minute oxidizer's **Average Chamber Temperatures** divided by sixty (60)¹¹. Samples of the recordkeeping format are provided in Attachment J.
- (2) The permittee shall maintain operating and maintenance records for the oxidizer using Attachment D (or its equivalent) which records the following:
 - (A) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - (B) Maintenance activities, with inspection schedule, repair actions, and replacements or additions of components.

¹⁰ The requirements of 10 CSR 10-5.390 are less stringent than the requirements of 40 CFR Part 63 Subpart HHHHH. The department considers compliance with 40 CFR Part 63 Subpart HHHHH as compliance with 10 CSR 10-5.390.

¹¹ A valid one-hour period consists of no fewer than forty (40) minutes of **Average Chamber Temperatures** (for example, that would be at least three (3) 15-minute readings). The average value would then be the sum of the one-hour **Average Chamber Temperatures** divided by the number of one-hour **Average Chamber Temperatures**.

Dry Loading			
Emission Unit	Description	Control Devices	Location
RX1	Dry loading to Resin Reactor 1	BH-39-01	B3900
RX2	Dry loading to Resin Reactor 2	BH-39-01	B3900
RX5	Dry loading to Resin Reactor 5	BH-39-02	B3900
RX6	Dry loading to Resin Reactor 6	BH-51-01	B5100
RX7	Dry loading to Resin Reactor 7	BH-51-01	B5100
T6511	Dry loading to Process Tank 6511	BH-65-01	B6500
T6512	Dry loading to Process Tank 6512	BH-65-01	B6500
T6513	Dry loading to Process Tank 6513	BH-65-01	B6500
T6514	Dry loading to Process Tank 6514	BH-65-01	B6500
T6515	Dry loading to Process Tank 6515	BH-65-01	B6500
T6516	Dry loading to Process Tank 6516	BH-65-01	B6500

Permit Condition 1 RX1, RX2, RX5, RX6, RX7 10 CSR 10-6.400 Control of Emission of Particulate Matter From Industrial Processes
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Emission Limitation:

The permittee shall operate the fabric filters or baghouses whenever the associated emission units are operating.¹²

Monitoring / Recordkeeping:

The permittee shall keep maintenance logs, using Attachment D (or its equivalent), which shall include the following:

- (1) Incidents of malfunction with impact on emissions, duration of event, probable cause, and corrective action.
- (2) Maintenance activities, inspection schedule, repair actions, and replacements, etc.

Permit Condition 2 T6511, T6512, T6513, T6514, T6515, T6516 10 CSR 10-6.060 Construction Permits Required Permit 07-12-027
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Emission Limitations:

- (1) The permittee shall operate BH-65-01 and it shall receive the vent streams from T6511, T6512, T6513, T6514, T6515 and T6516 during the addition of solid raw materials to ensure proper control of PM₁₀.
- (2) Replacement filters/bags/cartridges shall be kept on hand at all times to replace defective filters/bags/cartridges (the filters/bags/cartridges shall be made of materials appropriate for the operating conditions expected to occur).

Monitoring:

- (1) The operator(s) shall conduct and document inspections and maintenance of the Dust Collector for structural component failures, for leaks and wear, and for the cleaning sequence of the baghouse every six months.

¹² For some of the emission units, this emission limit establishes a federal requirement for the control device and thus provides an exemption from the pound per hour limit.

- (2) The permittee shall install instruments to monitor the operating pressure drop across the Dust Collector. All instruments and control equipment shall be calibrated, maintained, and operated according to the manufacturer's preventive maintenance recommendations. The operator(s) shall check and record the pressure drop across the dust collector filter once per operating week during solid materials loading according to the permittee's regular baghouse maintenance procedures. BH-65-01 operating pressure drop shall be maintained between one (1) and six (6) inches of water column. A pressure drop reading of less than one inch may be observed for the eight (8) operating hours after commencing operation following the installation of a new bag.

Recordkeeping:

- (1) The permittee shall keep maintenance logs of all inspections, corrective actions, filter/cartridge/bag changes, and instrument calibrations pertaining to BH-65-01, using Attachment D (or its equivalent).
- (2) The permittee shall record pressure drop readings once weekly on BH-65-01 during solid materials loading, using Attachment F (or its equivalent). If no solid materials are loaded on any day it shall be noted on the record as the reason no pressure drop was taken, using Attachment F (or its equivalent).

Permit Condition 3

RX6 & RX7

10 CSR 10-6.060 Construction Permits Required Permit 04-12-025 and 04-12-025PM

Emission Limitations:

- (1) The permittee shall ensure that BH-51-01 is in operation while material is being added to reactor RX6 or RX7.
- (2) BH-51-01 shall be maintained such that the pressure drop remains in the normal operating range (1 to 6 inches of water), whenever the emission unit is in operation. A pressure drop reading of less than one inch may be observed for the eight (8) hours after commencing operation following the installation of a new bag.
- (3) If the pressure drop falls out of the normal operating range, corrective action shall be taken within eight (8) hours to return the pressure drop to normal.
- (4) If leaks or abnormal conditions are detected the appropriate measures for remediation shall be implemented within eight (8) hours.

Monitoring:

- (1) BH-51-01 pressure drop shall be checked and documented weekly.
- (2) Check and document the cleaning sequence of BH-51-01 semi-annually.
- (3) Thoroughly inspect the bags for leaks and wear semi-annually.
- (4) Inspect all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods semi-annually.

Recordkeeping:

- (1) The permittee shall keep maintenance logs of all inspections, corrective actions, filter/cartridge/bag changes, and instrument calibrations pertaining to BH-51-01, using Attachment D (or its equivalent).
- (2) The permittee shall record pressure drop readings once weekly on BH-51-01, using Attachment F (or its equivalent).

Mixer Group 1			
Emission Unit	Description	Control Devices	Location
DA600 Mixer	Two possible tanks	BH-45-01	B4500
QS 800 Mixer		BH-45-03	B4500
EM600 Mixer	Deaerating with vacuum	BH-45-03	B4500
DA900 Mixer	Deaerating with vacuum	BH-45-03	B4500

Permit Condition 1 Mixer Group 1 10 CSR 10-6.400 Control of Emission of Particulate Matter From Industrial Processes
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Emission Limitation:

The permittee shall operate the fabric filters or baghouses whenever the associated emission units are operating.¹³

Monitoring / Recordkeeping:

The permittee shall keep maintenance logs, using Attachment D (or its equivalent), which shall include the following:

- (1) Incidents of malfunction with impact on emissions, duration of event, probable cause, and corrective action.
- (2) Maintenance activities, inspection schedule, repair actions, and replacements, etc.

B4100 Group			
Emission Unit	Description	Control Devices	Location
RX3	Old pilot plant reactor	Condenser (packed column)	B4100
T701 (T6)	T6 on left	Condenser	B4100
T702 (T2)	T2 on right thinning and blending	Condenser	B4100

Permit Condition 1 B4100 Group 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart A General Provisions and Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing
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Emission Limitation:

The permittee shall maintain records qualifying these tanks as Group 2 batch processes.

Group 1 batch process vent means each of the batch process vents in a process for which the collective uncontrolled organic HAP emissions from all of the batch process vents are greater than or equal to 10,000 lb/yr at an existing source or greater than or equal to 3,000 lb/yr at a new source.

Group 2 batch process vent means each batch process vent that does not meet the definition of Group 1 batch process vent.

¹³ For some of the emission units, this emission limit establishes a federal requirement for the control device and thus provides an exemption from the pound per hour limit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios
 Permit Condition 2¹⁴
 B4100 Group
 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and
 Other Allied Surface Coating Products

Emission Limitations:

The polymerization of synthetic varnish or resin shall be done in a completely enclosed operation with the VOC emissions controlled by the use of surface condensers. The surface condensers must be maintained to ensure a 95% overall removal efficiency for total VOC emissions when condensing total VOC of a vapor pressure greater than 26 mmHg (as measured at 20 degrees Celsius).

Monitoring:

Owners or operators utilizing add-on control technology shall monitor the following parameters continuously while the affected equipment is in operation:

- (1) Exit stream temperature on all condensers; and
- (2) Any other parameter which the director determines is necessary to quantify emissions or otherwise determine compliance with this rule.
- (3) The control efficiency specified in 10 CSR 10-5.390(4)(D) and (F) shall be determined by the testing methods reference at 10 CSR 10-6.030(14)(A) – 40 CFR Part 60, Appendix A – Test Methods, Method 25 – Determination of Total Gaseous Non-methane Organic Emissions as Carbon. The permittee may use any test methods approved by the department for this purpose.

Recordkeeping:

The permittee shall keep records on routine and unscheduled maintenance and repair activities on all air pollution control equipment, inspections, including date, time observation and description of any corrective action required or performed. Attachment D, or an equivalent, may be used for these recordkeeping requirements.

T6509 Tank			
Emission Unit	Description	Control Devices	Location
T6509	Mobile process tank/vessel	Cover	B6500

Permit Condition 1
 T6509
 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
 40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for
 Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Emission Limitation:

Each portable process vessel shall be equipped with a cover or lid that must be in place at all times when the vessel contains a HAP except for material additions or sampling.

Monitoring:

The permittee shall perform inspections once per shift to verify that covers are in place during operation. The permittee shall inspect the condition of the covers and replace them as necessary.

¹⁴ This condition applies only when the emission unit condenses total VOC's with a vapor pressure greater than 26 mmHg.

Recordkeeping:

Records shall be kept of all cover inspections. Attachment E, or an equivalent, may be used for these recordkeeping requirements.

Large Dough Mixer			
Emission Unit	Description	Control Devices	Location
Large Dough Mixer	Compounding Operations Mixer 8 (Dough Mixer)	BH-46-01 Installed 1999, Manufacturer/Mode 1 : Flex-Kleen/120- WSBC-64(IIIG)	B4600

<p>10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios Permit Condition 1¹⁵ Large Dough Mixer 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing</p>
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Emission Limitation:

Each process vessel shall be equipped with a cover or lid that must be in place at all times when the vessel contains a HAP except for material additions or sampling.

Monitoring:

The permittee shall perform inspections once per shift to verify that covers are in place during operation. The permittee shall inspect the condition of the covers and replace them as necessary.

Recordkeeping:

Records shall be kept of all cover inspections. Attachment E, or an equivalent, may be used for these recordkeeping requirements.

Pebble Mill 1			
Emission Unit	Description	Control Devices	Location
Pebble Mill 1	Compounding Operations Mill 1 (Pebble Mill, Installed pre-1967)	BH-46-01	B4600

<p>Permit Condition 1 Pebble Mill 1 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products</p>

Emission Limitation:

All grinding mills shall be operated and maintained in accordance with manufacturers' specifications.

Monitoring:

The permittee shall maintain and operate Pebble Mill 1 according to the permittee's written operating procedures, to insure proper function, in lieu of the manufacturers' specifications for the grinding mill.

¹⁵ This condition applies only when the emission unit is in HAP service.

Recordkeeping:

The permittee shall keep records of any inspections, maintenance or malfunction responses. The permittee shall use an appropriate recordkeeping form, such as Attachment D. The permittee’s written operating procedures will be available for inspection.

Compounding Operations Process Tanks		
ID	Description	Location
T481	Process Tank, 3,300 gallons	B4500
T484	Process Tank, 3,300 gallons	B4500

Permit Condition 1
 T481 and T484
 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
 40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for
 Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Emission Limitations:

Each process vessel shall be equipped with a cover or lid that must be in place at all times when the vessel contains a HAP except for material additions or sampling.

Monitoring:

The permittee shall perform inspections once per shift to verify that covers are in place during operation. The permittee shall inspect the condition of the covers and replace them as necessary.

Recordkeeping:

Records shall be kept of all cover inspections. Attachment E, or an equivalent, may be used for these recordkeeping requirements.

Compounding Operations Storage Tanks		
ID	Description	Location
T408	Storage Tank 408 (2,970 Gallons)	B4500
T409	Storage Tank 409 (2,970 Gallons)	B4500

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios
 Permit Condition 1¹⁶
 Compounding Operations Building 45 – Storage Tanks
 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and
 Other Allied Surface Coating Products

Emission Limitations:

Tanks storing VOC with a vapor pressure greater than or equal to 10 kilopascals at twenty degrees Celsius, shall be equipped with pressure/vacuum conservation vents set at ± 0.2 kPa, except where more effective air pollution control is used. Stationary VOC storage containers with a capacity greater than two hundred fifty gallons shall be equipped with a submerged-fill pipe or bottom fill, except where more effective air pollution control is used and has been approved by the director.

Recordkeeping:

(1) Records shall be kept sufficient to determine daily VOC emissions.

¹⁶ Under the Reasonably Anticipated Operating Scenarios program, the permittee is required to keep records only when operations are subject to the requirement.

- (2) The permittee shall maintain a record of the inspections, including date, time observation and description of any corrective action required or performed. Attachment D contains a log that may be used for these recordkeeping requirements. This log or an equivalent log created by the permittee must be used to certify compliance with this requirement.

Resin Department Storage Tanks		
ID	Description	Location
T301	Storage Tank 301 (3,000 Gallon)	B3000
T305	Storage Tank 305 (3,000 Gallon)	B3000
T306	Storage Tank 306 (3,000 Gallon)	B3000
T307	Storage Tank 307 (3,000 Gallon)	B3000
T308	Storage Tank 308 (3,000 Gallon)	B3000
T309	Storage Tank 309 (3,000 Gallon)	B3000
T310	Storage Tank 310 (3,000 Gallon)	B3000
T311	Storage Tank 311 (3,000 Gallon)	B3000
T312	Storage Tank 312 (5,000 Gallon)	B3000
T313	Storage Tank 313 (5,000 Gallon)	B3000
T320	Storage Tank 320 (6,200 Gallon)	B3000
T325	Storage Tank 325 (4,000 Gallon)	B3000

Permit Condition 1
 Building 30 – Resin Department Storage Tanks
 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products

Emission Limitations:

Tanks storing VOC with a vapor pressure greater than or equal to 10 kilopascals at twenty degrees Celsius, shall be equipped with pressure/vacuum conservation vents set at ± 0.2 kPa, except where more effective air pollution control is used. Stationary VOC storage containers with a capacity greater than two hundred fifty gallons shall be equipped with a submerged-fill pipe or bottom fill, except where more effective air pollution control is used and has been approved by the director.

Recordkeeping:

- (1) Records shall be kept sufficient to determine daily VOC emissions.
- (2) The permittee shall maintain a record of the inspections, including date, time observation and description of any corrective action required or performed. Attachment D contains a log that may be used for these recordkeeping requirements. This log or an equivalent log created by the permittee must be used to certify compliance with this requirement.

Tank Farm 51 Storage Tanks		
ID	Description	Location
T61	Storage Tank 61 (15,000 Gallon)	TF51
T62	Storage Tank 62 (15,000 Gallon)	TF51
T63	Storage Tank 63 (10,000 Gallon)	TF51
T64	Storage Tank 64 (10,000 Gallon)	TF51
T66	Storage Tank 66 (12,000 Gallon)	TF51
T67	Storage Tank 67 (12,000 Gallon)	TF51
T68	Storage Tank 68 (16,000 Gallon)	TF51

Tank Farm 51 Storage Tanks		
ID	Description	Location
T69	Storage Tank 69 (16,000 Gallon)	TF51
T70	Storage Tank 70 (16,000 Gallon)	TF51
T71	Storage Tank 71 (16,000 Gallon)	TF51
T72	Storage Tank 72 (16,000 Gallon)	TF51
T73	Storage Tank 73 (16,000 Gallon)	TF51
T74	Storage Tank 74 (16,000 Gallon)	TF51
T75	Storage Tank 75 (16,000 Gallon)	TF51
T76	Storage Tank 76 (16,000 Gallon)	TF51
T77	Storage Tank 77 (16,000 Gallon)	TF51
T78	Storage Tank 78 (16,000 Gallon)	TF51
T79	Storage Tank 79 (16,000 Gallon)	TF51
T80	Storage Tank 80 (16,000 Gallon)	TF51
T81	Storage Tank 81 (16,000 Gallon)	TF51
T82	Storage Tank 82 (16,000 Gallon)	TF51
T83	Storage Tank 83 (16,000 Gallon)	TF51
T84	Storage Tank 84 (16,000 Gallon)	TF51
T85	Storage Tank 85 (16,000 Gallon)	TF51
T86	Storage Tank 86 (16,000 Gallon)	TF51
T87	Storage Tank 87 (16,000 Gallon)	TF51
T88	Storage Tank 88 (16,000 Gallon)	TF51
T89	Storage Tank 89 (16,000 Gallon)	TF51
T90	Storage Tank 90 (16,000 Gallon)	TF51
T91	Storage Tank 91 (16,000 Gallon)	TF51
T92	Storage Tank 92 (16,000 Gallon)	TF51

Permit Condition 1
 Tank Farm 51 Storage Tanks
 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
 40 CFR Part 63, Subpart A General Provisions and Subpart FFFF – National Emission Standards for Hazardous
 Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Emission Limitations:

The permittee shall not store material that has a maximum true vapor pressure of total HAP greater than or equal to 6.9 kilopascals (51.8 mmHg) , in a Group 2 storage tank at an existing source.

Recordkeeping:

The permittee will keep records of each material stored in each storage tank and the associated maximum true vapor pressure of total HAP. Samples of the recordkeeping may be found at Attachment M, Sample of Tank Farm Recordkeeping, on page 73.

Permit Condition 2
Tank Farm 51 Storage Tanks
10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and
Other Allied Surface Coating Products

Emission Limitations:

Tanks storing VOC with a vapor pressure greater than or equal to 10 kilopascals at twenty degrees Celsius, shall be equipped with pressure/vacuum conservation vents set at ± 0.2 kPa, except where more effective air pollution control is used. Stationary VOC storage containers with a capacity greater than two hundred fifty gallons shall be equipped with a submerged-fill pipe or bottom fill, except where more effective air pollution control is used and has been approved by the director.

Recordkeeping:

- (1) Records shall be kept sufficient to determine daily VOC emissions.
- (2) The permittee shall maintain a record of the inspections, including date, time observation and description of any corrective action required or performed. Attachment D contains a log that may be used for these recordkeeping requirements. This log or an equivalent log created by the permittee must be used to certify compliance with this requirement.

Tank Farm 53 Storage Tanks		
ID	Description	Location
T200	Storage Tank 200 (12,500 Gallon)	TF53
T201	Storage Tank 201 (12,500 Gallon)	TF53
T202	Storage Tank 202 (12,500 Gallon)	TF53
T203	Storage Tank 203 (12,500 Gallon)	TF53
T205	Storage Tank 205 (12,000 Gallon)	TF53
T204	Storage Tank 204 (12,000 Gallon)	TF53
T206	Storage Tank 206 (12,000 Gallon)	TF53
T208	Storage Tank 208 (12,000 Gallon)	TF53
T209	Storage Tank 209 (12,000 Gallon)	TF53
T210	Storage Tank 210 (15,000 Gallon)	TF53
T213	Storage Tank 213 (15,000 Gallon)	TF53
T214	Storage Tank 214 (15,000 Gallon)	TF53
T216	Storage Tank 216 (15,000 Gallon)	TF53

Permit Condition 1
Tank Farm 53 Storage Tanks
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart A General Provisions and Subpart FFFF – National Emission Standards for Hazardous
Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Emission Limitations:

The permittee shall not store material that has a maximum true vapor pressure of total HAP greater than or equal to 6.9 kilopascals (51.8 mmHg), in a Group 2 storage tank at an existing source.

Recordkeeping:

The permittee will keep records of each material stored in each storage tank and the associated maximum true vapor pressure of total HAP. Samples of the recordkeeping may be found at Attachment M, Sample of Tank Farm Recordkeeping, on page 73.

Permit Condition 2
Tank Farm 53 Storage Tanks
 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and
 Other Allied Surface Coating Products

Emission Limitations:

Tanks storing VOC with a vapor pressure greater than or equal to 10 kilopascals at twenty degrees Celsius, shall be equipped with pressure/vacuum conservation vents set at ± 0.2 kPa, except where more effective air pollution control is used. Stationary VOC storage containers with a capacity greater than two hundred fifty gallons shall be equipped with a submerged-fill pipe or bottom fill, except where more effective air pollution control is used and has been approved by the director.

Recordkeeping:

- (1) Records shall be kept sufficient to determine daily VOC emissions.
- (2) The permittee shall maintain a record of the inspections, including date, time observation and description of any corrective action required or performed. Attachment D contains a log that may be used for these recordkeeping requirements. This log or an equivalent log created by the permittee must be used to certify compliance with this requirement.

Boilers		
ID	Description	Location
R2	Therminol Burner	B3900
Therminol Burner 51	Therminol Burner for Bldg. 51	L2500
56-01	Burnham Steam Boiler 25 (also known as Steam Boiler 56), 12.5 million British Thermal Units (MMBtu) per hour natural gas or No. 2 Fuel Oil fired, constructed 1998	B5600
56-02	Cleaver-Brooks, 12.25 MMBtu per hour natural gas or fuel oil boiler that will be used to heat water to produce steam for use in the plant, constructed December 2011	B5600
41	AKA F Steam Boiler, 4.18 MMBtu per hour natural gas, constructed 1999	B4100

Permit Condition 1
56-01
 10 CSR 10-6.060 Construction Permits Required Permit 97-07-007A

Emission Limitations:

- (1) Natural Gas consumption in the Boiler operation shall not exceed 107 million cubic feet per year.
- (2) Number two (2) fuel oil usage shall not exceed 292,000 gallons per year.
- (3) The manufacturer’s operational manual shall be available at the site.
- (4) The boilers shall burn only distillate fuel and natural gas.

Recordkeeping:

Monthly records shall be kept of fuel oil and natural gas consumption for the boiler. Usage shall be monitored by meter for natural gas and by tank turnover for fuel oil.

Permit Condition 2
R2, Therminol Burner 51, 56-01, 56-02
10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60, Subpart A General Provisions and Subpart Dc – Standards of Performance for Small
Industrial-Commercial-Institutional Steam Generating Units

Emission Limitation:

The permittee shall not combust oil that contains greater than 0.5 weight percent sulfur.

Recordkeeping:

The permittee shall maintain records from the oil supplier that show that the oil complies with the specifications for distillate oil in 60.41c [40 CFR 60.48c(e)(11)] along with the type and amount of fuel combusted.

Permit Condition 3
Boilers
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial,
Commercial, and Institutional Boilers and Process Heaters

Emission Limitations:

The permittee shall comply with the following requirements by January 31, 2016:

- (1) The permittee shall perform boiler tune-ups according to the following schedule:
 - (A) Boiler 41: every five (5) years;
 - (B) Boilers R2 and Therminol Burner 51: every two (2) years; and
 - (C) Boilers 56-01 and 56-02: every year.
- (2) The permittee must conduct tune-ups according to one of the following [§63.7540(a)(10)(i) through (vi)]:
 - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
 - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
 - (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
 - (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
 - (F) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,

- i) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - ii) A description of any corrective actions taken as a part of the tune-up; and
 - iii) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period.
Units sharing a fuel meter may estimate the fuel used by each unit.
- (3) The permittee must include with the Notification of Compliance Status a signed certification that they completed the energy assessment according to the following list and that it is an accurate depiction of your facility at the time of the assessment. The permittee shall have a qualified energy assessor conduct the one-time energy assessment performed on the major source facility. An energy assessment, or an amended energy assessment, completed on or after January 1, 2008, that meets the energy assessment requirements (see the following list), satisfies the energy assessment requirement. The energy assessment must include [§63.7530(e) and Table 3]:
- (A) A visual inspection of the boiler or process heater system,
 - (B) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints,
 - (C) An inventory of major energy consuming systems,
 - (D) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
 - (E) A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices,
 - (F) A list of major energy conservation measures,
 - (G) A list of the energy savings potential of the energy conservation measures identified, and
 - (H) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

Reporting:

- (1) The permittee must submit an Initial Notification not later than 120 days after January 31, 2013 [§ 63.9(b)(2)].
- (2) The permittee shall submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). For the initial compliance demonstration for each affected source, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business March 31, 2016 [§ 63.10(d)(2)]. The Notification of Compliance Status report must contain all the following information [§ 63.(e)(1) through (8)]:
 - (A) A description of the affected unit(s) including identification of which subcategory the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit, description of the fuel(s) burned, including whether the fuel(s) were determined to be a non-waste under § 241.3, whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of § 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration.
 - (B) Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.
 - (C) A summary of the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable emission standard.
 - (D) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

- (E) Identification of whether you plan to demonstrate compliance by emissions averaging and identification of whether you plan to demonstrate compliance by using emission credits through energy conservation:
 - i) If you plan to demonstrate compliance by emission averaging, report the emission level that was being achieved or the control technology employed on May 20, 2011.
- (F) A signed certification that you have met all applicable emission limits and work practice standards.
- (G) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.
- (H) In addition to the information required in § 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - i) “This facility complies with the requirements in § 63.7540(a)(10) to conduct an annual or biennial tune-up, as applicable, of each unit.”
 - ii) “This facility has had an energy assessment performed according to § 63.7530(e).”
 - iii) Except for units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: “No secondary materials that are solid waste were combusted in any affected unit.”

Permit Condition 4
41
10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating

Emission Limitation:

The permittee shall not emit particulate matter in excess of 0.29 pounds per million BTU of heat input.

Monitoring / Recordkeeping:

No monitoring or recordkeeping is required for this condition based on 10 CSR 10-6.405(1)(C): *An emission unit that is subject to 10 CSR 10-6.070 and in compliance with applicable provisions; or an emission unit fueled by landfill gas, propane, natural gas, fuel oils #2 through #6 (with less than one and two-tenths percent (1.2%) sulfur), and/or other gases (with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent) would be deemed in compliance with 10 CSR 10-6.405.*

Parts Washers (Cold Cleaners)		
ID	Description	Location
CPW-B	3-Chamber Parts Washer B, 10 gal/chamber	B4100
CPW-J	1-Chamber Parts Washer J, 18 gallons	B4100
CPW-M	1-Chamber Parts Washer M, 24 gallons	B1000
CPW-N	1-Chamber Parts Washer N, 10 gallons	B1000
CPW-O	3-Chamber Parts Washer O, 10 gallons/chamber	B1000
CPW-R	3-Chamber Parts Washer R, 10 gallons/chamber	B1000
CPW-S	2-Chamber Parts Washer S, 10 gallons/chamber	B1000
CPW-T	2-Chamber Parts Washer T, 10 gallons/chamber	B1000

Parts Washers (Cold Cleaners)		
ID	Description	Location
CPW-W	2-Chamber Parts Washer W, 10 gallons/chamber	B1000

Permit Condition 1 Parts Washers (Cold Cleaners) 10 CSR 10-5.300 – Control of Emissions From Solvent Metal Cleaning

Emission Limitations:

- (1) The permittee shall not operate a cold cleaner using a solvent with a vapor pressure greater than 1.0 mmHg at 20 degrees Celsius. Exception: The permittee may use an alternative method for reducing cold cleaning emissions if the level of emission control is equivalent to or greater than the requirements listed above. The director must approve the alternative method.
- (2) Each cold cleaner shall have a cover which will prevent the escape of solvent vapors from the solvent bath while in the closed position, or an enclosed reservoir which limits the escape of solvent vapors from the solvent bath whenever parts are not being processed in the cleaner.
- (3) When one or more of the following conditions exist, the design of the cover shall be such that it can be easily operated with one hand such that minimal disturbing of the solvent vapors in the tank occurs. (For covers larger than ten square feet, this shall be accomplished by either mechanical assistance such as spring loading or counter weighing or by power systems):
 - (A) The solvent vapor pressure is greater than 0.3 psi measure at 37.8 degrees Celsius (37.8°C) (100 degrees Fahrenheit (100°F)), such as in mineral spirits.
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (4) Each cold cleaner shall have a drainage facility which will be internal so that parts are enclosed under the cover while draining.
- (5) If an internal drainage facility cannot fit into the cleaning system and the solvent vapor pressure is less than 0.6 psi measured at 37.8°C (100°F), then the cold cleaner shall have an external drainage facility which provides for the solvent to drain back into the solvent bath.
- (6) Solvent sprays, if used, shall be a solid fluid stream (not a fine, atomized or shower-type spray) and at a pressure which does not cause splashing above or beyond the freeboard.
- (7) A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment.
- (8) Any cold cleaner which uses a solvent that has a solvent vapor pressure greater than 0.6 psi measured at 37.8°C (100°F) or is heated above 48.9°C (120°F), must use one of the following control devices:
 - (A) A freeboard ratio of at least 0.75;
 - (B) Water cover (solvent must be insoluble in and heavier than water); or
 - (C) Other control systems with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to 65%. These control systems must receive approval from the director prior to their use.
- (9) Each cold cleaner shall be operated as follows:
 - (A) Cold cleaner covers shall be closed whenever parts are not being handled in the cleaners or the solvent must drain into an enclosed reservoir.
 - (B) Clean parts shall be drained in the freeboard area for at least 15 seconds or until dripping ceases, whichever is longer.

- (C) Whenever a cold cleaner fails to perform within the operating parameters established for it by this regulation, the unit shall be shut down immediately and shall remain shut down until trained service personnel are able to restore operation within the established operating procedures.
- (D) Solvent leaks shall be repaired immediately or the cleaner shall be shut down and leaks secured until the leaks are repaired.
- (E) Any waste material removed from a cold cleaner shall be disposed of by one of the following methods in accordance with the Missouri Hazardous Waste Management Commission Rules codified as 10 CSR 25, as applicable:
 1. Reduction of the waste material to less than 20% VOC solvent by distillation and proper disposal of the still bottom waste, or
 2. Stored in closed containers for transfer to a contract reclamation service or disposal facility approved by the director.
 3. Waste solvent shall be stored in covered containers only.
- (10) Operators must be trained as follows:
 - (A) Only persons trained in at least the operation and equipment requirements specified in this rule for their particular solvent metal cleaning process to operate this equipment;
 - (B) The supervisor of any person who operates a solvent metal cleaning process shall receive equivalent or greater operational training than the operators; and
 - (C) Refresher training shall be given to all solvent metal cleaning equipment operators at least once every 12 month period.

Monitoring:

The permittee shall monitor the throughputs of the solvents monthly and maintain material safety data sheets of the cleanup solvents used at the installation.

Recordkeeping:

- (1) The permittee shall monitor the throughputs of the solvents monthly and maintain material safety data sheets of the cleanup solvents used at the installation.
- (2) The permittee shall maintain the following records for each purchase of cold cleaner solvent (Attachment H):
 - (A) Name and address of the solvent supplier.
 - (B) Date of purchase.
 - (C) Type of solvent purchased.
 - (D) Vapor pressure of solvent in mm Hg at 20^oC or 68^oF.
- (3) The permittee shall keep monthly inventory records of solvent types and amounts purchased and solvent consumed. The records shall include all types and amounts of solvent containing waste material transferred to either a contract reclamation service or to a disposal installation and all amounts distilled on the premises (see Attachment G). The record also shall include maintenance and repair logs that occurred on the cold cleaner (Attachment D).
- (4) The permittee shall keep training records of solvent metal cleaning for each employee on an annual basis (Attachment I).

Ribbon Mixer			
Emission Unit	Description	Control Devices	Location
Ribbon Mixer	Ribbon Mixer (500 Gallon)	BH-45-02 & BH-45-03 operating in parallel	B4500

Permit Condition 1
Ribbon Mixer
10 CSR 10-6.060 Construction Permits Required Permit 01-11-034
10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes

Emission Limitations:

The permittee shall insure the *Ribbon Mixer* emission unit vents to the control devices when operating.

Monitoring / Recordkeeping:

The permittee shall maintain an operating and maintenance log for the control devices using Attachment D (found on page 64) which shall include the following:

- (1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
- (2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios
Permit Condition 2¹⁷
Ribbon Mixer
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Emission Limitations:

Each portable process vessel shall be equipped with a cover or lid that must be in place at all times when the vessel contains a HAP except for material additions or sampling.

Monitoring:

The permittee shall perform inspections once per shift to verify that covers are in place during operation. The permittee shall inspect the condition of the covers and replace them as necessary.

Recordkeeping:

Records shall be kept of all cover inspections. Attachment E, or an equivalent, may be used for these recordkeeping requirements.

Process Tank 29		
ID	Description	Location
T29	Process Tank 29 (7,200 Gallon)	L2500

Permit Condition 1
Process Tank 29
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Emission Limitations:

Each process vessel shall be equipped with a cover or lid that must be in place at all times when the vessel contains a HAP except for material additions or sampling.

¹⁷ Under the Reasonably Anticipated Operating Scenarios program, the permittee is required to keep records only when operations are subject to the requirement (in HAP service).

Monitoring:

The permittee shall perform inspections once per shift to verify that covers are in place during operation. The permittee shall inspect the condition of the covers and replace them as necessary.

Recordkeeping:

Records shall be kept of all cover inspections. Attachment E, or an equivalent, may be used for these recordkeeping requirements.

Permit Condition 2 Process Tank 29 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products

Recordkeeping:

Records shall be kept on production rates sufficient to determine daily VOC emissions.

L2500 Storage Tanks		
ID	Description	Location
T337	Storage Tank 337 (15,000 Gallons)	L2500
T338	Storage Tank 338 (15,000 Gallons)	L2500
T339	Storage Tank 339 (15,000 Gallons)	L2500
T27	Storage Tank 27 (4,500 Gallon)	L2500

Permit Condition 1 T337, T338, T339 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart A General Provisions and Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing
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Emission Limitations:

The permittee shall not store material that has a maximum true vapor pressure of total HAP greater than or equal to 6.9 kilopascals (51.8 mmHg), in a Group 2 storage tank at an existing source. .

Recordkeeping:

The permittee will keep records of each material stored in each storage tank and the associated maximum true vapor pressure of total HAP.

Permit Condition 2 L2500 Storage Tanks 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products

Emission Limitations:

Tanks storing VOC with a vapor pressure greater than or equal to 10 kilopascals at twenty degrees Celsius, shall be equipped with pressure/vacuum conservation vents set at ± 0.2 kPa, except where more effective air pollution control is used. Stationary VOC storage containers with a capacity greater than two hundred fifty gallons shall be equipped with a submerged-fill pipe or bottom fill, except where more effective air pollution control is used and has been approved by the director.

Recordkeeping:

(1) Records shall be kept sufficient to determine daily VOC emissions.

(2) The permittee shall maintain a record of the inspections, including date, time observation and description of any corrective action required or performed. Attachment D contains a log that may be used for these recordkeeping requirements. This log or an equivalent log created by the permittee must be used to certify compliance with this requirement.

Mixers Group 2			
Emission Unit	Description	Control Devices	Location
45-1	Cowles Mixer	BH-45-02 & BH-45-03 operating in parallel	B4500
45-2	Cowles Mixer		B4500
DA-110	Mixer		B4500
DA-350	Mixer		B4500

Permit Condition 1
Mixers Group 2
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for
Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Emission Limitations:

Each portable process vessel shall be equipped with a cover or lid that must be in place at all times when the vessel contains a HAP except for material additions or sampling.

Monitoring:

The permittee shall perform inspections once per shift to verify that covers are in place during operation. The permittee shall inspect the condition of the covers and replace them as necessary.

Recordkeeping:

Records shall be kept of all cover inspections. Attachment E, or an equivalent, may be used for these recordkeeping requirements.

Permit Condition 2
DA-350
10 CSR 10-6.400 Control of Emission of Particulate Matter From Industrial Processes

Emission Limitation:

The permittee shall operate the fabric filters or baghouses whenever the associated emission units are operating.¹⁸

Monitoring / Recordkeeping:

The permittee shall keep maintenance logs, using Attachment D (or its equivalent), which shall include the following:

- (1) Incidents of malfunction with impact on emissions, duration of event, probable cause, and corrective action.
- (2) Maintenance activities, inspection schedule, repair actions, and replacements, etc.

¹⁸ For some of the emission units, this emission limit establishes a federal requirement for the control device and thus provides an exemption from the pound per hour limit.

Cowles Mixers			
Emission Unit	Description	Control Devices	Location
Mixer 1	Cowles Mixer	BH-46-01	B4600
Mixer 6	Cowles Mixer	BH-46-01	B4600
Mixer 3	Cowles Mixer	BH-46-01	B4600

Permit Condition 1
 Cowles Mixers
 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
 40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for
 Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Emission Limitations:

Each portable process vessel shall be equipped with a cover or lid that must be in place at all times when the vessel contains a HAP except for material additions or sampling.

Monitoring:

The permittee shall perform inspections once per shift to verify that covers are in place during operation. The permittee shall inspect the condition of the covers and replace them as necessary.

Recordkeeping:

Records shall be kept of all cover inspections. Attachment E, or an equivalent, may be used for these recordkeeping requirements.

Permit Condition 2
 Mixers 3 & 6
 10 CSR 10-6.400 Control of Emission of Particulate Matter From Industrial Processes

Emission Limitation:

The permittee shall operate the fabric filters or baghouses whenever the associated emission units are operating.¹⁹

Monitoring / Recordkeeping:

The permittee shall keep maintenance logs, using Attachment D (or its equivalent), which shall include the following:

- (1) Incidents of malfunction with impact on emissions, duration of event, probable cause, and corrective action.
- (2) Maintenance activities, inspection schedule, repair actions, and replacements, etc.

Equipment Leak Group
Description
Various pumps, connectors and equipment used in the HAP service stream. These items are located throughout the installation (for example, B3000, B3900, B4500, B4600, B5100, B6500, Tank Farm 51, Tank Farm 53, etc.)

¹⁹ For some of the emission units, this emission limit establishes a federal requirement for the control device and thus provides an exemption from the pound per hour limit.

Permit Condition 1
Equipment Leak Group
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart A General Provisions and Subpart FFFF – National Emission Standards for Hazardous
Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Emission Limitations:

The permittee shall comply with the standards prescribed by § 63.2480 What requirements must I meet for equipment leaks?²⁰ You should reference page 42 of this permit for the actual wording.

Monitoring:

- (1) The permittee shall monitor at least annually and after any reconfiguration or maintenance of the equipment, unless the regulation allows for an exemption. The permittee may complete monitoring using pressure tests, liquid tests, or 40 CFR Part 60, Appendix A—Test Methods, Method 21—*Determination of Volatile Organic Compound Leaks* as specified in 40 CFR Part 63, Subpart UU for the type of equipment being monitored and at the specified frequency.
- (2) The permittee shall perform repairs as required by Subpart UU for the type of equipment being monitored.

Recordkeeping:

- (1) The permittee shall maintain the current equipment leak group list as specified by 40 CFR Part 63, Subpart UU and make it available upon request.
- (2) The permittee shall maintain records of the results of all required monitoring and repair.

Permit Condition 2
Equipment Leak Group
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for
Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Emission Limitations:

The permittee shall comply with the standards prescribed by § 63.8015 What requirements apply to my equipment leaks?²¹ You should reference page 43 of this permit for the actual wording.

Monitoring:

- (1) The permittee shall monitor at least annually and after any reconfiguration or maintenance of the equipment, unless the regulation allows for an exemption. The permittee may perform monitoring using pressure tests, liquid tests, or Method 21 as specified in 40 CFR Part 63, Subpart TT for the type of equipment being monitored and at the specified frequency.
- (2) The permittee shall perform repairs as required by Subpart TT for the type of equipment being monitored.

Recordkeeping:

- (1) The permittee shall maintain the current equipment leak group list as specified by Subpart 40 CFR Part 63, Subpart TT and make it available upon request.
- (2) The permittee shall maintain records of the results of all required monitoring and repair.

²⁰ The permittee has elected to comply with § 63.2480 and the requirements in Table 6 of Subpart FFFF by complying with the requirements of Subpart UU, with possible exceptions as provided by § 63.2480.

²¹ The permittee has elected to comply with § 63.8015 and the requirements in Table 3 of Subpart HHHHH by complying with the requirements of Subpart TT, with possible exceptions as provided by § 63.8015.

Emergency Generators		
ID	Description	Location
B39	Emergency Generator - 2010 Cummins, Model QSK23-G7 NR2 (engine) 750 kW DQCB (generator)	L3200
B51	Emergency Generator – Diesel fired 500 kW (755 hp) Cummins Model Number 500DFEK (2008)	L2500

Permit Condition 1
B39 Emergency Generator
10 CSR 10-6.060: Source Registration Permits Required SR10.014

Emission Limitation:

- (1) The emergency generator shall be limited to 500 hours of operation in any consecutive 12-month period. The generator shall be equipped with a non-resettable meter to record operational hours.
- (2) The generator shall only be operated when power from the utility is interrupted, when required to perform maintenance, or for operational testing as allowed in the applicable NSPS subpart.
- (3) The generator shall be installed and maintained per the manufacturer’s recommendations. The generator shall only burn Low or Ultra-Low Sulfur Diesel (LSD @ 500 ppm or ULSD @ 15 ppm #2 fuel oil) with a sulfur content not to exceed 0.05% by weight.

Recordkeeping:

- (1) Records of operational hours shall be maintained for this unit, with the reason for each operating period, a total for each month and a total for each consecutive 12-month period.
- (2) The permittee shall keep records of all maintenance performed on the equipment. The permittee shall keep copies of the manufacturer’s operation and maintenance instructions for the life of the equipment.

Permit Condition 2
B51 Emergency Generator
10 CSR 10-6.060: Source Registration Permits Required SR08.046

Emission Limitation:

- (1) The emergency generator shall be limited to 500 hours of operation in any consecutive 12-month period. The generator shall be equipped with a non-resettable meter to record operational hours.
- (2) The generator shall only be operated when power from the utility is interrupted, when required to perform maintenance, and when performing operational testing.
- (3) The generator shall be maintained per the manufacturer’s recommendations. The generator shall only burn #2 fuel oil with a sulfur content not to exceed 0.5% by weight.

Recordkeeping:

- (1) Records of operational hours shall be maintained for this unit, with a total for each month and for each consecutive 12-month period.
- (2) The permittee shall keep records of all maintenance performed on the equipment.

Permit Condition 3
Emergency Generators
10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60, NSPS Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal
Combustion Engines

Emission Limitations:

- (1) You must operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4204 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [§60.4206]
- (2) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a). [§60.4207(a)]
 - (A) Sulfur content: 500 parts per million (ppm) maximum; and [§80.510(a)(1)]
 - (B) A minimum cetane index of 40; or a maximum aromatic content of 35 volume percent. [§80.510(a)(2)(i) and (ii)]
- (3) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [§60.4207(b)]
 - (A) Sulfur content: 15 ppm maximum for nonroad diesel fuel; and [§80.510(b)(1)(i)]
 - (B) A minimum cetane index of 40; or a maximum aromatic content of 35 volume percent. [§80.510(b)(2)(i) and (ii)]
- (4) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of Paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator. [§60.4207(c)]

Recordkeeping:

The permittee shall maintain an accurate record of the diesel fuel used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and compliant content will be acceptable.

Reporting:

The permittee shall certify annually that the affected units have been operated and maintained according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. The permittee may include this certification with its annual certification report to the department.

ETO		
ID	Description	Location
ETO	RCRA Resource Recovery Unit Oil-Water Separator (OWS), pH Adjustment Tank, Organo-Clay/Carbon Filtration Unit, and Evaporative Thermal Oxidizer	B6600

Permit Condition 1 ETO 10 CSR 10-6.060: Source Registration Permits Required SR09.008

Emission Limitation:

- (1) The permittee shall use only natural gas as a fuel in the ETO.
- (2) The permittee shall not exceed 150 ppm concentration of organic chemicals (HAP and VOC) in the water processed by the ETO.
- (3) The permittee shall abide by the terms and conditions of their *Resource Recovery Certification RR0075*, Classification U, issued to Elantas PDG, Incorporated, dated June 18, 2010, signed by Richard A. Nussbaum, P.E., R.G., Chief, Permits Section, Missouri Department of Natural Resources, Hazardous Waste Program.

Recordkeeping:

The permittee shall keep records of the results of water analysis in (3) above.

Cooling Tower		
ID	Description	Location
Cooling Tower	Cooling Tower with maximum water flow capacity of 800 gallons per minute and integrated drift eliminators	B3900 Roof

Permit Condition 1 Cooling Tower 10 CSR 10-6.060: Source Registration Permits Required SR11.019

Emission Limitation:

The permittee shall not use any water treatment chemicals containing chromium in the cooling tower.

Recordkeeping:

The permittee shall maintain records of any water treatment chemicals added to the cooling towers, including the chromium content of the chemicals added. A MSDS or technical data sheet stating the chemicals contain no added chromium will be sufficient to satisfy this requirement.

IV. Endnotes:

Title 40: Protection of Environment

[PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES \(CONTINUED\)](#)

Subpart FFFF—National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Source: 68 FR 63888, Nov. 10, 2003, unless otherwise noted.

§ 63.2480 What requirements must I meet for equipment leaks?

- (a) You must meet each requirement in table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.
- (b) If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
- (1) The requirements for pressure testing in §63.179(b) or §63.1036(b) may be applied to all processes, not just batch processes.
- (2) For the purposes of this subpart, pressure testing for leaks in accordance with §63.179(b) or §63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.
- (3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under §63.1022(b)(1) or §63.181(b)(1)(i).
- (4) For connectors in gas/vapor and light liquid service at an existing source, you may elect to comply with the requirements in §63.169 or §63.1029 for connectors in heavy liquid service, including all associated recordkeeping and reporting requirements, rather than the requirements of §63.174 or §63.1027.
- (5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 parts per million (ppm) or greater as an alternative to the values specified in §63.1026(b)(2)(i) through (iii) or §63.163(b)(2).
- (c) If you comply with 40 CFR Part 65, subpart F, you may elect to comply with the provisions in paragraphs (c)(1) through (9) of this section as an alternative to the referenced provisions in 40 CFR Part 65, subpart F.
- (1) The requirements for pressure testing in §65.117(b) may be applied to all processes, not just batch processes.
- (2) For the purposes of this subpart, pressure testing for leaks in accordance with §65.117(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.
- (3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under §65.103(b)(1).
- (4) You may elect to comply with the monitoring and repair requirements specified in §65.108(e)(3) as an alternative to the requirements specified in §65.108(a) through (d) for any connectors at your affected source.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 ppm or greater as an alternative to the values specified in §65.107(b)(2)(i) through (iii).

(6) When 40 CFR Part 65, subpart F refers to the implementation date specified in §65.1(f), it means the compliance date specified in §63.2445.

(7) When §§65.105(f) and 65.117(d)(3) refer to §65.4, it means §63.2525.

(8) When §65.120(a) refers to §65.5(d), it means §63.2515.

(9) When §65.120(b) refers to §65.5(e), it means §63.2520.

(d) The provisions of this section do not apply to bench-scale processes, regardless of whether the processes are located at the same plant site as a process subject to the provisions of this subpart.

[71 FR 40335, July 14, 2006]

Table 6 to Subpart FFFF of Part 63—Requirements for Equipment Leaks

As required in §63.2480, you must meet each requirement in the following table that applies to your equipment leaks:

For all . . .	And that is part of . . .	You must . . .
1. Equipment that is in organic HAP service	a. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or	
	b. Comply with the requirements of subpart H of this part 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or	

Title 40: Protection of Environment

[PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES \(CONTINUED\)](#)

Subpart HHHHH—National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing

Source: 68 FR 69185, Dec. 11, 2003, unless otherwise noted.

§ 63.8015 What requirements apply to my equipment leaks?

(a) You must meet each requirement in Table 3 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.

(b) *Exceptions to requirements in §63.424(a).* (1) When §63.424(a) refers to “a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart,” the phrase “a miscellaneous coating manufacturing affected source subject to 40 CFR Part 63, subpart HHHHH” shall apply for the purposes of this subpart.

(2) When §63.424(a) refers to “equipment in gasoline service,” the phrase “equipment in organic HAP service” shall apply for the purposes of this subpart.

(3) When §63.424(a) specifies that “each piece of equipment shall be inspected during loading of a gasoline cargo tank,” the phrase “each piece of equipment must be inspected when it is operating in organic HAP service” shall apply for the purposes of this subpart.

(4) Equipment in service less than 300 hours per year, equipment in vacuum service, or equipment contacting non-process fluids is excluded from this section.

(c) When §63.1036 refers to batch processes, any part of the miscellaneous coating manufacturing operations applies for the purposes of this subpart.

(d) For the purposes of this subpart, pressure testing for leaks in accordance with §63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

[68 FR 69185, Dec. 11, 2003, as amended at 70 FR 25681, May 13, 2005]

Table 3 to Subpart HHHHH of Part 63—Requirements for Equipment Leaks

As required in §63.8015, you must meet each requirement in the following table that applies to your equipment leaks.

For all . . .	You must . . .
1. Equipment that is in organic HAP service at an existing source	a. Comply with the requirements in §§63.424(a) through (d) and 63.428(e), (f), and (h)(4), except as specified in §63.8015(b); or
	b. Comply with the requirements of subpart TT of this part; or
	c. Comply with the requirements of subpart UU of this part, except as specified in §63.8015(c) and (d).
2. Equipment that is in organic HAP service at a new source	a. Comply with the requirements of subpart TT of this part; or
	b. Comply with the requirements of subpart UU of this part, except as specified in §63.8015(c) and (d).

[68 FR 58190, Oct. 8, 2003, as amended at 71 FR 69021, Nov. 29, 2006]

V. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Contained in State Implementation Plan)

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

St. Louis City Ordinance 68657 Section 6 & Section 15 – Open Burning Restrictions²²

Section Six. *Definitions*

This Section defines key words and expressions used in the Ordinance. The following definitions are in addition to those contained in State Rule 10 CSR 10-6.020, as amended.

23. Open Burning - The burning of any matter in such manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through an approved stack, duct, vent or chimney.
29. Refuse - Any combustible waste material containing carbon in a free or combined state, other than liquids or gases.
30. Salvage Operation - Any business, trade, industry or other activity conducted in whole or in part for the purpose of salvaging or reclaiming any product or material including but not limited to metals or chemicals.
34. Trade Waste - Solid, liquid, or gaseous material resulting from construction or the prosecution of any business, trade or industry, or any demolition operation including but not limited to wood, plastics, cartons, grease, oil, chemicals and cinders.
36. Vegetation - Any representative of the plant kingdom including, but not limited to trees, shrubs, grasses, or vegetables, and any anatomical part of these plants including but not limited to leaves, stems, roots, flowers or fruits.

Section Fifteen: *Open Burning Restrictions.*

- A. No person shall cause, suffer, allow, or permit the open burning of refuse.
- B. No person shall conduct, cause or permit the conduct of a salvage operation by open burning.
- C. No person shall conduct, cause or permit the disposal of trade waste by open burning.
- D. No person shall cause or permit the open burning of leaves, trees or the byproducts there from, grass, or other vegetation.
- E. It shall be prima-facie evidence that the person who owns or controls property on which open burning occurs, has caused or permitted said open burning.

10 CSR 10-6.045 Open Burning Requirements

- (1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be

²² This ordinance is a part of the Missouri state implementation plan, and as such, is federally enforceable.

construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.

- (2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
- (A) St. Louis metropolitan area. The open burning of household refuse is prohibited
 - (B) Yard waste: St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is prohibited in incorporated municipalities including the City of St. Louis.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- (1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
- (A) Name and location of installation;
 - (B) Name and telephone number of person responsible for the installation;
 - (C) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - (D) Identity of the equipment causing the excess emissions;
 - (E) Time and duration of the period of excess emissions;
 - (F) Cause of the excess emissions;
 - (G) Air pollutants involved;
 - (H) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - (I) Measures taken to mitigate the extent and duration of the excess emissions; and
 - (J) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- (2) The permittee shall submit the paragraph (1) information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- (3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- (4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- (5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos

- (1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- (2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- (1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- (2) The permittee may be required by the director to file additional reports.
- (3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- (4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- (5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.
- (6) The permittee shall complete required reports on state supplied EIQ forms or in a form satisfactory to the director and the reports shall be submitted to the director by April 1st (or May 1st, if filed electronically) after the end of each reporting period.
- (7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.

- (8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

- (1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- (2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- (3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - (A) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - (B) Paving or frequent cleaning of roads, driveways and parking lots;
 - (C) Application of dust-free surfaces;
 - (D) Application of water; and
 - (E) Planting and maintenance of vegetative ground cover.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule²³:

- (1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- (2) Should no violation of this regulation be observed during this period then-

²³ The reissuance of this operating permit will not affect the frequency of monitoring. The permittee may continue their current monitoring schedule for all affected emission units.

- (A) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
- (B) If a violation is noted, monitoring reverts to weekly.
- (C) Should no violation of this regulation be observed during this period then-
 - 1. The permittee may observe once per month.
 - 2. If a violation is noted, monitoring reverts to weekly.
- (3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment A (Fugitive Emission Observations, page 61), or its equivalent, noting the following:

- (1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- (2) Whether the visible emissions were normal for the installation.
- (3) Whether equipment malfunctions contributed to an exceedance.
- (4) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- (1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- (2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- (3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

10 CSR 10-5.120 Information on Sales of Fuels to be Provided and Maintained

Every delivery of coal or residual fuel oil when first delivered to a consumer or wholesaler in the St. Louis metropolitan area must be accompanied by a ticket prepared in triplicate and containing at least the name and address of the seller and the buyer; the grade of fuel; ash content of coal, the source of the fuel, which must be an approved source, and such other information as the Air Conservation Commission may require. One copy of each ticket shall be kept by the person delivering the fuel and be retained for one year; one copy is to be given to the recipient of the fuel to be retained for one year; and,

upon request, within 30 days after delivery of the fuel, the delivering party shall mail one copy to the Air Conservation Commission.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit, or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one (1) volume of odorous air is diluted with seven (7) volumes of odor-free air for two (2) separate trials not less than fifteen (15) minutes apart within the period of one (1) hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

10 CSR 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

- (1) Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
- (2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per hour.

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitation:

No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions in excess of the limits specified by this rule. This permit will contain the opacity limits identified (10, 20 or 40 percent) for the specific emission units.

Monitoring:

- (1) The permittee should note the visible emissions performance of the plant according to the schedule outlined in (2) below. Specifically, the source would first conduct a quick survey of the entire plant. The permittee must maintain a log noting whether any air emissions (except for water vapor) were visible from the plant, all emission points from which visible emissions occurred, and whether the visible emissions were normal for the process. If the permittee observes no visible or other significant emissions then no further observations would be required.

For those emission points with visible emissions perceived or believed to above the normal opacity level, the permittee should record a formal Method 9 reading for the emission points of concern. Whether recording "qualitative" visible emission characteristics or taking Method 9 readings, the permittee should also document the total duration of any visible emission incident as part of the log.

Where the permittee opts to record "qualitative" visible emissions data, rather than record official Method 9 readings, it may be prudent for the source to bring in a certified Method 9 observer to periodically "quantify" visible emissions. These periodic Method 9 readings along with the survey results would give the responsible official some reasonable assurance that the source is meeting its

opacity obligations.

In all cases, the permittee shall insure that all persons responsible for making visible emission observations acquire basic training in the general principles and practices of “reading” opacity. At a minimum, the observers should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water. EPA’s Reference Method 22, found at 40 CFR Part 60, Appendix A, suggests two references in Section 7 that may be helpful.

The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required at that time. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.

- (2) The permittee must maintain the following monitoring schedule²⁴:
- (A) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
 - (B) Should the permittee observe no violations of this regulation during this period then-
 - 1. The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - 2. If a violation is noted, monitoring reverts to weekly.
 - 3. Should no violation of this regulation be observed during this period then-
 - A. The permittee may observe once per month.
 - B. If a violation is noted, monitoring reverts to weekly.
- (3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:

The permittee shall maintain records of all observation results using appropriately, Attachments B and/or C (or their equivalent), noting:

- (1) Whether any air emissions (except for water vapor) were visible from the emission units;
- (2) All emission units from which visible emissions occurred;
- (3) Whether the visible emissions were normal for the process;
- (4) The permittee shall maintain records of any equipment malfunctions, which may contribute to visible emissions; and,
- (5) The permittee shall maintain records of all USEPA Method 9 opacity tests performed.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements
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The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to

²⁴ The reissuance of this operating permit will not affect the frequency of monitoring. The permittee may continue their current monitoring schedule for all affected emission units.

allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone
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- (1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - (A) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - (B) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - (C) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - (D) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- (2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - (A) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - (B) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - (C) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - (D) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - (E) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - (F) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- (3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- (4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

- (5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage
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- (1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
- (A) Monitoring methods outlined in 40 CFR Part 64;
 - (B) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - (C) Any other monitoring methods approved by the director.
- (2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
- (A) Monitoring methods outlined in 40 CFR Part 64;
 - (B) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - (C) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- (3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- (A) Applicable monitoring or testing methods, cited in:
 - 1. 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - 2. 10 CSR 10-6.040, "Reference Methods";
 - 3. 10 CSR 10-6.070, "New Source Performance Standards";
 - 4. 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - (B) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

VI. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements

(1) Recordkeeping

- (A) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
- (B) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.

(2) Reporting

- (A) All reports shall be submitted to the Missouri Department of Natural Resources Air Pollution Control Program, Compliance/Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
- (B) The permittee shall submit a report of all required monitoring by:
 - 1. October 1st for monitoring which covers the January through June time period, and
 - 2. April 1st for monitoring which covers the July through December time period.
 - 3. Exception. Monitoring requirements which require reporting more frequently than semiannually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
- (C) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
- (D) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - 1. Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

2. Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
 3. Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- (E) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- (F) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- (1) June 21, 1999;
- (2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- (3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.E Title IV Allowances

This permit prohibits emissions which exceed any allowances the installation holds under Title IV of the Clean Air Act.

No permit revisions shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program if the increases do not require a permit revision under any other applicable requirement.

Limits cannot be placed on the number of allowances that may be held by an installation. The installation may not use these allowances, however, as a defense for noncompliance with any other applicable requirement.

Any allowances held by a Title IV installation shall be accounted for according to procedures established in rules promulgated under Title IV of the Clean Air Act.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

- (1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- (2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- (3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- (5) The permittee shall furnish to the Missouri Department of Natural Resources Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

The following are reasonably anticipated operating scenarios in this permit:

- Large Dough Mixer, on page 23
- Compounding Operations Building 45 – Storage Tanks, on page 24
- Ribbon Mixer, on page 34

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- (1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- (2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - (A) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (C) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

- (D) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- (3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
- (A) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - (B) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- (4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to Environmental Protection Agency, Region 7, AWMD/APCO, 11201 Renner Boulevard, Lenexa, KS 66219 and the Missouri Department of Natural Resources Air Pollution Control Program, Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
- (A) The identification of each term or condition of the permit that is the basis of the certification;
 - (B) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
 - (C) Whether compliance was continuous or intermittent;
 - (D) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
 - (E) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

- (1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
- (A) The application requirements are included and specifically identified in this permit, or
 - (B) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- (2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
- (A) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - (B) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - (C) The applicable requirements of the acid rain program,
 - (D) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - (E) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

- (1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - (A) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - (B) That the installation was being operated properly,
 - (C) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - (D) That the permittee submitted notice of the emergency to the Department of Natural Resources' Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- (2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Missouri Department of Natural Resources Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, and the Environmental Protection Agency, Region 7, AWMD/APCO, 11201 Renner Boulevard, Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.

- (1) Before making a change under this provision, The permittee shall provide advance written notice to the Missouri Department of Natural Resources' Air Pollution Control Program, Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as Environmental Protection Agency, Region 7, AWMD/APCO, 11201 Renner Boulevard, Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days' notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.

(2) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:

- (1) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
- (2) The permittee must provide written notice of the change to the Missouri Department of Natural Resources' Air Pollution Control Program, Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as Environmental Protection Agency, Region 7, AWMD/APCO, 11201 Renner Boulevard, Lenexa, KS 66219, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
- (3) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
- (4) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Susan W. Graham, President/CEO. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the director of the Missouri Department of Natural Resources' Air Pollution Control Program of the change. This notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- (1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- (2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- (3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - (A) The permit has a remaining term of less than three years;
 - (B) The effective date of the requirement is later than the date on which the permit is due to expire;or
 - (C) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- (4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- (5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VII. Attachments

Attachments follow.

Attachment C

Method 9 Opacity Emissions Observations								
Company				Observer				
Location				Observer Certification Date				
Date				Emission Unit				
Time				Control Device				
Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
SUMMARY OF AVERAGE OPACITY								
Set Number	Time				Opacity		Average	
	Start	End		Sum				

Readings ranged from: _____ to: _____ % opacity.

Was the emission unit in compliance at the time of evaluation (Yes/No)? _____

Signature of Observer: _____

Attachment J
 Average Chamber Temperature Log

A	B	C	D	E
	DateTime	RTO_AVRG_COMBUSTION_CHAMBER_TEMP	4 Hour Avg Chamber Temperature A & B	Comments
	12/31/2011 06:00:00	1583		
	12/31/2011 06:01:00	1613		
	12/31/2011 06:02:00	1621		
	12/31/2011 06:03:00	1622		
	12/31/2011 06:04:00	1602		
	12/31/2011 06:05:00	1625		
	12/31/2011 06:06:00	1609		
	12/31/2011 06:07:00	1594		
	12/31/2011 06:08:00	1580		
	12/31/2011 06:09:00	1603		
	12/31/2011 06:10:00	1602		
	12/31/2011 06:11:00	1605		

Block One-Hour Period²⁶ Average Chamber Temperature Log

A	B	C	D	E
	DateTime	RTO_AVRG_COMBUSTION_CHAMBER_TEMP	4 Hour Avg Chamber Temperature A & B	Comments
X	12/31/2011 10:00:00	1638	1,605	
X	12/31/2011 14:00:00	1601	1,605	
X	12/31/2011 18:00:00	1602	1,605	
X	12/31/2011 22:00:00	1601	1,605	
X	01/01/2012 02:00:00	1592	1,605	
X	01/01/2012 06:00:00	1616	1,605	

²⁶ What is labeled here as “4 Hour Avg Chamber Temperature A & B” will actually be the one-hour period average.

Attachment K
Compliance Demonstration for 10 CSR 10-6.405

		Rated Capacity (MMBtu / hour)	SCC Unit Capacity	Type (New / Existing?)	Calculated Limits (lbs PM / MMBtu)
56-01	Burnham Steam Boiler 25, natural gas or No. 2 Fuel Oil fired	12.50	0.012	E	0.57
56-02	Cleaver-Brooks, natural gas or fuel oil boiler	12.25	0.012	N	0.29
41	AKA F Steam Boiler, natural gas	4.18	0.004	N	0.29

Attachment L
Sample 12-month recordkeeping

Material Batch	Material description	Del. qty	Unit	Bsc start	EF (lbs./Ton)	Uncontrolled Emissions (lbs)	Controlled Emissions (lbs)	TOTAL Emissions (lbs)
307556	1193870 TRITHERM A 981-M-30 FX /LB	12,023	LB	6/14/2010	0.44	2,6451	-2,6186	0.0265
307409	1195543 TRITHERM A 981-H-16 /LB	8,738	LB	6/22/2010	0.44	1,9224	-1,9031	0.0192
307550	1195545 TRITHERM A 981-H-13 /LB	9,307	LB	6/24/2010	5.90	27,4557	-27,1811	0.2746
307449	1198750 ULTRATHERM D 701-27 /LB	5,995	LB	7/6/2010	0.44	1,3189	-1,3057	0.0132
307276	1198752 B2-120FP (53841PU) EPOXY KIT PT A /LB	27,085	LB	7/15/2010	0.10	1,3543	-1,3407	0.0135
307445	1204197 ULTRATHERM A 828-15 /LB	5,712	LB	7/26/2010	0.44	1,2566	-1,2441	0.0126
307550	1210406 TRITHERM A 981-H-13 /LB	9,744	LB	8/20/2010	5.90	28,7448	-28,4574	0.2874
307445	1211560 ULTRATHERM A 828-15 /LB	5,741	LB	8/23/2010	0.44	1,2630	-1,2504	0.0126
307277	1213452 B2-122-3H-A (53841WV) IMPRE /LB	7,350	LB	8/31/2010	0.10	0,3675	-0,3638	0.0037
307556	1215377 TRITHERM A 981-M-30 FX /LB	21,944	LB	9/8/2010	0.44	4,8277	-4,7794	0.0483
307409	1215403 TRITHERM A 981-H-16 /LB	9,241	LB	9/9/2010	0.44	2,0330	-2,0127	0.0203
307276	1223256 RanVar™ B2-120A (53841PU) Resin /LB	22,717	LB	10/18/2010	0.10	1,1359	-1,1245	0.0114
307276	1229300 RanVar™ B2-120A (53841PU) Resin /LB	10,639	LB	11/15/2010	0.10	0,5320	-0,5266	0.0053
307409	1215403 Tritherm® A 981-H-16 /LB	9,241	LB	9/9/2010	0.44	2,0330	-2,0127	0.0203
307409	1228700 Tritherm® A 981-H-16 /LB	9,771	LB	11/9/2010	0.44	2,1496	-2,1281	0.0215
307445	1215413 ULTRATHERM A 828-15 /LB	5,621	LB	10/4/2010	0.44	1,2366	-1,2243	0.0124
307550	1218641 TRITHERM A 981-H-13 /LB	9,921	LB	9/27/2010	5.90	29,2670	-28,9743	0.2927
307550	1225183 TRITHERM A 981-H-13 /LB	9,493	LB	10/25/2010	5.90	28,0044	-27,7243	0.2800
307550	1234300 TRITHERM A 981-H-13 /LB	9,200	LB	12/7/2010	5.90	27,1400	-26,8686	0.2714
307784	1238621 RanVar™ B7-606 DAPC /LB	2,290	LB	1/3/2011	0.10	0,1145	-0,1134	0.0011
307356	1241519 Pedigree® 2500-35 /LB	22,000	LB	1/17/2011	0.44	4,8400	-4,7916	0.0484
								12.1217 TOTAL (Rolling)

Attachment M
Sample of Tank Farm Recordkeeping

TANKS DATA-BASE	TANK #	LOCATION	TYPE	HEIGHT	Diameter	LIQ HEIGHT AVAIL.	Cap. Working	COLOR	ROOF TYPE	ROOF HEIGHT	ROOF RADIUS / SLOPE	BREATHR VENT SETTINGS	HEAT	MATERIAL	NOTES	CONTROL
entered	0															
n/a	57	B-51 New Reactor												Cooling water B-51		
n/a	58	B-51 New Reactor		7.1	5.0									Condensate B-51		
Rental	60	B-14 3-sided shed	H	8.2	4.6	100%	1019	red	FLAT					Low Sulfur Diesel	Energy provides tank	
	61	Tank Farm 51		20.0	11.3	20.0		alum diffused	D	1.917	9.34	none yet	180°F	212437 (PHENOL)		Submerged fill
	62	Tank Farm 51		20.0	11.3	20.0		alum diffused	D	1.917	9.34	none yet	180°F	212437 (PHENOL)		Submerged fill
	63	Tank Farm 51		15.5	10.0	13.8		white	C		0.06250				default slope	Submerged fill
	64	Tank Farm 51		15.5	10.0	13.8		white	C		0.06250			212220 (SOLVENT SHELLSOL D38)	default slope	Submerged fill
	65	Tank Farm 51		16.7	11.0	14.9		white	D	1.942	* 10.00	.03/.06		EMPTY (AIP)	AIP	
	66	Tank Farm 51		~ 16.7	11.0			white	C		0.06250			307556 (TRITHERM A 981-M-30 FX)	default slope	Submerged fill
	67	Tank Farm 51		21.0	11.0	21.0		alum diffused	D	1.942	* 10.00	.03/.06	ambient	Hazardous waste (Distillate Water)	dome top & bottom; chem make up defined previously	Pressure vent
	68	Tank Farm 51		23.0	11.0	20.9		white	C		0.06250				default slope	Submerged fill
	69	Tank Farm 51		23.0	11.0	20.9		white	C		0.06250		70-90F	212446 (DIBASIC ESTER)	default slope	Submerged fill
	70	Tank Farm 51		23.1	11.0	21.0		white	C		0.06250		70-90F	212009 (ISOSOLVE 231)	default slope; combined tank system with T69 - no file for this tank.	Submerged fill
	71	Tank Farm 51		23.1	11.0	21.0		white	C		0.06250			212234 (N METHYL 2 PYRROLIDONE)	default slope	Submerged fill
	72	Tank Farm 51		23.1	11.0	21.0		white	C		0.06250	.03/.06		Hazardous waste (Spent Cresylic acid)	default slope	Pressure vent

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received 12/21/2006
- 2) 2008 Emissions Inventory Questionnaire, received June 2, 2009; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

Permit History

- OP2002-035 - Completed 5/24/2002, Status: Part 70 Operating Permit Issued Project: EX199705026, Expires 5/23/2007
- 9801004SC - Completed 7/10/1998, Description: Nylon Process Tank, Status: Local Construction Permit Issued, Project: EX199806047
- 9807-039SC - Completed 9/25/1998, Description: Thinning Tank, Status: Local Construction Permit Issued, Project: EX199808115
- 00-04-018 - Completed 5/24/2000, Description: Chemical usage in tanks, Status: Local Construction Permit Issued, Project: EX200004095
- 00-04-018F - Completed 10/25/2000, Status: Local Construction Permit Issued, Project: EX200009092
- 01-11-034 - Completed 1/30/2002, Description: Mixers, Status: Local Construction Permit Issued Project: AP200201017
- 03-09-017PM - Completed 11/6/2003, Description: Modify previous conditions, Status: Local Construction Permit Issued, Project: AP200310023
- 04-04-007 - Completed 6/3/2004, Status: Local Construction Permit Issued, Project: AP200405152
- 04-02-006 - Completed 7/9/2004, Status: Local Construction Permit Issued, Project: AP200407013
- 04-04-007 - Completed 12/20/2005, Status: Local Construction Permit Issued, Project: AP200501056
- 04-12-024 - Completed 12/20/2005, Status: Local Construction Permit Issued, Project: AP200501057
- 04-12-025 - Completed 3/23/2005, Description: Al Reactor, Status: Local Construction Permit Issued Project: AP200502024
- 05-11-011 - Completed 1/10/2006, Description: 20,000 gal tank, Status: Local Construction Permit Issued, Project: AP200512034
- 06-01-001 - Completed 2/23/2006, Description: 800 gal mixing vessel, Status: Local Construction Permit Issued, Project: AP200602059
- 042007-012 - Completed 4/16/2007, Description: Four Process Tanks, Status: Local Construction Section 5 Permit Issued, Project: AP200702018
- 07-12-027 - Completed 4/21/2008, Description: Process Tanks, Status: Local Construction Permit Issued, Project: AP200803099
- 08-03-005 - Completed 10/23/2008, Description: Tank, Status: Local Construction Permit Issued, Project: AP200809046

09-05-012 - Completed 9/17/2009, Status: Local Construction Permit Issued, Project:
AP200908035

SR10.014 - Completed, Status: Local Construction Permit Issued

SR08.046 - Completed, Status: Local Construction Permit Issued

SR09.008 - Completed, Status: Local Construction Permit Issued

SR11.019 - Completed, Status: Local Construction Permit Issued

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-5.220 Control of Petroleum Liquid Storage, Loading and Transfer – Previously this rule applied to storage tank 60 (EU0100 in OP2002-035), a 1,000 gallon reformulated gasoline storage tank. This tank has since been replaced (storage tank 60A) with a 200 gallon storage tank which is exempt from this rule.

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

This state rule provides an exemption at (1)(A)2.:

Combustion equipment that uses exclusively pipeline grade natural gas as defined in 40 CFR 72.2. or liquefied petroleum gas as defined by American Society for Testing and Materials (ASTM), or any combination of these fuels.

Steam Boiler 41 uses pipeline grade natural gas exclusively.

Boilers 56-01 and 56-02 are exempt per (1)(A)1 since they are subject to sulfur limits per 10 CSR 10-6.070 (NSPS Dc) and the generators are exempt because they are subject NSPS III.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

All Construction Permits:

Because many of the facility's permits were written prior to the installation of the regenerative thermal oxidizer (RTO), similar limitations, monitoring, recordkeeping, and reporting requirements from these construction permits were not included in their listed requirements.

Instead these requirements are listed under their necessary rule sections (40 CFR Part 63, Subpart FFFF, 40 CFR Part 63, Subpart HHHHH, and 10 CSR 10-5.390). Also, in many instances the local agency reiterated the maximum hourly design rate as a special permit condition, which is unnecessary since the equipment is incapable of exceeding the limit. Those conditions have been dropped where found.

Permit 04-12-025 (January 14, 2005)

This permit lists requirements for the reactor's condenser including a 95% overall removal efficiency for total VOC emissions. This was done prior to the facility reaching compliance with 40 CFR Part 63, Subpart 63 FFFF. With the installation of the RTO the facility now meets this removal efficiency and demonstrates compliance with the Subpart. For this reason the limitations, conditions, recordkeeping, and reporting associated with the condenser in this construction permit were not included in the limitations section of this operating permit.

Permit 03-09-017PM (October 1, 2003)

This permit supersedes requirements from the following permits: 97-06-066SC (November 18, 1997), 98-07-039SC (August 17, 1998), and 00-04-018F (April 19, 2000). While this permit removed the majority of the limitations, conditions, and recordkeeping from the original permits, the remaining requirements are all satisfied by the 10 CSR 10-5.390 and Subpart 40 CFR Subpart 63 FFFF requirements for these units listed in this permit.

Permit 05-11-011 (December 7, 2005)

This permit has not been updated to reflect the facility's installation of the RTO to meet compliance with applicable rules. Thus, the limitations, monitoring, recordkeeping, and reporting conditions from this permit were not used in the operating permit.

Permits 04-04-007, 04-04-007PM, and Permit Matter 09-05-012

These permits were not applied to Mixers DA900, EM600, QS 800 because the MACT regulation was determined not to apply. 10 CSR 10-6.400 provides an exemption if control is included. Finally, the opacity limit is covered in the group of visible emission sources.

Permit 07-12-027

The dust collector pressure drop monitoring was changed from daily to weekly to match the frequency given in all the other construction permits. There are no unusual circumstances at this unit that would warrant a more frequent schedule of monitoring.

Permit 94-11-132 - 135R1

The combined controlled emission rate from the Resin Dept. Process Tank 31, Resin Reactor 6, and Resin Dept. Process Tank 32 (T31, RX6, T32) is determined to be incapable of exceeding 40 tons VOC per 12-month rolling total. Therefore, this requirement was left out of the operating permit.

Permit 042007-012

The combined controlled emission rate from T1, T2, T3, T4 process tanks is determined to be incapable of exceeding 40 tons VOC per 12 month rolling total. Therefore, this requirement was left out of the operating permit.

New Source Performance Standards (NSPS) Applicability²⁷ Issues

40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units:

Boiler 41 is less than 10 MMBtu per hour and is not subject. The facility has elected to show compliance via fuel oil certification.

40 CFR Part 60, Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984:

None of the storage tanks at the facility is subject to this regulation.

40 CFR Part 60, Subpart TT, Metal Coil Surface Coating:

This regulation does not apply to the installation since the installation does not coat metal strips. Magnet wire coated for research and development is not considered a metal strip.

Maximum Achievable Control Technology (MACT) Applicability²⁸ Issues

40 CFR Part 63, Subpart A General Provisions and Subpart FFFF – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing:

The facility is subject to this subpart and for the purposes of evaluation is considered to be an existing source.

Table 4 to Subpart FFFF of Part 63—Emission Limits for Storage Tanks

As required in §63.2470, you must meet each emission limit in the following table that applies to your storage tanks:

For each . . .	For which . . .	Then you must . . .
1. Group 1 storage tank	a. The maximum true vapor pressure of total HAP at the storage temperature is ≥ 76.6 kilopascals	i. Reduce total HAP emissions by ≥ 95 percent by weight or to ≤ 20 ppmv of TOC or organic HAP and ≤ 20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or
		ii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or
		iii. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein.

²⁷ This area is used to discuss any questionable applicability issues that arose and were resolved.

²⁸ This area is used to discuss any questionable applicability issues that arose and were resolved.

For each . . .	For which . . .	Then you must . . .
	b. The maximum true vapor pressure of total HAP at the storage temperature is <76.6 kilopascals	i. Comply with the requirements of subpart WW of this part, except as specified in §63.2470; or
		ii. Reduce total HAP emissions by ≥ 95 percent by weight or to ≤ 20 ppmv of TOC or organic HAP and ≤ 20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or
		iii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or
		iv. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein.
2. Halogenated vent stream from a Group 1 storage tank	You use a combustion control device to control organic HAP emissions	Meet one of the emission limit options specified in Item 2.a.i or ii. in Table 1 to this subpart.

A Group 1 storage tank is defined in the Subpart as “a storage tank with a capacity greater than or equal to 10,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 6.9 kilopascals at an existing source or greater than or equal to 0.69 kilopascals at a new source.” A Group 2 storage tank means a storage tank that does not meet the definition of a Group 1 storage tank.

Based on this information along with information provided by the facility that emission streams from its storage tanks do not contain halogens, **all storage tanks less than 10,000 gallons in capacity, and all existing tanks with a maximum true vapor pressure of total HAP less than 6.9 kPa, are not considered to have venting requirements from this Subpart.**

40 CFR Part 63, Subpart A General Provisions and Subpart HHHHH – National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing:

The facility is subject to this subpart and for the purposes of evaluation is considered to be an existing source.

Compliance with 40 CFR Part 63 Subpart FFFF and Subpart HHHHH
§ 63.8090(c) of subpart HHHHH states:

Compliance with 40 CFR Part 63, subpart FFFF. After the compliance dates specified in §63.7995, an affected source under this subpart HHHHH that includes equipment that is also part of an affected source under 40 CFR Part 63, subpart FFFF is deemed in compliance with this subpart HHHHH if all of the conditions specified in paragraphs (c)(1) through (5) of this section are met.

(1) Equipment used for both miscellaneous coating manufacturing operations and as part of a miscellaneous organic chemical manufacturing process unit (MCPU), as defined in §63.2435, must be part of a process unit group developed in accordance with the provisions in §63.2535(1).

(2) For the purposes of complying with §63.2535(1), a miscellaneous coating manufacturing “process unit” consists of all coating manufacturing equipment that is also part of an MCPU in the process unit group. All miscellaneous coating manufacturing operations that are not part of a process unit group must comply with the requirements of this subpart HHHHH.

(3) The primary product for a process unit group that includes miscellaneous coating manufacturing equipment must be organic chemicals as described in §63.2435(b)(1).

(4) The process unit group must be in compliance with the requirements in 40 CFR Part 63, subpart FFFF as specified in §63.2535(1)(3)(i) no later than the applicable compliance dates specified in §63.2445.

(5) You must include in the notification of compliance status report required in §63.8070(d) the records as specified in §63.2535(1)(1) through (3).

Carbon Bed Compliance:

Previously, we believed that DA600, DA900, EM600, QS800, T483, T2400 and T2401 were subject to Part 63 Subparts FFFF or HHHHH [68FR69185, Dec. 11, 2003, as amended at 71FR58503, Oct. 4, 2006]. EPA has now determined that these are not subject. See the following comments provided by EPA in response to a question from the National Paint and Coatings Association (NPCA):

NPCA Question #2:

Subpart FFFF, the Miscellaneous Organic National Emissions Standard for Hazardous Air Pollutants (MON), excludes "flexible elephant trunk systems that draw ambient air (i.e., systems that are not ducted, piped, or otherwise connected to the unit operations) away from operators that could be exposed to fumes when vessels are opened" from the definition of "batch process vent." The key to this seems to be that the ventilation system must not vent any emissions from the vessel when the vessel is sealed. One of NPCA's member companies has a fixed, slotted hood near the manway of the vessel to provide ventilation to minimize operator exposure to the chemicals when the manway is opened for small quantity additions to the vessel. When the manway is closed, the slotted hood vents general room air, and emissions from the sealed vessel are routed to the control device. Is the fixed, slotted hood design excluded from the definition of "batch process vent"? Subpart I-HHHHH contains a similar provision. For coatings vessels, charging chutes with the slot ventilation either can be fixed permanently to the tank or can be placed over a hatch for the charging operation. In either case, the ventilation is only "on" during the charging operation. Can EPA verify that a vent line from an external charging chute would NOT be a process vessel vent?

EPA Response Question #2:

The Agency believes that these would be similar to the operation of flexible elephant trunks. Also, as discussed in our December 5, 2003, memo to Mr. Darling, we intend to propose amendments to the MCM rule to clarify that hatch and manway openings are allowed for sampling and product addition. Therefore, ventilation which occurs during these operations would not be considered a process vent, regardless of the capture system design.

This applicability determination was provided via email, February 21, 2012, from Mr. Joe Terriquez, Air Permitting & Compliance, U.S. Environmental Protection Agency – Region 7.

Storage Tank Exemptions:

For storage tanks section § 63.8010 of the Subpart states:

“You must meet each emission limit in Table 2 to this subpart that applies to your storage tanks, and you must meet each applicable requirement specified in §63.8000(b).” [§ 63.8010 (a)]

§ 63.8000(b) states:

“*General requirements.* (1) If an emission stream contains halogen atoms, and you use a combustion-based control device (excluding a flare) to meet an organic HAP emission limit, you must determine whether the emission stream meets the definition of a halogenated stream by calculating the concentration of each organic compound that contains halogen atoms using the procedures specified in §63.115(d)(2)(v), multiplying each concentration by the number of halogen atoms in the organic compound, and summing the resulting halogen atom concentrations for all of the organic compounds in the emission stream. Alternatively, you may elect to designate the emission stream as halogenated.”

Table 2 to Subpart HHHHH of Part 63—Emission Limits for Storage Tanks

As required in §63.8010, you must meet each emission limit in the following table that applies to your storage tanks.

For each . . .	Then you must . . .
1. Group 1a storage tank	a. Comply with the requirements of subpart WW of this part, except as specified in §63.8010(b); or

For each . . .	Then you must . . .
	b. Reduce total organic HAP emissions from the storage tank by ≥ 90 percent by weight by venting emissions through a closed-vent system to any combination of control devices (excluding a flare); or
	c. Reduce total organic HAP emissions from the storage tank by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare.
2. Group 1b storage tank	a. Comply with the requirements of subpart WW of this part, except as specified in §63.8010(b); or
	b. Reduce total organic HAP emissions from the storage tank by ≥ 80 percent by weight by venting emissions through a closed-vent system to any combination of control devices (excluding a flare); or
	c. Reduce total organic HAP emissions from the storage tank by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare.

A Group 1a storage tank is defined in the Subpart as “a storage tank at an existing source with a capacity greater than or equal to 20,000 gal storing material that has a maximum true vapor pressure of total organic HAP greater than or equal to 1.9 pounds per square inch, absolute (psia). Group 1a storage tank also means a storage tank at a new source with either a capacity greater than or equal to 25,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 0.1 psia or a capacity greater than or equal to 20,000 gal and less than 25,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 1.5 psia.”

A Group 1b storage tank is defined in the Subpart as “a storage tank at a new source that has a capacity greater than or equal to 10,000 gal, stores material that has a maximum true vapor pressure of total organic HAP greater than or equal to 0.02 psia, and is not a Group 1a storage tank.”

Based on this information along with information provided by the facility that emission streams from its storage tanks do not contain halogens, **all storage tanks less than 20,000 gallons in capacity are not considered to have venting requirements from this Subpart.**

The following units were considered portable process vessels by this subpart: Meyers Mixer 45-1.

All Process Tanks subject to this Subpart are considered stationary process vessels as defined in the Subpart.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability²⁹
None.

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

²⁹ This area is used to discuss any questionable applicability issues that arose and were resolved.

Greenhouse Gas Emissions

This installation exceeds 100 tons per year of mass emission of greenhouse gases. While Part 70 permits generally do not establish new emissions limits, they consolidate applicable requirements, as defined in Missouri State Regulations 10 CSR 10-6.020(2)(A)23, into a comprehensive air permit. At the time of permit issuance, there were no applicable GHG requirements for this source.

This source is subject to the Greenhouse Gas Reporting Rule, but not the annual reporting requirement. The preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at this time. In addition, Missouri regulations do not require the installation to report CO₂ emissions in their Missouri Emissions Inventory Questionnaire (MoEIS); therefore, the installation’s CO₂ emissions were not included within this permit. An estimate of CO₂ emissions is included in the statement of basis.

The following tables were generated by the permittee using EPA calculations from the reporting rule.

NATURAL GAS									
2010	LGR Rec'dr (COF)	Vol (ft ³)	Annual CO ₂ Mass Emissions (Metric Tons)	LGR Rec'dr (COF)	Vol (ft ³)	Annual CH ₄ Mass Emissions (Metric Tons)	LGR Rec'dr (COF)	Vol (ft ³)	Annual N ₂ O Mass Emissions (Metric Tons)
JAN	87,130	8,713,000	475	87,130	8,713,000	0.01115	87,130	8,713,000	0.00090
FEB	90,240	9,024,000	492	90,240	9,024,000	0.01155	90,240	9,024,000	0.00093
MAR	74,970	7,497,000	409	74,970	7,497,000	0.00960	74,970	7,497,000	0.00077
APR	51,940	5,194,000	283	51,940	5,194,000	0.00665	51,940	5,194,000	0.00053
MAY	48,390	4,839,000	264	48,390	4,839,000	0.00619	48,390	4,839,000	0.00050
JUN	49,970	4,997,000	272	49,970	4,997,000	0.00640	49,970	4,997,000	0.00051
JUL	44,670	4,467,000	243	44,670	4,467,000	0.00572	44,670	4,467,000	0.00046
AUG	48,370	4,837,000	264	48,370	4,837,000	0.00619	48,370	4,837,000	0.00050
SEP	41,600	4,160,000	227	41,600	4,160,000	0.00532	41,600	4,160,000	0.00043
OCT	53,500	5,350,000	292	53,500	5,350,000	0.00685	53,500	5,350,000	0.00055
NOV	65,180	6,518,000	355	65,180	6,518,000	0.00834	65,180	6,518,000	0.00067
DEC	72,140	7,214,000	393	72,140	7,214,000	0.00923	72,140	7,214,000	0.00074
	TOTAL		3,968	TOTAL		0.09320	TOTAL		0.00748

#2 FUEL OIL						
Vol (Gallons)	Annual CO ₂ Mass Emissions (Metric Tons)	Vol (MMbtu)	Annual CH ₄ Mass Emissions (Metric Tons)	Vol (MMbtu)	Annual N ₂ O Mass Emissions (Metric Tons)	TOTAL CO ₂ e
6271	64	6271	0.003	6271	0.0003	475
0	0	0	0.000	0	0	492
0	0	0	0.000	0	0	409
0	0	0	0.000	0	0	283
0	0	0	0.000	0	0	264
0	0	0	0.000	0	0	272
0	0	0	0.000	0	0	243
0	0	0	0.000	0	0	264
0	0	0	0.000	0	0	227
0	0	0	0.000	0	0	292
0	0	0	0.000	0	0	355
0	0	0	0.000	0	0	393
TOTAL	64	TOTAL	0.003	TOTAL	0.0003	4,033
						TARGET = 35,000

Other Regulatory Determinations

10 CSR 10-6.400 – Restriction of Emission of Particulate Matter from Industrial Processes:

An analysis was prepared to evaluate the applicability of this rule to emission units at the facility. The results of that analysis have been attached as an enclosure to this Statement of Basis.

Based on this determination all individual units are considered exempt as long as any associated control devices are in operation whilst operating the emission unit.

10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating:

Subsection (1)(E) *An installation is exempt from this rule if all of the installation's applicable units are fueled only by landfill gas, propane, natural gas, fuel oils #2 through #6 (with less than one and two-tenths percent (1.2%) sulfur), or other gases (with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent) or any combination of these fuels.*

The permittee uses only pipeline grade natural gas except during times of curtailment.

Discussion of the Evaporative Thermal Oxidizer (ETO)

The ETO is an emission unit, and may have other emissions, if the RCRA permit were not in place. This permit condition is more of a "notice" that changes in your RCRA permit may affect your operating permit.

The federal Clean Air Act does cite RCRA, thus:

Title 42 › Chapter 85 › Subchapter I › Part A ›

42 USC § 7412 - Hazardous air pollutants

(n) Other provisions

(7) RCRA facilities

In the case of any category or subcategory of sources the air emissions of which are regulated under subtitle C of the Solid Waste Disposal Act [42 U.S.C. 6921 et seq.], the Administrator shall take into account any regulations of such emissions which are promulgated under such subtitle and shall, to the maximum extent practicable and consistent with the provisions of this section, ensure that the requirements of such subtitle and this section are consistent.

We are being consistent by simply citing the RCRA permit. We do not intend for the permittee to keep or provide any other records than those that are required by the RCRA permit.

10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products

For the emission unit *Thermal Oxidizer Group*, the requirements of this rule have been subsumed by 40 CFR Part 63, Subparts FFFF and HHHHH. The emission limitations are considered complied with whenever Subparts FFFF and HHHHH are complied with. Therefore, a separate permit condition for this rule has not been included in the permit.

This rule only requires emission unit T6509 to have the one-time requirement that tank covers be installed on all open-top tanks used for the production of non-waterbase coating products, and recordkeeping of production rates sufficient to determine daily VOC emissions. One-time emission limitations, once compliance is confirmed, do not have to be included in the permit. The operational requirements are covered by 40 CFR Part 63 Subpart HHHHH. The recordkeeping is not associated with an emission limitation. Therefore, a separate permit condition for this rule has not been included in the permit.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation that is not specifically listed either in the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations that were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation does not comply with a regulation that was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

Randy E. Raymond
Environmental Engineer
Missouri Department of Natural Resources
Air Pollution Control Program

Enclosures:

Demonstration of Compliance for 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes*

Description	Process Weight Rate (ton/hr)	PM10 Emission Factor (lb/ton)	PM Emission Factor (lb/ton)	Capture Device Efficiency (%)	Control Device Efficiency (%)	Uncontrolled Emission Rate (lb/hr)	Controlled Emission Rate (lb/hr)	Allowable Emission Rate (lb/hr)	PTE is less than 0.5 lbs per hour? (with control / without control)	Is unit in compliance without controls?	Is the Control Efficiency Greater Than 90%?	Is unit in compliance with controls?	PTE as percentage of Allowable
Dry Loading Mixer 1	5.410	2.5	4.17	100	99.0	22.54	0.23	12.71	YES/w	NO	YES	YES	2%
Dry Loading Mixer 6	5.031	2.5	4.17	100	98.0	20.96	0.42	12.10	YES/w	NO	YES	YES	3%
Dry Loading Mixer 3	5.309	2.5	4.17	100	99.0	22.12	0.22	12.55	YES/w	NO	YES	YES	2%
Ribbon 80	0.125	2.5	4.17	100	99.0	0.52	0.01	1.02	YES/w	YES	YES	YES	1%
Ribbon 500	0.967	2.5	4.17	100	99.0	4.03	0.04	4.01	YES/w	NO	YES	YES	1%
DA110	0.440	2.5	4.17	100	99.0	1.83	0.02	2.37	YES/w	YES	YES	YES	1%
DA350	0.888	4.7	7.83	100	99.8	6.95	0.01	3.78	YES/w	NO	YES	YES	0%
Dry loading to Resin Reactor 6	5.900	4.7	7.83	100	99.0	46.22	0.46	13.47	YES/w	NO	YES	YES	3%
Dry loading to Resin Reactor 7	5.900	4.7	7.83	100	99.0	46.22	0.46	13.47	YES/w	NO	YES	YES	3%
Dry loading to Process Tank 6511	1.500	2.703	4.51	100	98.0	6.76	0.14	5.38	YES/w	NO	YES	YES	3%
Dry loading to Process Tank 6512	1.500	2.703	4.51	100	98.0	6.76	0.14	5.38	YES/w	NO	YES	YES	3%
Dry loading to Process Tank 6513	1.500	2.703	4.51	100	98.0	6.76	0.14	5.38	YES/w	NO	YES	YES	3%
Dry loading to Process Tank 6514	1.500	2.703	4.51	100	98.0	6.76	0.14	5.38	YES/w	NO	YES	YES	3%
Dry loading to Process Tank 6515	1.500	2.703	4.51	100	98.0	6.76	0.14	5.38	YES/w	NO	YES	YES	3%
EM600 (old DA Myers 800 Mixer)	0.657	4.7	7.83	100	99.0	5.15	0.05	3.09	YES/w	NO	YES	YES	2%
DA900 (old DA Meyers Mixer)	0.739	4.7	7.83	100	99.0	5.79	0.06	3.35	YES/w	NO	YES	YES	2%
QS800 (old 800 gallon mixing vessel)	0.116	20	33.33	100	99.0	3.87	0.04	0.97	YES/w	NO	YES	YES	4%

Description	Process Weight Rate (ton/hr)	PM10 Emission Factor (lb/ton)	PM Emission Factor (lb/ton)	Capture Device Efficiency (%)	Control Device Efficiency (%)	Uncontrolled Emission Rate (lb/hr)	Controlled Emission Rate (lb/hr)	Allowable Emission Rate (lb/hr)	PTE is less than 0.5 lbs per hour? (with control / without control)	Is unit in compliance without controls?	Is the Control Efficiency Greater Than 90%?	Is unit in compliance with controls?	PTE as percentage of Allowable
DA600	0.739	4.7	7.83	100	99.0	5.79	0.06	3.35	YES/w	NO	YES	YES	2%
Big Cowles Mixer	0.103	5.12	8.53	100	99.0	0.88	0.01	0.89	YES/w	YES	YES	YES	1%
Hobart Mixer 1	0.028	5.12	8.53	100	99.0	0.24	0.00	0.37	YES/wo	YES	YES	YES	1%
Hobart Mixer 2	0.028	5.12	8.53	100	99.0	0.24	0.00	0.37	YES/wo	YES	YES	YES	1%
Shar Mixer	0.013	5.12	8.53	100	0.0	0.11	0.11	0.22	YES/wo	YES	NO	YES	49%
Kitchen Aid Mixer	0.013	5.12	8.53	100	0.0	0.11	0.11	0.22	YES/wo	YES	NO	YES	49%



Jeremiah W. (Jay) Nixon, Governor

Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

MEMORANDUM

DATE: April 2, 2013

TO: 2006-12-070 File, Elantas PDG, Inc.

FROM: Randy E. Raymond, Environmental Technician

SUBJECT: Response to Public Comments

The department received seventeen (17) comments. The department received comments from U.S. EPA Region VII, Great Rivers Environmental, the permittee and the department's St. Louis Regional Office. Some comments and corrections are typographical in nature and do not change the content, meaning or intent of the original text. Those comments have not been included in the list of comments and responses below. The department addressed the comments in the order of which they appear within the letter(s).

Comment 1: The installation description on the cover page of the draft permit and installation description on page 6 does not indicate the pollutant(s) which create the need for a Part 70 /Title V operating permit. The customary practice of MDNR is to include and specify the regulated air pollutants that make the source major and therefore subject to a Part 70 operating permit in the Installation Description on the permit cover sheet and the Installation Description and Equipment Listing section of the permit. However, the installation descriptions reviewed in the Elantas draft permit do not indicate the major regulated air pollutant(s). Therefore, EPA recommends MDNR consider listing the major air pollutant(s) in the installation description that makes the source subject to Title V.

Response to Comment: The department agrees with the commenter. The department changed the operating permit because of this comment.

Comment 2: The Installation Description and Equipment Listing (Section I) includes a list of one hundred fifty (150) emission units identified as having unit-specific emission limitations. The Emission Unit Specific Limitations are specified in Section III of the draft Part 70 operating permit. However, eighteen (18) of the one hundred fifty (150) listed equipment items are not included in any of the draft permit conditions included in Section III. Therefore, EPA recommends that MDNR include appropriate permit conditions for all the equipment at this installation that emit air pollutants and are identified as having unit-specific emission limitations.

Response to Comment: The department agrees with the commenter. We have moved fifteen (15) emission units to the "without Specific Emission Limitations" list. Three (3) emission units have been included into existing emission unit groups and permit conditions. The department changed the operating permit because of this comment.

Comment 3: The list of facility equipment that makes up the Thermal Oxidizer Group includes a footnote 6 and a footnote 7. Footnote 6 says "dry loading to reactors is noted as a separate particulate source of emissions that is not vented to the RTO (emphasis added), but is captured and control (sic) through baghouses. Please refer to the Dry Loading Group." Footnote 7 says "dry loading to the process tanks 6501 through 6516 is a separate source of particulate emissions that do not go through the RTO (emphasis added) and are listed in a separate emission unit group. Please refer to the Dry Loading Group." However, the emission limitation of permit condition 2 (page 18 of the draft permit) requires equipment identified by footnote 6 to be vented to the thermal oxidizer (RTO) at all times (emphasis added), except during start-up, shutdown and malfunction. The emission limitation of permit condition 3 (page 19 of the draft permit) requires tanks 6501 through 6516 to be vented to the thermal oxidizer (RTO) at all times (emphasis added) except during start-up, shutdown and malfunction. There appears to be a discrepancy between footnotes 6 and 7 and the emission limitations in permit conditions 2 and 3 for the thermal oxidizer group. Therefore, EPA recommends MDNR correct this apparent discrepancy.

Response to Comment: The department disagrees with the commenter. There is no discrepancy. The operation of dry loading of the vessels is not operation of the vessel. The department considers dry loading a separate operation that involves the collection of fugitive emissions from the loading of the vessel. During operation of the vessel, the permittee vents the VOC emissions to the RTO. During the dry loading process, the permittee collects the fugitive emissions and vents them to the baghouse as described in the permit. The department did not change the operating permit because of this comment.

Comment 4: The Record keeping requirement in Permit Condition 1 for the Thermal Oxidizer Group says "records shall be kept on production rates sufficient to determine daily VOC emissions." However, Permit Condition 1, as drafted, does not have a VOC emission limitation or a VOC monitoring requirement. EPA requires that each Title V permit condition shall be practically enforceable. Practical enforceability answers the "who," "what," "where," "when," "how," and "how often." This Permit Condition 1 for the Thermal Oxidizer Group fails to meet the practical enforceability test. Therefore, EPA recommends that MDNR modify this permit condition to include an emission limitation, monitoring and record keeping requirement that is practically enforceable.

Response to Comment: The department disagrees with this commenter. The commenter should address their comments to the underlying authority cited in the operating permit. The state's rule, 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products, contains the requirement as identified in the draft operating permit. It is the intention of the operating permit to identify and codify all the applicable requirements, but not to change them. The department recommends that the commenter take its comment to the appropriate authority for change. However, the department has reevaluated the permit condition as a whole and decided to eliminate it and add a footnote to each of the next two conditions regarding the 10 CSR 10-5.390, that reads:

The requirements of 10 CSR 10-5.390 are less stringent than the requirements of 40 CFR Part 63 Subpart FFFF. Compliance with 40 CFR Part 63 Subpart FFFF is deemed compliance with 10 CSR 10-5.390.

Comment 5: Permit Condition 1 for the Dry Loading Group references 10 CSR 10-6.400, Control of Emission of Particulate Matter from Industrial Sources. The permit condition identifies dry loading to resin reactors 2, 5, 6 and 7 and omits the dry loading to resin reactor 1. Therefore, EPA recommends that MDNR include dry loading to resin reactor 1 as an affected equipment item.

Response to Comment: The department agrees with the commenter. The department added RX1 to the list. The department changed the operating permit because of this comment.

Comment 6: Item (2) in the Emission Limitations portion of Permit Condition 2 for the Dry Loading Group appears, as written in the draft operating permit, to be a monitoring requirement to ensure compliance with an emission limitation. Also, the Record keeping portion of Permit Condition 2 requires that records of all inspections, corrective actions, filter/cartridge/ bag changes and instrument calibrations be maintained. This Record keeping portion also requires weekly pressure drop reading be taken and recorded. However, the Record keeping portion does not specify the "who" and does not reference either Attachment D or Attachment F, which appear to have been included in the draft operating permit, as examples for capturing the required records. EPA recommends that MDNR consider a Monitoring portion in Permit Condition 2 for the Dry Loading Group and include item (2) from the Emission Limitation portion in the monitoring portion. Also, EPA recommends that MDNR specify that the "permittee shall" maintain the required records and add references to approved attachments for capturing the records.

Response to Comment: The department agrees with the commenter. The department rearranged and reworded the permit condition to correct the confusion. The department changed the operating permit because of this comment.

Comment 7: The Record keeping portion of Permit Condition 3 for the Dry Loading Group requires the permittee to maintain records to verify compliance with bag house monitoring. Attachment D and Attachment F appear to be designed and have been included, with this draft operating permit, to document this compliance. However, neither attachment is referenced in Permit Condition 3. EPA recommends that MDNR consider adding a reference to Attachment D and Attachment F to the record keeping portion of Permit Condition 3 for the Dry Loading Group.

Response to Comment: The department agrees with the commenter. The department rearranged and reworded the permit condition to correct the confusion. The department changed the operating permit because of this comment.

Comment 8: The Record keeping portion of Permit Condition 2 for the B4100 Group requires the permittee to keep production records sufficient to determine daily VOC emissions. However, Permit Condition 2 for the B4100 Group does not include a VOC emission limit or VOC monitoring requirement and there is no discussion on how the permittee is to determine daily VOC emissions. Therefore, EPA recommends that MDNR and Elantas PDG, Inc. develop an appropriate record for maintaining daily VOC determinations from the B4100 Group and include as an attachment to the operating permit.

Response to Comment: The department disagrees with the commenter, in part. The commenter should address their comments to the underlying authority cited in the operating permit. The state's rule, 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products, contains the requirement as identified in the draft operating permit. It is the intention of the operating permit to identify and codify all the applicable requirements, but not to change them. The department recommends that the commenter take its comment to the appropriate authority for change. The department has reevaluated the permit condition as a whole, and changed the permit condition to an Alternate Operating Scenario. The department added to the monitoring commensurate with the *Emission Limitations*.

Comment 9: Additionally, the Record keeping portion [*of Permit Condition 2 for the B4100 Group*] requires the permittee to maintain records on routine and unscheduled maintenance and repair activities on all air pollution control equipment and to maintain records of inspections, including date, time, observation and description of corrective action, using Attachment E or approved equivalent. Attachment E is titled Tank Cover Inspection Log and would appear not to be the desired record for maintain the information required in the Record keeping portion of Permit Condition 2 for the B4100 Group. EPA also recommends that MDNR consider an appropriate attachment to use in lieu of Attachment E for the described record keeping activities.

Response to Comment: The department agrees with the commenter. The department rearranged and reworded the permit condition to correct the confusion. The department changed the operating permit because of this comment.

Comment 10: Permit Condition 1 for T6509 Tank; Permit Condition 1 for Resin Department Storage Tanks; Permit Condition 2 for Tank Farm 51 Storage Tanks; Permit Condition 2 for Tank Farm 53 Storage Tanks; and Permit Condition 2 for L2500 Storage Tanks all have a record keeping requirement that says "records shall be kept on production rates sufficient to determine daily VOC emissions. However, none of these five (5) permit conditions include a VOC emission limit or a VOC emission monitoring requirement. EPA requires each Title V permit condition to be practically enforceable. Practical enforceability answers the "who," "what," "where," "when," "how," and "how often." These five (5) permit conditions, as drafted fail to meet the practical enforceability test. Therefore, EPA recommends that MDNR modify this permit condition to include an emission limitation, monitoring and record keeping requirement that is practically enforceable.

Response to Comment: The department disagrees with this commenter. The commenter should address their comments to the underlying authority cited in the operating permit. The state's rule, 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products, contains the requirement as identified in the draft operating permit. It is the intention of the operating permit to identify and codify all the applicable requirements, but not to change them. The department recommends that the commenter take its comment to the appropriate authority for change. However, the department has reevaluated the permit condition as a whole and decided to eliminate it and add the following statement to the statement of basis:

This rule only requires emission unit T6509 to have the one-time requirement that tank covers be installed on all open-top tanks used for the production of non-waterbase coating products, and record keeping of production rates sufficient to determine daily VOC emissions. One-time emission limitations, once compliance is confirmed, do not have to be included in the permit. The operational requirements are covered by 40 CFR Part 63 Subpart HHHHH. The record keeping is not associated with an emission limitation. Therefore, a separate permit condition for this rule has not been included in the permit.

Comment 11: I don't see it mentioned elsewhere, so should we also state that boilers 56-01 and 56-02 are exempt per (1)(A)1 because they are subject to sulfur limits per 10 CSR 10-6.070 (NSPS Dc) and the generators are exempt because they are subject NSPS IIII?

Response to Comment: The department agrees with the commenter. The department changed the operating permit because of this comment.

Comment 12: Add 40 CFR Part 60 Subpart IIII for the generators? We discussed it and edited the permit conditions accordingly, as I recall.

Response to Comment: The department disagrees with the commenter. This section of the statement of basis is for addressing issues or the reasons the department left a requirement out of the operating permit. The commenter refers to conditions that are in the permit. Therefore, the department does not need to address them here. The department did not change the operating permit because of this comment.

Comment 13: Since you have this determination, and since PW001 requires I&M and control devices and records, is it also necessary to include 6.400 conditions for individual emission units (Dry Loading p. 20; Mixer Groups 1 & 2 p. 22 & 36, Ribbon Mixer P. 33 and Cowles p. 36)? Pressure drop requirements that remain in the OP are from the CP's.

Response to Comment: The department disagrees with the commenter. There are several different exemptions contained in 10 CSR 10-6.400. The specific emission unit exemption determines whether a condition governing the control device is included or not in the permit. The department did not change the operating permit because of this comment.

Comment 14: Missouri's regulation 10 CSR 10-6.220 sets out the requirements for restrictions on emissions of visible air contaminants. Section (3) of this regulation lists the maximum visible emissions limitations that are permitted under the rule. Section (3), Part (F) states that "[a]ll sources shall have the opacity of visible emissions determined by one (1) of the

methods in section (5) of this rule." Section (5) of the rule has four methods by which to determine whether visible emissions limitations have been violated: 1. by a qualified observer in accordance with 10 CSR 10-6.030(9); 2. by a qualified observer in accordance with 40 CFR part 51, Appendix M—Recommended Test Methods, Method 203A; 3. by a qualified observer in accordance with 40 CFR part 51, Appendix M—Recommended Test Methods, Method 203B; or 4. by a Continuous Opacity Monitoring System.

In reference to Permit Condition 1: Visible Emissions Sources, on page 16 of Elantas' Draft Permit, it states that the permittee shall monitor visible emissions sources in accordance with the requirements laid out in the section "Core Permit Requirements" for 10 CSR 10-6.220, "Restriction of Emission of Visible Air Contaminants." This section states:

...the source would first conduct a quick survey of the entire plant. The permittee must maintain a log noting whether any air emissions (except for water vapor) were visible from the plant, all emission points from which visible emissions occurred, and whether the visible emissions were normal for the process. If the permittee observes no visible or other significant emissions then no further observations would be required.

For those emission points with visible emissions perceived or believed to exceed the applicable opacity standard, the permittee should attempt to record formal Method 9 readings for the emission points of concern. Whether recording "qualitative" visible emission characteristics or taking Method 9 readings, the permittee should also document the total duration of any visible emission incident as part of the log.

Draft Permit p. 49. This monitoring requirement does not conform to the regulation 10 CSR 10-6.220. As previously noted, the law requires that any emissions from all sources (that are not specifically exempted) have opacity determined by one of the methods outlined in the rule. The above-selected procedure does not conform to one of the four methods listed in 10 CSR 10-6.220(5). This part of the Draft Permit does mention Method 9, which is assumed to be an attempt to require monitoring in accordance with 10 CSR 10-6.220(5)(1) which states, "Qualified observer in accordance with 10 CSR 10-6.030(9), Reference Method 9—Visual Determination of the Opacity of Emissions from Stationary Sources." *Id.* However, the monitoring requirements in the Draft Permit first require that an observer make a "qualitative" reading to determine if a Method 9 reading is necessary. *Id.* This is not a permissible threshold for determining whether an emissions point is subject to Method 9 monitoring under 10 CSR 10-6.220(5). The trigger for when a method under 10 CSR 10-6.220(5) must be applied is if a visible emission occurs from any source that is not exempt under 10 CSR 10-6.220(1)(A)-(I). The trigger is not whether emissions are believed to exceed an opacity standard. The standard for whether a Method 9 observation is required is based upon the belief an opacity limit has been exceeded, it would introduce an unacceptable level of subjectivity into monitoring requirements.

Furthermore, a formal Method 9 observation should not just be "attempted" on an emissions source, but done competently by someone with sufficient training in this method of opacity observation. Determining opacity standard exceedances should not begin with a guess as to whether an opacity standard is exceeded, followed by an attempt to conduct a legally required method of observation by someone who is not qualified to ensure that emissions

restrictions are being complied with.

The monitoring requirements further state:

Where the permittee opts to record "qualitative" visible emissions data, rather than record official Method 9 readings, it may be prudent for the source to bring in a certified Method 9 observer to periodically "quantify" visible emissions. These periodic Method 9 readings along with the survey results would give the responsible official some reasonable assurance that the source is meeting its opacity obligations.

Id. at 49-50. Again, the monitoring requirements of Elantas' Draft Permit treat the mandates of 10 CSR 10-6.220 as options. The permittee may not "opt" to avoid conducting Method 9 readings at emission points that are not specifically exempted from the regulation in favor of some improvised method of monitoring not acknowledged by state or federal air pollution control laws.

The monitoring requirements of the Draft Permit state that where Elantas uses the improvised "qualitative" emissions reading method, it may be prudent to have a certified Method 9 observer "quantify" emissions to provide reasonable assurance the facility's opacity obligations are being met. *Id.* Given that the "qualitative" emissions reading method does not conform to the law, it would *definitely* be prudent to have a certified Method 9 observer "quantify" emissions to provide reasonable assurance opacity obligations are being met. It would not only provide assurance to Elantas, but to the state of Missouri, which has the responsibility of ensuring Elantas' compliance with the law, and Missouri's citizens who have to breathe in Elantas' pollutants. Adhering to 10 CSR 10-6.220 by conducting Method 9 observations at every nonexempt emissions point by a qualified observer is the only way to ensure regulatory obligations are not being violated. The Draft Permit should be revised to include monitoring requirements that conform to the law as written.

Response to Comment: The department agrees, in part, with the commenter. The department agrees that it should reword some of the descriptive discussion to explain when the permittee must do Method 9 testing. For example, Method 9 readings should not be "attempted" but performed, when necessary. In addition, the permittee should not be determining whether the opacity is exceeding the limit "qualitatively". Therefore, the department has reworded the opacity monitoring to clarify these points.

However, the department disagrees with the commenter that procedure presented for visible emissions monitoring is not appropriate. The state rule 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants describes the emission limitations and testing methods, but not *when* the permittee must perform Method 9 testing. According to a D.C. Circuit case, *Sierra Club v. EPA* [*Sierra Club v. EPA*, 536 F.3d 673, 675 (D.C. Cir. 2008)], there are three steps used to determine the monitoring requirements that should be established in a Title V permit as part of permit conditions: (1) where there are monitoring requirements already contained in existing regulations or permits, the permitting authority must incorporate those requirements into the permit; (2) where no previously established monitoring requirements exist for an emission limit, the permitting authority must add "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the

permit;" and

(3) where monitoring requirements exist that correspond to an emission limit, but that monitoring is not sufficient to assure compliance with the permit limit, the permit writer must remedy that deficiency by supplementing inadequate monitoring to make the requirement sufficient to assure compliance.

There are regulatory requirements that define when continuous opacity monitoring is required. Those requirements describe how instrumentation is installed and operated to monitor opacity at all times. Those requirements do not apply to the permittee.

The department has determined that it is impractical, inappropriate and unsuitable to require permittees to be required have a staff of Method 9 qualified observers monitoring their visible emission sources at all times. The department bases this determination, in part, on the years of state inspectors implement the visible emission limits rules prior to implementing operating permits. During all that time, the department never kept inspectors at a site for any length of time only to perform Method 9 readings.

The monitoring procedure the department has developed, according to item (3) above, provides the permittee a scheme for determining *when* Method 9 testing must be done. The state rule does not address the "*when*" issue. It is common practice for the department inspectors to perform this procedure when inspecting installations.

If the permittee should demonstrate frequent violations, the Missouri Air Pollution Control Program's Enforcement Section has the right to issue Notice of Violations and require a compliance plans.

The commenter states, in part, "The permittee may not "opt" to avoid conducting Method 9 readings at emission points that are not specifically exempted from the regulation in favor of some improvised method of monitoring *not acknowledged* [emphasis added] by state or federal air pollution control laws." The department believes that state and federal air pollution control laws, through guidance, in fact acknowledge the procedure described. The department bases its method for implementing 10 CSR 10-6.220 on the federal guidance issued by U.S. EPA Region VII, titled "Region 7 Policy on Periodic Monitoring for Opacity", dated April 18, 1997.

Comment 15: Any permits issued pursuant to the Clean Air Act must have monitoring requirements that are sufficient to assure compliance with permit emission limits. 42 U.S.C. § 7661c(c). The transparency that is provided by reports of adequately monitored permit limitations provides the basis for citizens to file suit for permit violations under the Clean Air Act citizen suit provision. According to a D.C. Circuit case, *Sierra Club v. EPA*, there are three steps used to determine the monitoring requirements that should be established in a Title V permit as part of permit conditions:

- (1) where there are monitoring requirements already contained in existing regulations or permits, the permitting authority must incorporate those requirements into the permit;
- (2) where no previously established monitoring requirements exist for an emission limit, the permitting authority must add "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit;" and

(3) where monitoring requirements exist that correspond to an emission limit, but that monitoring is not sufficient to assure compliance with the permit limit, the permit writer must remedy that deficiency by supplementing inadequate monitoring to make the requirement sufficient to assure compliance.

See *Sierra Club v. EPA*, 536 F.3d 673, 675 (D.C. Cir. 2008); see also *In re United States Steel Corporation — Granite City Works*, Petition No. V-2009-03, Order Responding to Petitioner's Request that the Administrator Object to Issuance of State Operating Permit, at 5-7.

"Permit Condition 1: Visible Emission Sources" monitoring schedule is deficient. According to 10 CSR 10-6.220, the permittee must conduct weekly tests for eight consecutive weeks after the permit is issued. Draft permit, p. 50. Should no violation be noted, observations are to be made once every two weeks for a period of eight weeks. *Id.* If no violations are observed during this time frame, observations need be made only monthly. *Id.* Simply put, this monitoring program is inadequate because it fails to capture data 96% of the time. This is not sufficient to ensure compliance with the 20% opacity limit. Using the three steps from *Sierra Club v. EPA* to determine appropriate monitoring standards for this condition it is clear that step 3 requires the permit writer to remedy the deficiency by imposing monitoring that will assure compliance with this permit condition. This permit condition should require that opacity be monitored, at a minimum, on a weekly basis.

Response to Comment: The department disagrees with the commenter. The commenter provided no evidence that the schedule included in the draft permit is insufficient to assure compliance with the permit limit [refer to commenter's item (3)]. The department, to the contrary, has demonstrated that the schedule included in the draft permit *is sufficient* to assure compliance with the permit limit. The Missouri Air Pollution Control Program has employed the monitoring schedule the department included within the draft permit for many years. The schedule provides an incentive (i.e. reduced monitoring) for remaining in compliance. The schedule begins with weekly monitoring to ensure compliance with the opacity limitation. After eight readings (8 weeks ~ 2 months) demonstrating compliance at this monitoring frequency, the department allows the permittee to decrease monitoring to once every two weeks. After four readings (8 weeks ~ 2 months) demonstrating compliance at this monitoring frequency, the department allows the permittee to decrease monitoring to once each month. If at any time the permittee exceeds the opacity standard, the department requires the permittee to revert to weekly monitoring, beginning the schedule again. The department has proven this schedule effective by its many years of practical implementation. Increased monitoring would reduce the incentive to remain in compliance and prove unnecessarily burdensome to the permittee. The permittee does not have a history of habitually violating this schedule for these emission units. If the permittee should demonstrate frequent violations, the Missouri Air Pollution Control Program's Enforcement Section has the right to issue Notice of Violations and require compliance plans. The department did not change the operating permit because of this comment.

Comment 16: Throughout the Draft Permit, a majority of the conditions that reference the regulations the conditions are based upon delineate what is required in the way of emissions/operational limitations, monitoring requirements, and recordkeeping requirements. "Permit Condition 1: Thermal Oxidizing Group" only states that records on production rates sufficient to determine daily VOC emissions be kept. The emissions/operational limitations and monitoring requirements for this condition should be incorporated, as well.

Response to Comment: The department disagrees with this commenter. The commenter should address their comments to the underlying authority cited in the operating permit. The state's rule, 10 CSR 10-5.390 Control of Emissions From the Manufacturing of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products, contains the requirement as identified in the draft operating permit. It is the intention of the operating permit to identify and codify all the applicable requirements, but not to change them. The department recommends that the commenter take its comment to the appropriate authority for change. The department did not change the operating permit because of this comment.

Comment 17: Now that 40 CFR Part 63, Subpart DDDDD has been issued, should the boiler requirements be updated to match the issued regulation?

Response to Comment: The department agrees with the commenter. The department changed the Boilers group permit condition to match the issued regulation. The department changed the operating permit because of this comment.

RER/kjc