



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: **OP2013-028**
Expiration Date: **APR 30 2018**
Installation ID: 031-0064
Project Number: 2011-01-015

Installation Name and Address

BioKyowa Inc.
5469 Nash Road
Cape Girardeau, MO 63701
Cape Girardeau County

Parent Company's Name and Address

Kyowa Hakko Bio
P.O. Box 1550
Cape Girardeau, MO 63702

Installation Description:

BioKyowa, Inc. is an existing manufacturer of feed additives for domestic animals. The manufacturing process consists of two amino acid production plants (Plant 1 and Plant 2); a natural gas/fuel oil fired Utility Plant to produce process steam for operation; an Evaporation Plant; and a Wastewater Treatment Plant. The method of production involves fermentation to produce the feed additives and subsequent processing and handling of the product. The installation is a major source of Greenhouse Gases (CO₂e), Sulfur Oxides (SO_x), and Nitrogen Oxides (NO_x).

MAY 01 2013

Effective Date

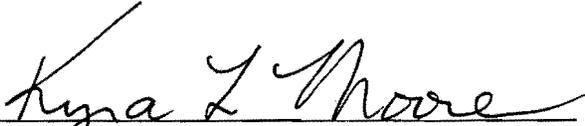

Director or Designee
Department of Natural Resources

Table of Contents

I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING	4
II. PLANT WIDE EMISSION LIMITATIONS.....	9
III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	10
PERMIT CONDITION 001	10
10 CSR 10-6.060 Construction Permits Required.....	10
Construction Permit 082008-017, Issued August 22, 2008.....	10
PERMIT CONDITION 002.....	11
10 CSR 10-6.060 Construction Permits Required.....	11
Construction Permit 082008-017, Issued August 22, 2008.....	11
PERMIT CONDITION 003.....	11
10 CSR 10-6.060 Construction Permits Required.....	11
Construction Permit 082008-017, Issued August 22, 2008.....	11
PERMIT CONDITION 004.....	12
10 CSR 10-6.060 Construction Permits Required.....	12
Construction Permit 082008-017, Issued August 22, 2008.....	12
PERMIT CONDITION 005.....	13
10 CSR 10-6.060 Construction Permits Required.....	13
Construction Permit 112011-002, Issued November 2, 2011.....	13
PERMIT CONDITION 006.....	14
10 CSR 10-6.060 Construction Permits Required.....	14
Construction Permit 072012-010, Issued July 23, 2012.....	14
PERMIT CONDITION 007.....	15
10 CSR 10-6.060 Construction Permits Required.....	15
Construction Permit 072012-010, Issued July 23, 2012.....	15
PERMIT CONDITION 008.....	16
10 CSR 10-6.060 Construction Permits Required.....	16
Construction Permit 072012-010, Issued July 23, 2012.....	16
PERMIT CONDITION 009.....	16
10 CSR 10-6.070 New Source Performance Regulations	16
40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.....	16
PERMIT CONDITION 010.....	20
10 CSR 10-6.070 New Source Performance Regulations	20
40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.....	20
PERMIT CONDITION 011.....	21
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	21
40 CFR Part 63, Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	21
PERMIT CONDITION 012.....	24
10 CSR 10-6.060 Construction Permits Required.....	24
Construction Permit 1099-021B, Issued March 1, 2000	24
PERMIT CONDITION 013.....	25
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	25
PERMIT CONDITION 014.....	27
10 CSR 10-6.060 Construction Permits Required.....	27
Construction Permit 1099-021B, Issued March 1, 2000	27
PERMIT CONDITION 015.....	28
10 CSR 10-6.070 New Source Performance Regulations	28
40 CFR Part 60, Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.....	28
PERMIT CONDITION 016.....	30
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	30
40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.....	30
PERMIT CONDITION 017.....	30

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	30
40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	30
PERMIT CONDITION 018	34
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	34
PERMIT CONDITION 019	35
10 CSR 10-6.060 Construction Permits Required.....	35
Construction Permit 122002-002, Issued December 4, 2002	35
PERMIT CONDITION 020	35
10 CSR 10-6.060 Construction Permits Required.....	35
Construction Permit 122002-002, Issued December 4, 2002	35
PERMIT CONDITION 021	36
10 CSR 10-6.060 Construction Permits Required.....	36
Construction Permit 122002-002, Issued December 4, 2002	36
PERMIT CONDITION 022	37
10 CSR 10-6.060 Construction Permits Required.....	37
Construction Permit 122002-002, Issued December 4, 2002	37
IV. CORE PERMIT REQUIREMENTS	38
V. GENERAL PERMIT REQUIREMENTS.....	45
VI. ATTACHMENTS	50
ATTACHMENT A	51
Methanol Compliance Worksheet.....	51
ATTACHMENT B	52
Daily Carbon Black Compliance Worksheet	52
ATTACHMENT C	53
Inspection/Maintenance/Repair/Malfunction Log.....	53
ATTACHMENT D	54
10 CSR 10-6.170 Fugitive Emissions Observations	54
ATTACHMENT E	55
10 CSR 10-6.220 Method 22 Observations.....	55
ATTACHMENT F	56
EP17 SO _x Worksheet	56

I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

BioKyowa, Inc. is an existing manufacturer of feed additives for domestic animals. The manufacturing process consists of two amino acid production plants (Plant 1 and Plant 2); a natural gas/fuel oil fired Utility Plant to produce process steam for operation; an Evaporation Plant; and a Wastewater Treatment Plant. The method of production involves fermentation to produce the feed additives and subsequent processing and handling of the product. The installation is a major source of Greenhouse Gases (CO₂e), Sulfur Oxides (SO_x), and Nitrogen Oxides (NO_x).

Reported Air Pollutant Emissions, tons per year					
Pollutants	2011	2010	2009	2008	2007
Particulate Matter ≤ Ten Microns (PM ₁₀)	2.57	2.90	3.38	3.29	3.24
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	1.71	1.86	1.83	1.79	1.73
Sulfur Oxides (SO _x)	1.15	1.13	1.48	1.96	1.79
Nitrogen Oxides (NO _x)	8.39	9.15	9.56	11.11	10.50
Volatile Organic Compounds (VOC)	9.31	10.56	13.19	11.13	7.24
Carbon Monoxide (CO)	18.89	20.55	20.21	19.76	19.09
Lead (Pb)	0.0001	0.0001	-	-	-
Ammonia (NH ₃)	4.81	4.78	4.54	4.96	4.35
Hazardous Air Pollutants (HAPs)	0.60	0.60	0.62	0.59	0.71
Hexane (110-54-3)	0.42	0.42	0.44	0.44	0.42
Hydrogen Chloride (7647-01-0)	0.18	0.16	0.15	0.15	0.16
Methanol (67-56-1)	-	-	0.0003	0.0003	0.13

EMISSION UNITS WITH LIMITATIONS

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

Emission Unit	Description
EP02	Process #31 Boiler
EP03	T106 - 26,400 gallon HCl Storage Tank
EP17	MP-901C Process Boiler
EP18	Plant 2 Methanol Process
EP19A	T2441 - 16,000 gallon Plant 2 Methanol Storage Tank
EP19B	T2442 - 16,000 gallon Plant 2 Methanol Storage Tank
EP23	T2122 - 40,000 gallon Plant 2 HCl Storage Tank
EP24	Plant 2 Product Loading
EP25	Plant 1 Filter Aid Vent
EP26	Plant 1 Dryer Vent
EP27	Plant 1 Hopper and Bagging Vent
EP28	Methanol Wastewater Treatment
EP29	Plant 1 Dry Crystal Conveyor Vent
EP36	Plant 2 Decolorizing Process
EP37	T951 - 475 gallon Plant 2 HCl Day Tank for DI System
EP38	Plant 2 Product Pneumatic Transfer
EP39	Plant 1 Decolorization System Vent

Emission Unit	Description
EP40	Plant 1 Sodium Metabisulfite Addition
EP42	Plant 1 Bulk Ammonium Sulfate Unloading
EP44	MP-901D Process Boiler
EP45	MP-901E Process Boiler
EP48	Aftercooler
EP49	Receiving Tanks
EP50	Vacuum System
EP51	Plant 1 Evaporation Process Scrubber Vent
EP52	60 kW Diesel Emergency Generator
EP53	300 HP Diesel Fired Emergency Fire Pump Engine
EP54	Haul Road

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.

Emission Unit	Description
EP08	T903 - 61,000 gallon Fuel Oil #2 Storage Tank, South Site
EP09	T1601 - 8,800 gallon Diesel Storage Tank, North Site
EP10	Wastewater Treatment Plant
EP20	T2132 - 2,650 gallon Process Tank
EP21	T2133 - 2,650 gallon Recovered Process Tank
EP22	RS2230 - Xylene Recovery System
EP30	T2230A - 81,000 gallon Plant 2 Fermentation Tank Vent A
EP31	T2230B - 81,000 gallon Plant 2 Fermentation Tank Vent B
EP32	T2230C - 81,000 gallon Plant 2 Fermentation Tank Vent C
EP33	T230D - 81,000 gallon Plant 1 Fermentation Tank Vent A
EP34	T230E - 81,000 gallon Plant 1 Fermentation Tank Vent B
EP35	T230F - 81,000 gallon Plant 1 Fermentation Tank Vent C
EP41	WWTP Package Boiler
EP43	Ethanol Addition
-	Propane Space Heaters
T101	528,000 gallon Wastewater Utility Tank
T102	5,300 gallon Raw Material Storage Tank
T105	21,000 gallon Sulfuric Acid Tank
T107	4,000 gallon Nitric Acid Tank
T108	(2) 26,000 gallon Anhydrous Ammonia Storage Tanks
T109	4,000 gallon Caustic Storage Tank
T111	2,600 gallon Defoamer Oil Storage Tank
T201A & B	(2) 13,000 gallon Molasses Dilution Tanks
T201D	800 gallon Glucose Tank
T202	(2) 5,300 gallon Makeup Tanks
T204	(3) 38,000 gallon Feeding Tanks
T207	450 gallon Defoamer Storage Tank
T208	3,950 gallon Nitric Acid Dilution Tank
T209	3,950 gallon Caustic Soda Dilution Tank
T210	(2) 800 gallon First Seed Tanks
T212	30 gallon Caustic Measuring Tank

Emission Unit	Description
T220	(2) 5,300 gallon Second Seed Tanks
T231	(3) 2,700 gallon Cushion Tanks
T233	(2) 500 gallon Pressure Holding Tanks
T234	53 gallon Ammonia Scrubbing Tank
T240	(2) 1,200 gallon Medium Cushion Tanks
T260	(2) 26,000 gallon Hot Water Tanks
T279	2,100 gallon Drain Tank
T280	53 gallon Defoamer Tank
T281	2,650 gallon Hot Water Tank
T301C	72,000 gallon DI Water Storage Tank
T301D	72,000 gallon Fermentation Broth Tank
T301E & F	(2) 80,000 gallon Broth Tanks
T302A	(2) 2,600 gallon Sulfuric Acid Head Tanks
T302B	1,320 gallon Sulfuric Acid Head Tank
T310A	500 gallon Resin Charging Tank
T310B	500 gallon Redissolving Tank
T351	(2) 31,700 gallon Decolorizing Tanks
T353	2,650 gallon Precoat Tank
T354	450 ft ³ Filter Aid Tank
T356	(2) 700 ft ³ Filter Aid Tanks
T360	(2) 40,000 gallon Evaporator Condensate Tanks
T361	16,000 gallon Filtrate Tank
T393	2,500 gallon Evaporator Feed Balance Tank
T399	40,000 gallon Evaporator Slurry Tank
T411	16,000 gallon Neutralization Tank
T413	(5) 5,700 gallon Vacuum Pan Tanks
T414	5,000 gallon Crystalizer Tank
T415C	6,000 gallon ML Tank
T415D	6,000 gallon Wash-Liquor Tank
T416	(2) 2,650 gallon Centrifuge Feed Tanks
T420	1,320 gallon Caustic Soda Day Tank
T422	100 gallon Evaporator Defoamer Tank
T423	300 gallon Sulfamic Acid CIP Holding Tank
T506	(2) 1165 ft ³ Product Hopper Tanks
T610	2,600 gallon Anhydrous Ammonia Tank
T611	1,500 gallon Evaporator Condensate Tank
T612	500 gallon CIP Work Tank
T613	500 gallon Acid Wash (Dilute Nitric) Tank
T615	500 gallon Caustic Wash (Caustic Soda) Tank
T617	160,000 gallon Wastewater Utility Tank
T650	1,000 gallon Pre-Evaporation Feed Balance Tank
T658	1,500 gallon Forced Circulation Evaporation Feed Balance Tank
T663	1,000 gallon Condensate Receiver Tank
T664	3,000 gallon Service Water Tank
T665	3,000 gallon Acid Reclaim Tank
T666	3,000 gallon Caustic Reclaim Tank
T667	2,500 gallon CIP Recovered Water Tank
T809	5,500 gallon H ₃ PO ₄ Storage Tank

Emission Unit	Description
T810	7,800 gallon Caustic Storage Tank
T828A	3,000 gallon Polymer Storage Tank
T828B	1,500 gallon Polymer Storage Tank
T829	90 gallon Polymer Measuring Tank
T830	(2) 1,400 gallon Polymer Mixing Tanks
T838	36,800 gallon Liquid Sludge Blending Tank
T839	(2) 2,500 gallon Ferric Sulfate Storage Tanks
T840A	75,000 gallon Sludge Storage Tank
T840B	125,000 gallon Sludge Storage Tank
T878	500 gallon Caustic Soda Storage Tank
T879	4,400 gallon Bleach Storage Tank
T886	4,000 gallon Well Water Storage North Site
T897	(2) 7,200 gallon Caustic Soda Storage Tanks
T904	33 ft ³ Plant Air Receiver (Dried Air) Tank
T905	(2) 33 ft ³ Plant Air Receiver (Wet Air) Tanks
T906	300 ft ³ Instrument Air Receiver Tank
T910	(2) 250 gallon Caustic Day Tanks (Powerhouse)
T911	(2) 18,000 gallon Softened Water Storage Tanks
T913	(2) 500 gallon Deionized Water Surge Tanks
T914	500 gallon Nitric Acid Dilution Tank
T952	110,000 gallon Deionized Water Storage Tank
T953	690 gallon Caustic Day Tank
T2123	40,000 gallon NaOH Storage Tank
T2124	16,000 gallon KOH Storage Tank
T2131	8,000 gallon Defoamer Oil Storage Tank
T2201	26,500 gallon Glucose Storage Tank
T2202	8,000 gallon Makeup Tank 1
T2203	1,200 gallon Medium Cushion Tank
T2204	11,000 gallon Feeding Tank
T2207	800 gallon Defoamer Tank
T2208	3,950 gallon Nitric Acid Dilution Tank
T2209	3,950 gallon Caustic Soda Dilution Tank
T2210	(3) 800 gallon First Seed Tanks
T2212	(2) 264 gallon Caustic Measuring Tanks
T2220	(2) 5,300 gallon Second Seed Tanks
T2230D	11,000 gallon Sub-Fermentor
T2232	(3) 30 gallon Defoamer Feed Tanks
T2233	530 gallon Pressure Holding Tank
T2234	53 gallon NH ₃ Scrubbing Tank
T2235	360 gallon H ₂ SO ₄ Tank
T2240	11,000 gallon Fructose Tank
T2241	11,000 gallon CSL Storage Tank
T2242	5,500 gallon CSL Treatment Tank
T2243	5,500 gallon H ₃ PO ₄ Storage Tank
T2244	5,500 gallon Makeup Tank 2
T2246	1,320 gallon Makeup Tank 3
T2250	1,320 gallon Detergent Tank
T2260	26,500 gallon Hot Water Tank

Emission Unit	Description
T2270	1,320 gallon Foam Receiving Tank
T2279	1,320 gallon Drain Tank
T2280	53 gallon Defoamer Tank
T2301	(2) 80,000 gallon Broth Tanks
T2310A	530 gallon Decanter Cushion Tank
T2310B	800 gallon Waste Cake Hopper
T2311	21,000 gallon Resin Column Feed Tank
T2321	1,320 gallon Resin Column
T2322	32,000 gallon Tail Cut Tank
T2323	40,000 gallon Rich Cut Tank
T2351	5,500 gallon Wastewater Tank
T2360	16,000 gallon Decolorizing Tank
T2361	360 gallon Pre-Coat Tank
T2362	16,000 gallon Filtrate Tank
T2363	280 ft ³ Waste Cake Hopper
T2364	250 gallon Wash Water Tank
T2372	360 gallon Reverse Filtration Tank
T2373	5,280 gallon Filtrate Tank 2
T2392	450 gallon CIP Work Tank
T2393	450 gallon Acid Wash Tank
T2394	450 gallon Caustic Wash Tank
T2413	(4) 5,700 gallon Vacuum Pan Tanks
T2414	(2) 5,500 gallon Crystalizer Tanks
T2415	1,320 gallon ML Tank
T2420	800 gallon Crystalizer Hot Water Tank
T2413	(3) 70 ft ³ Wet Crystal Collector Tanks
T2506	1,000 ft ³ Product Hopper Tank
T2507	470 ft ³ Product Service Hopper Tank
RC2320	(3) 31,700 gallon Resin Columns
RC2330	(2) 40,000 gallon Resin Columns
RC2340	(2) 9,500 gallon Resin Columns
RC2350	(2) 9,500 gallon Resin Columns
T2510	360 gallon Dryer Hot Water Tank
T2561	50 ft ³ Cooled Product Receiver Tank
T2562	82 ft ³ Dry Crystal Collector Tank
-	85 gallon Emergency Generator Diesel Fuel Tank

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.

None.

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.

PERMIT CONDITION 001	
10 CSR 10-6.060 Construction Permits Required Construction Permit 082008-017, Issued August 22, 2008	
Emission Unit	Description
EP18	Plant 2 Methanol Process
EP19A	T2441 - Plant 2 Methanol Storage Tank
EP19B	T2442 - Plant 2 Methanol Storage Tank
EP28	Methanol Wastewater Treatment

Emission Limitation:

Special Condition 2.A: The permittee shall emit less than 10.0 tons of Methanol (67-56-1) from EP18 Plant 2 Methanol Process, EP19A and EP19B Methanol Storage Tanks, and EP28 Methanol Wastewater Treatment in any consecutive 12-month period.

Monitoring/Recordkeeping:

1. Special Condition 2.B: The permittee shall use Attachment A or equivalent forms approved by the Air Pollution Control Program to demonstrate compliance by tracking actual 12-month rolling total Methanol (67-56-1) emissions. The permittee shall retain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
2. Records may be retained in written and/or electronic format.

Reporting:

1. Special Condition 2.C: The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance of the Methanol (67-56-1) emission limitation.
2. The permittee shall report any deviations from the emission limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 002	
10 CSR 10-6.060 Construction Permits Required Construction Permit 082008-017, Issued August 22, 2008	
Emission Unit	Description
EP36	Plant 2 Decolorizing Process

Operational Limitation:

Special Condition 3.A: The permittee shall not use in excess of 1,500 pounds of carbon black in EP36 Plant 2 Decolorizing Process in any consecutive 24-hour period.

Monitoring/Recordkeeping:

1. Special Condition 3.B: The permittee shall use Attachment B or equivalent forms approved by the Air Pollution Control Program to demonstrate compliance by tracking actual 24-hour rolling total carbon black usage. The permittee shall retain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
2. Records may be retained in written and/or electronic format.

Reporting:

1. Special Condition 3.C: The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the 24-hour period during which records indicate an exceedance of the carbon black usage operational limitation.
2. The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 003	
10 CSR 10-6.060 Construction Permits Required Construction Permit 082008-017, Issued August 22, 2008	
Emission Unit	Description
EP18	Plant 2 Methanol Process
EP48	Aftercooler

Operational Limitation:

Special Condition 4.A: The permittee shall control emissions from EP18 Plant 2 Methanol Process and EP48 Aftercooler using fabric filter dust collectors. The fabric filter dust collectors shall be operated and maintained in accordance with the manufacturer's performance specifications. The fabric filter dust collectors shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them. Replacement filters for the fabric filter dust collectors shall be retained on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring/Recordkeeping:

1. Special Condition 4.B: The permittee shall monitor and record the operating pressure drop across the fabric filter dust collectors at least once each 24 hours while the emission units are in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance specifications.
2. The permittee shall retain the manufacturer's performance specifications.
3. Special Condition 4.C: The permittee shall retain an operating and maintenance log for the fabric filter dust collectors using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include 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, etc.
4. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
5. Records may be retained in written and/or electronic format.

Reporting:

The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 004	
10 CSR 10-6.060 Construction Permits Required Construction Permit 082008-017, Issued August 22, 2008	
Emission Unit	Description
EP44	MP-901D Process Boiler
EP45	MP-901E Process Boiler

Operational Limitation:

Special Condition 5.A: The permittee shall control emissions from EP44 MP-901 D Process Boiler and EP45 MP-901 E Process Boiler using low NO_x burners. The low NO_x burners shall be operated and maintained in accordance with the manufacturer's performance specifications.

Monitoring/Recordkeeping:

1. The permittee shall retain the manufacturer's performance specifications.
2. Special Condition 5.B: The permittee shall retain an operating and maintenance log for the low NO_x burners using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include 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, etc.
3. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
4. Records may be retained in written and/or electronic format.

Reporting:

The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 005	
10 CSR 10-6.060 Construction Permits Required	
Construction Permit 112011-002, Issued November 2, 2011	
Emission Unit	Description
EP49	Receiving Tanks
EP50	Vacuum System

Operational Limitations:

1. Special Condition 1.A: The permittee shall control emissions from EP49 Receiving Tanks and EP50 Vacuum System using baghouses.
2. Special Condition 1.B: The baghouses shall be operated and maintained in accordance with the manufacturer's performance specifications. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
3. Special Condition 1.C: Replacement filters for the baghouses shall be retained on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring/Recordkeeping:

1. Special Condition 1.D: The permittee shall monitor and record the operating pressure drop across the baghouses at least once each 24 hours while the emission units are in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance specifications.
2. The permittee shall retain the manufacturer's performance specifications.
3. Special Condition 1.E: The permittee shall retain an operating and maintenance log for the baghouses using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include 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, etc.
4. Special Condition 2: The permittee shall retain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used.
5. Records may be retained in written and/or electronic format.

Reporting:

The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 006	
10 CSR 10-6.060 Construction Permits Required Construction Permit 072012-010, Issued July 23, 2012	
Emission Unit	Description
EP25	Plant 1 Filter Aid Vent
EP26	Plant 1 Dryer Vent
EP27	Plant 1 Hopper and Bagging Vent
EP29	Plant 1 Dry Crystal Conveyor Vent
EP36	Plant 2 Decolorizing Process
EP39	Plant 1 Decolorization System Vent
EP40	Plant 1 Sodium Metabisulfite Addition
EP42	Plant 1 Bulk Ammonium Sulfate Unloading
EP51	Plant 1 Evaporation Process Scrubber Vent

Operational Limitations:

1. Special Condition 1.A: The permittee shall use baghouses to control emissions from the following emission units:
 - a) EP25 Plant 1 Filter Aid Vent
 - b) EP26 Plant 1 Dryer Vent
 - c) EP27 Plant 1 Hopper and Bagging Vent
 - d) EP29 Plant 1 Dry Crystal Conveyor Vent
 - e) EP36 Plant 2 Decolorizing Process
 - f) EP39 Plant 1 Decolorization System Vent
 - g) EP40 Plant 1 Sodium Metabisulfite Addition
 - h) EP42 Plant 1 Bulk Ammonium Sulfate Unloading
 - i) EP51 Plant 1 Evaporation Process Scrubber Vent
2. Special Condition 1.B: The baghouses shall be operated and maintained in accordance with the manufacturer's performance specifications. Each baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
3. Special Condition 1.C: Replacement filters for the baghouses shall be retained on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring/Recordkeeping:

1. Special Condition 1.D: The permittee shall monitor and record the operating pressure drop across each baghouse at least once every 24 hours while the emission units are in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance specifications. The manufacturer's performance specifications containing the design conditions shall be retained onsite. If the pressure drop reading should fall outside of the normal operating range, then the associated equipment shall be shut down as quickly as reasonably practical. Corrective actions shall be taken to address the cause of the non-normal pressure drop and the baghouse(s) shall be returned to normal operation before re-starting the equipment.
2. Special Condition 1.E: The permittee shall retain an operating and maintenance log for the baghouses using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include 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, etc.
3. Special Condition 4: The permittee shall retain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.
4. Records may be retained in written and/or electronic format.

Reporting:

The permittee in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 007	
10 CSR 10-6.060 Construction Permits Required Construction Permit 072012-010, Issued July 23, 2012	
Emission Unit	Description
EP40	Plant 1 Sodium Metabisulfite Addition
EP51	Plant 1 Evaporation Process Scrubber Vent

Operational Limitations:

1. Special Condition 2.A: The permittee shall use control emissions from EP40 Plant 1 Sodium Metabisulfite Addition and EP51 Plant 1 Evaporation Process Scrubber Vent using scrubbers.
2. Special Condition 2.B: The scrubbers shall be operated and maintained in accordance with the manufacturer's performance specifications. Each scrubber shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. Each scrubber shall be equipped with a flow meter that indicates the water flow rate through the scrubber. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.

Monitoring/Recordkeeping:

1. Special Condition 2.C: The permittee shall monitor and record the operating pressure drop across each scrubber at least once every 24 hours while the emission units are in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance specifications. The manufacturer's performance specifications containing the design conditions shall be retained onsite.
2. Special Condition 2.D: The permittee shall monitor and record the water flow rate through each scrubber at least once every 24 hours while the emission units are in operation. The water flow rate shall be maintained within the design conditions specified by the manufacturer's performance specifications. The manufacturer's performance specifications containing the design conditions shall be retained onsite.
3. Special Condition 2.E: The permittee shall retain an operating and maintenance log for each scrubber using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - c) A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.

4. Special Condition 4: The permittee shall retain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.
5. Records may be retained in written and/or electronic format.

Reporting:

The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 008	
10 CSR 10-6.060 Construction Permits Required Construction Permit 072012-010, Issued July 23, 2012	
Emission Unit	Description
EP52	Emergency Generator

Operational Limitation:

The permittee shall install a nonresettable meter on EP52 Emergency Generator.

Reporting:

The permittee shall report any deviations from the operational limitation and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 009	
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	
Emission Unit	Description
EP02	Process #31 Boiler
EP17	MP-901C Process Boiler

Emission/Operational Limitations:

1. The permittee shall not combust oil that contains greater than 0.5 weight percent sulfur. [§60.42c(d)]
2. Compliance with the fuel oil sulfur limit may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable. [§60.42c(h)]
3. The fuel oil sulfur limit applies at all times, including periods of startup, shutdown, and malfunction. [§60.42c(i)]
4. The permittee shall not cause to be discharged into the atmosphere from the affected facility any gases that exhibit greater than 20 percent opacity (six-minute average), except for one six-minute period per hour of not more than 27 percent opacity. [§60.43c(c)]
5. The opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction. [§60.43c(d)]

Performance Testing:

1. To demonstrate compliance with the fuel oil sulfur limits under §60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the permittee shall sample the oil in the fuel tank after each new shipment of oil is received, as described under §60.46c(d)(2). [§60.44c(g)]
2. To demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable. [§60.44c(h)]
3. To demonstrate compliance with the opacity standards under §60.43c, the permittee shall conduct an initial performance test as required under §60.8, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods: [§60.45c(a)]
 - a) Method 9 of Appendix A-4 of this 40 CFR Part 60 shall be used for determining the opacity of stack emissions. [§60.45c(a)(8)]

Monitoring:

1. Fuel sampling shall be conducted as follows: [§60.46c(d)]
 - a) Oil samples shall be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The permittee shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less. [§60.46c(d)(2)]
2. The monitoring requirements of §60.46c(d) shall not apply to affected facilities subject to §60.42c(h) seeking to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under §60.48c(f), as applicable. [§60.46c(e)]
3. The permittee shall conduct a performance test using Method 9 of Appendix A-4 of 40 CFR Part 60 and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43c by April 29, 2011, and shall comply with either §60.47(a)(1), (2), or (3). The observation period for Method 9 of Appendix A-4 of 40 CFR Part 60 performance tests may be reduced from three hours to 60 minutes if all six-minute averages are less than ten percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation. [§60.47c(a)]
 - a) Except as provided in §60.47c(a)(2) and (3), the permittee shall conduct subsequent Method 9 of Appendix A-4 of 40 CFR Part 60 performance tests using the procedures in §60.47c(a) according to the applicable schedule in §60.47c(a)(1)(i) through (iv), as determined by the most recent Method 9 of Appendix A-4 of 40 CFR Part 60 performance test results. [§60.47c(a)(1)]
 - i) If no visible emissions are observed, a subsequent Method 9 of Appendix A-4 of 40 CFR Part 60 performance test shall be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day oil is combusted, whichever is later; [§60.47c(a)(1)(i)]
 - ii) If visible emissions are observed but the maximum six-minute average opacity is less than or equal to five percent, a subsequent Method 9 of Appendix A-4 of 40 CFR Part 60

performance test shall be completed within six calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that oil is combusted, whichever is later; [§60.47c(a)(1)(ii)]

- iii) If the maximum six-minute average opacity is greater than five percent but less than or equal to ten percent, a subsequent Method 9 of Appendix A-4 of 40 CFR Part 60 performance test shall be completed within three calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that oil is combusted, whichever is later; or [§60.47c(a)(1)(iii)]
 - iv) If the maximum six-minute average opacity is greater than ten percent, a subsequent Method 9 of Appendix A-4 of 40 CFR Part 60 performance test shall be completed within 45 calendar days from the date that the most recent performance test was conducted. [§60.47c(a)(1)(iv)]
- b) If the maximum six-minute opacity is less than ten percent during the most recent Method 9 of Appendix A-4 of 40 CFR Part 60 performance test, the permittee may, as an alternative to performing subsequent Method 9 of Appendix A-4 of 40 CFR Part 60 performance tests, elect to perform subsequent monitoring using Method 22 of Appendix A-7 of 40 CFR Part 60 according to the following procedures: [§60.47c(a)(2)]
- i) The permittee shall conduct ten minute observations (during normal operation) each operating day the affected facility fires oil using Method 22 of Appendix A-7 of 40 CFR Part 60 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of five percent of the observation period (i.e., 30 seconds per ten minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial ten minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than five percent of the observation period (i.e., 90 seconds per 30 minute period), the permittee shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than five percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 of Appendix A-4 of 40 CFR Part 60 performance test using the procedures in §60.47c(a) within 45 calendar days according to the requirements in §60.45c(a)(8). [§60.47c(a)(2)(i)]
 - ii) If no visible emissions are observed for ten operating days while combusting oil, observations can be reduced to once every seven operating days while combusting oil. If any visible emissions are observed, daily observations shall be resumed. [§60.47c(a)(2)(ii)]
- c) If the maximum six-minute opacity is less than ten percent during the most recent Method 9 of Appendix A-4 of 40 CFR Part 60 performance test, the permittee may, as an alternative to performing subsequent Method 9 of Appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in §60.47c(a)(2). For reference purposes in preparing the monitoring plan, see OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. EPA; Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. [§60.47c(a)(3)]
4. Affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 0.060 lb/MMBtu heat

input or less and that do not use a post-combustion technology to reduce SO₂ or PM emissions and that are subject to an opacity standard in §60.43c(c) are not required to operate a COMS if they follow the applicable procedures in §60.48c(f). [§60.47c(c)]

5. An affected facility that is subject to an opacity standard in §60.43c(c) is not required to operate a COMS provided that the affected facility meets the following condition: [§60.47c(f)]
 - a) The affected facility burns only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and the permittee operates the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan shall include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §60.8 and §60.11 that the permittee submit any deviations with the excess emissions report required under §60.48c(c). [§60.47c(f)(3)]

Reporting and Recordkeeping:

1. The permittee shall submit to the Administrator the performance test data from the initial and any subsequent performance tests. [§60.48c(b)]
2. In addition to the applicable requirements in §60.7, the permittee shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in §60.48c(c)(1) through (3), as applicable to the visible emissions monitoring method used. [§60.48c(c)]
 - a) For each performance test conducted using Method 9 of Appendix A-4 of 40 CFR Part 60, the permittee shall retain the records including the following information: [§60.48c(c)(1)]
 - i) Dates and time intervals of all opacity observation periods; [§60.48c(c)(1)(i)]
 - ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and [§60.48c(c)(1)(ii)]
 - iii) Copies of all visible emission observer opacity field data sheets; [§60.48c(c)(1)(iii)]
 - b) For each performance test conducted using Method 22 of Appendix A-4 of 40 CFR Part 60, the permittee shall retain the records including the following information: [§60.48c(c)(2)]
 - i) Dates and time intervals of all visible emissions observation periods; [§60.48c(c)(2)(i)]
 - ii) Name and affiliation for each visible emission observer participating in the performance test; [§60.48c(c)(2)(ii)]
 - iii) Copies of all visible emission observer opacity field data sheets; and [§60.48c(c)(2)(iii)]
 - iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the permittee to demonstrate compliance with the applicable monitoring requirements. [§60.48c(c)(2)(iv)]
 - c) For each digital opacity compliance system, the permittee shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator. [§60.48c(c)(3)]
3. Each affected facility subject to fuel oil sulfur limits under §60.42c shall submit reports to the Administrator. [§60.48c(d)]
4. The permittee shall retain records and submit reports as required under §60.48c(d), including the following information, as applicable: [§60.48c(e)]
 - a) Calendar dates covered in the reporting period. [§60.48c(e)(1)]
 - b) Each 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken. [§60.48c(e)(2)]

- c) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under §60.48c(f)(1), (2), (3), or (4), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. [§60.48c(e)(11)]
- 5. Fuel supplier certification shall include the following information: [§60.48c(f)]
 - a) For distillate oil: [§60.48c(f)(1)]
 - i) The name of the oil supplier; [§60.48c(f)(1)(i)]
 - ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and [§60.48c(f)(1)(ii)]
 - iii) The sulfur content or maximum sulfur content of the oil. [§60.48c(f)(1)(iii)]
- 6. Except as provided under §60.48c(g)(2) and (3), the permittee shall record and retain records of the amount of each fuel combusted during each operating day. [§60.48c(g)(1)]
- 7. As an alternative to meeting the requirements of §60.48c(g)(1), the permittee may elect to record and retain records of the amount of each fuel combusted during each calendar month. [§60.48c(g)(2)]
- 8. As an alternative to meeting the requirements of §60.48c(g)(1), the permittee may elect to record and retain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [§60.48c(g)(3)]
- 9. The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [§60.48c(j)]
- 10. The permittee shall retain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.
- 11. Records may be retained in written and/or electronic format.
- 12. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission/operational limitations.
- 13. The permittee shall report any deviations from the emission/operational limitations, performance testing, monitoring, and reporting and recordkeeping requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 010	
10 CSR 10-6.070 New Source Performance Regulations	
40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	
Emission Unit	Description
EP44	MP-901D Process Boiler
EP45	MP-901E Process Boiler

Recordkeeping:

- 1. Except as provided under §60.48c(g)(2) and (3), the permittee shall record and retain records of the amount of each fuel combusted during each operating day. [§60.48c(g)(1)]
- 2. As an alternative to meeting the requirements of §60.48c(g)(1), the permittee may elect to record and retain records of the amount of each fuel combusted during each calendar month. [§60.48c(g)(2)]

3. As an alternative to meeting the requirements of §60.48c(g)(1), the permittee may elect to record and retain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [§60.48c(g)(3)]
4. The permittee shall retain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used.
5. Records may be retained in written and/or electronic format.

Reporting:

The permittee shall report any deviations from the recordkeeping and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 011	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	
Emission Unit	Description
EP02	Process #31 Boiler
EP17	MP-901C Process Boiler

Compliance Dates:

1. The permittee shall achieve compliance with the applicable provisions in 40 CFR Part 63, Subpart JJJJJ by: [§63.11196(a)]
 - a) The permittee shall achieve compliance with the work practices or management standards no later than March 21, 2012. [§63.11196(a)(1)]
 - b) The permittee shall achieve compliance with the energy assessment requirement no later than March 21, 2014. [§63.11196(a)(3)]

Standards:

1. The permittee shall comply with each of the following work practice standards, emission reduction measures, and management practices: [§63.11201(b)]
 - a) Conduct a tune-up of the boiler biennially as specified in §63.11223. [Table 2 to Subpart JJJJJ of Part 63]
 - b) Conduct a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements satisfies the energy assessment requirement. Energy assessment requirements: [Table 2 to Subpart JJJJJ of Part 63]
 - i) A visual inspection of the boiler system,
 - ii) An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints,
 - iii) Inventory of major systems consuming energy from affected boiler(s),
 - iv) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
 - v) A list of major energy conservation measures,
 - vi) A list of the energy savings potential of the energy conservation measures identified,

- vii) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
2. These standards apply at all times. [§63.11201(d)]

General Requirements:

At all times the permittee shall operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.11205(a)]

Initial Compliance:

1. The permittee shall demonstrate initial compliance no later than the compliance date that is specified in §63.11196 and according to the applicable provisions in §63.7(a)(2). [§63.11210(c)]
2. The permittee shall conduct a performance tune-up according to §63.11223(b) and the permittee shall submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted a tune-up of the boiler. [§63.11214(b)]
3. The permittee shall submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed and submit, upon request, the energy assessment report. [§63.11214(c)]

Continuous Compliance:

1. The permittee shall conduct a biennial performance tune-up according to §63.11223(b) and retain records as required in §63.11225(c) to demonstrate continuous compliance. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [§63.11223(a)]
2. The permittee shall conduct a tune-up of the boiler biennially to demonstrate continuous compliance specified as follows: [§63.11223(b)]
 - a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, but the permittee shall inspect each burner at least once every 36 months). [§63.11223(b)(1)]
 - 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. [§63.11223(b)(2)]
 - c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. [§63.11223(b)(3)]
 - d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available. [§63.11223(b)(4)]
 - e) Measure the concentrations in the effluent stream of CO in ppmv 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). [§63.11223(b)(5)]
 - f) Maintain onsite and submit, if requested by the Administrator, biennial report containing the following information: [§63.11223(b)(6)]
 - i) The concentrations of CO in the effluent stream in ppmv and oxygen in volume percent, measured before and after the tune-up of the boiler. [§63.11223(b)(6)(i)]

- ii) A description of any corrective actions taken as a part of the tune-up of the boiler. [§63.11223(b)(6)(ii)]
- iii) The type and amount of fuel used over the 12 months prior to the biennial tune-up of the boiler. [§63.11223(b)(6)(iii)]
- g) If the unit is not operating on the required date for a tune-up, the tune-up shall be conducted within one week of startup. [§63.11223(b)(7)]

General Provisions:

The permittee shall refer to Table 8 to Subpart JJJJJ of Part 63 for 40 CFR Part 63, Subpart A applicability.

Notifications, Recordkeeping, and Reporting:

1. The permittee shall submit the following notifications to the delegated authority: [§63.11225(a)]
 - a) The permittee shall submit all of the notifications in §63.7(b); §63.8(e) and (f); §63.9(b) through (e); and §63.9(g) and (h) that apply by the dates specified. [§63.11225(a)(1)]
 - b) As specified in § 63.9(b)(2), the permittee shall submit the Initial Notification no later than 120 calendar days after May 20, 2011 or within 120 days after the source becomes subject to the standard. [§63.11225(a)(2)]
 - c) The permittee shall submit the Notification of Compliance Status in accordance with §63.9(h) no later than 120 days after the applicable compliance date specified in §63.11196. In addition to the information required in §63.9(h)(2), the notification shall include the following certification(s) of compliance, as applicable, and signed by a responsible official: [§63.11225(a)(4)]
 - i) “This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler.” [§63.11225(a)(4)(i)]
 - ii) “This facility has had an energy assessment performed according to §63.11214(c).” [§63.11225(a)(4)(ii)]
 - iii) “No secondary materials that are solid waste were combusted in any affected unit.” [§63.11225(a)(4)(iv)]
2. The permittee shall prepare a biennial Compliance Report specified as follows: [§63.11225(b)]
 - a) Company name and address. [§63.11225(b)(1)]
 - b) Statement by a responsible official, with the official's name, title, phone number, e-mail address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJ. [§63.11225(b)(2)]
 - c) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken. [§63.11225(b)(3)]
3. The permittee shall retain the following records: [§63.11225(c)]
 - a) As required in §63.10(b)(2)(xiv), the permittee shall retain a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted. [§63.11225(c)(1)]
 - b) The permittee shall retain records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 as follows: [§63.11225(c)(2)]

- i) Records shall identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. [§63.11225(c)(2)(i)]
- ii) Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel, including whether the fuel has received a non-waste determination by the permittee or EPA, and the total fuel usage amount with units of measure. [§63.11225(c)(2)(ii)]
- c) Records of the occurrence and duration of each malfunction of the boiler. [§63.11225(c)(4)]
- d) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. [§63.11225(c)(5)]
- 4. Records shall be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). As specified in §63.10(b)(1), the permittee shall retain each record for five years following the date of each recorded action. The permittee shall retain each record onsite for at least two years after the date of each recorded action according to §63.10(b)(1). The permittee may retain the records off site for the remaining three years. [§63.11225(d)]
- 5. If the permittee intends to switch fuels, and this fuel switch may result in the applicability of a different subcategory or a switch out of 40 CFR Part 63, Subpart JJJJJJ due to a switch to 100 percent natural gas, the permittee shall provide 30 days prior notice of the date upon which the permittee will switch fuels. The notification shall identify: [§63.11225(g)]
 - a) The name of the permittee, the location of the source, the boiler(s) that will switch fuels, and the date of the notice. [§63.11225(g)(1)]
 - b) The currently applicable subcategory under 40 CFR Part 63, Subpart JJJJJJ (existing oil-fired greater than 10 MMBtu/hr). [§63.11225(g)(2)]
 - c) The date on which the permittee became subject to the currently applicable standards. [§63.11225(g)(3)]
 - d) The date upon which the permittee will commence the fuel switch. [§63.11225(g)(4)]
- 6. Records may be retained in written and/or electronic format.
- 7. The permittee shall report any deviations from the compliance dates, standards, general requirements, initial compliance, continuous compliance, general provisions, notifications, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 012	
10 CSR 10-6.060 Construction Permits Required	
Construction Permit 1099-021B, Issued March 1, 2000	
Emission Unit	Description
EP03	T106 – 26,400 gallon HCl Storage Tank

Operating Limitation:

- 1. Special Condition 6: The permittee shall install, maintain, and operate a scrubber to control Hydrogen Chloride (7647-01-0) emissions from EP03 T106 – 26,400 gallon HCl Storage Tank. The scrubber shall be operated and maintained according to the manufacturer’s performance specifications.
- 2. The scrubber shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. The scrubber shall be equipped with a flow meter that indicates the water flow rate through the scrubber. These gauges or meters shall be located such that Department of Natural Resources’ employees may easily observe them.

Monitoring/Recordkeeping:

1. The permittee shall monitor and record the operating pressure drop across the scrubber at least once every 24 hours while the emission unit is in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer’s performance specifications. The manufacturer’s performance specifications containing the design conditions shall be retained onsite.
2. The permittee shall monitor and record the water flow rate through each scrubber at least once every 24 hours while the emission unit is in operation. The water flow rate shall be maintained within the design conditions specified by the manufacturer’s performance specifications. The manufacturer’s performance specifications containing the design conditions shall be retained onsite.
3. The permittee shall retain an operating and maintenance log for the scrubber using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - c) A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.
4. The permittee shall retain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request. These records shall include MSDS for all materials used.
5. Records may be retained in written and/or electronic format.

Reporting:

The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 013	
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
EP54	Haul Road

Emission Limitation:

1. The permittee shall not cause or permit to be discharged into the atmosphere from these emission units any visible emissions with an opacity greater than 20 percent.
2. Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 60 percent.

Monitoring:

1. The permittee shall conduct opacity readings on these emission units using the procedures contained in U.S. EPA Test Method 22. Readings are only required when the haul road is in use and when the weather conditions allow. If no visible emissions are observed using these procedures, then no further observations would be required.
2. The following monitoring schedule shall be maintained:

- a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then
 - b) Observations shall be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
 - c) Observations shall be made once per month. If a violation is noted, monitoring reverts to weekly.
 - d) If, at the issuance of this permit, the permittee has progressed in the schedule listed above the permittee may continue to advance accordingly or maintain observations.
3. If the source reverts to weekly monitoring at any time, monitoring frequency shall progress in an identical manner from the initial monitoring frequency.
4. If visible emissions are noted, the source representative shall then control fugitive emissions from the haul road at this site by performing at least one of the following *Best Management Practices*:
- a) Pavement of Road Surfaces –
 - i) The permittee may pave all or any portion of the haul roads with materials such as asphalt, concrete, and/or other material(s) after receiving approval from the program. The pavement shall be applied in accordance with industry standards for such pavement so as to achieve “Control of Fugitive Emissions” while the plant is operating.
 - ii) Maintenance and/or repair of the road surface shall be conducted as necessary according to ASTM standards to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating. The permittee shall document which ASTM standards the installation is complying with.
 - iii) The permittee shall periodically water, wash and/or otherwise clean all of the paved portions of the haul road(s) as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
 - b) Usage of Chemical Dust Suppressants –
 - i) The permittee shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to all the unpaved portions of the haul roads. The suppressant shall be applied in accordance with the manufacturer’s suggested application rate (if available) and re-applied as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
 - ii) The permittee shall retain the manufacturer’s specifications for the chemical dust suppressant from which the application rate amount and frequency was taken.
 - iii) The permittee shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The permittee shall retain these records with the plant for not less than five years, and the permittee shall make these records available to Department of Natural Resources’ personnel upon request.
 - c) Usage of Documented Watering –
 - i) The permittee shall control the fugitive emissions from all the unpaved portions of the haul roads at the installation by consistently and correctly using the application of a water spray. Documented watering will be applied in accordance with a recommended application rate of 100 gallons per day per 1,000 square feet of unpaved/untreated surface area of haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating. For example, the permittee shall calculate the total square feet of unpaved vehicle activity area requiring control on any particular day, divide that product by 1,000, and multiply the quotient by 100 gallons for that day.
 - ii) The permittee shall maintain a log that documents daily water applications. This log shall include, but is not limited to, date and volumes (e.g., number of tanker applications and/or

total gallons used) of water application. The log shall also record rationale for not applying water on day(s) the plant is in operation (e.g., meteorological situations, precipitation events, freezing, etc.)

- iii) Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the plant is operating is sufficient reason to suspend water spray applications on the date of the meteorological precipitation occurrence.
- iv) Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads. The permittee shall record a brief description of such events in the same log as the documented watering.
- v) The permittee shall retain these records with the plant for not less than five years, and the permittee shall make these records available to Department of Natural Resources' personnel upon request.

Recordkeeping:

- 1. The permittee shall maintain records of all observation results (see Attachment E, or an equivalent form approved by the Air Pollution Control Program), noting:
 - a) Whether any air emissions (except for water vapor) were and
 - b) Whether the visible emissions exceeded the opacity limit.
- 2. The permittee shall maintain records of any *Best Management Practices* performed in accordance with this permit condition.
- 3. The permittee shall retain MSDS for all materials used.
- 4. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 5. All records must be maintained for five years.
- 6. Records may be retained in written and/or electronic format.

Reporting:

- 1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation.
- 2. The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 014 10 CSR 10-6.060 Construction Permits Required Construction Permit 1099-021B, Issued March 1, 2000	
Emission Unit	Description
EP17	Process Boiler MP-901C

Emission Limitation:

Special Condition 1: The permittee shall emit less than 39.7 tons of SO_x from EP17 Process Boiler MP-901C in any consecutive 12-month period from the combustion of fuel oil.

Monitoring/Recordkeeping:

1. Special Condition 2: The permittee shall record the monthly and the 12-month rolling total SO_x emissions in tons from EP17 Process Boiler MP-901C. These records shall be retained on-site for five years and shall be made immediately available for inspection to Department of Natural Resources' personnel upon request. Attachment F, or an equivalent form approved by the Air Pollution Control Program, shall be used for this purpose.
2. Records may be retained in written and/or electronic format.

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance of the SO_x emission limitation.
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 015	
10 CSR 10-6.070 New Source Performance Regulations	
40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	
Emission Unit	Description
EP52	60 kW Diesel Emergency Generator

Emission Limitations:

1. Manufacturers shall certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the following emission standards: [§60.4202(a)]
 - a) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007. [§60.4202(a)(2)]
2. Engines manufactured by stationary CI internal combustion engine manufacturers shall meet the emission standards as required in §60.4202 during the certified emissions life of the engines. [§60.4203]
3. The permittee shall comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power. [§60.4205(b)]
4. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4205 over the entire life of the engine. [§60.4206]

Operational Limitations:

1. The permittee shall only purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [§60.4207(b)]
2. The permittee may not install stationary CI ICE that do not meet the applicable emission limitations for 2007 model year engines. [§60.4208(a)]
3. The permittee shall install a non-resettable hour meter prior to startup of the engine. [§60.4209(a)]
4. The permittee shall do all of the following, except as permitted under §60.4211(g): [§60.4211(a)]
 - a) Operate and maintain the stationary CI internal combustion engine according to the manufacturer's emission-related written instructions; [§60.4211(a)(1)]

- b) Change only those emission-related settings that are permitted by the manufacturer; and
[§60.4211(a)(2)]
- c) Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as applicable. [§60.4211(a)(3)]
- 5. The permittee shall comply by purchasing an engine certified to the emission standards in §60.4205(b) for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in §60.4211(g) of this section. [§60.4211(c)]
- 6. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted, is prohibited. [§60.4211(f)]
- 7. If the permittee does not install, configure, operate, and maintain the engine according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows: [§60.4211(g)]
 - a) The permittee shall retain a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the permittee does not install and configure the engine according to the manufacturer's emission-related written instructions, or the permittee changes the emission-related settings in a way that is not permitted by the manufacturer, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year of such action. [§60.4211(g)(1)]

Notifications/Recordkeeping:

The permittee is not required to submit an initial notification. Starting with the 2012 model year, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall retain records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [§60.4214(b)]

General Provisions:

The permittee shall refer to Table 8 to 40 CFR Part 60, Subpart IIII for 40 CFR Part 60, Subpart A applicability. [§60.4218]

Reporting:

The permittee shall report any deviations from the emission limitations, operational limitations, notifications/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 016	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
Emission Unit	Description
EP52	60 kW Diesel Emergency Generator

Standards:

The permittee shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII, for compression ignition engines. No further requirements apply for the engine under 40 CFR Part 63, Subpart ZZZZ.

PERMIT CONDITION 017	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
Emission Unit	Description
EP53	300 HP Emergency Fire Pump Engine

Compliance Date:

1. The permittee shall comply with the applicable emission limitations and operating limitations no later than May 3, 2013. [§63.6595(a)(1)]
2. The permittee shall meet the applicable notification requirements in 40 CFR Part 63, Subpart A. [§63.6595(c)]

Operational Limitations:

1. The permittee shall comply with the following requirements, except during periods of startup: [§63.6603(a)]
 - a) Change oil and filter every 500 hours of operation or annually, whichever comes first; [40 CFR Part 63, Subpart ZZZZ Table 2d #4.a]
 - i) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement. The oil analysis shall be performed at the same frequency specified for changing the oil. The analysis program shall at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee shall change the oil within two days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee shall change the oil

within two days or before commencing operation, whichever is later. The permittee shall retain records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the engine. [§63.6625(i)]

- b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and [40 CFR Part 63, Subpart ZZZZ Table 2d #4.b]
 - c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63, Subpart ZZZZ Table 2d #4.c]
 - d) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. The permittee shall report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR Part 63, Subpart ZZZZ Table 2d Footnote #2]
2. The permittee shall comply with the operating limitations at all times. [§63.6605(a)]
 3. At all times the permittee shall operate and maintain the engine in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.6605(b)]
 4. The permittee shall operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63.6625(e)]
 5. The permittee shall install a non-resettable hour meter if one is not already installed. [§63.6625(f)]
 6. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. [§63.6625(h)]

Continuous Compliance Requirements:

1. The permittee shall demonstrate continuous compliance with the operating limitations according to the following methods: [§63.6640(a)]
 - a) The permittee shall operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or [40 CFR Part 63, Subpart ZZZZ Table 6 #9.a.i]
 - b) The permittee shall develop and follow a maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63, Subpart ZZZZ Table 6 #9.a.ii]

2. The permittee shall report each instance in which the permittee did not meet the operating limitations. These instances are deviations from the operating limitations. These deviations shall be reported according to the requirements in §63.6650. [§63.6640(b)]
3. The permittee shall also report each instance in which the permittee did not meet applicable 40 CFR Part 63, Subpart A requirements. [§63.6640(e)]
4. The permittee shall operate the emergency stationary RICE according to the requirements in §63.6640(f)(1)(i) through (iii). Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in §63.6640(f)(1)(i) through (iii), is prohibited. If the permittee does not operate the engine according to the requirements in §63.6640(f)(1)(i) through (iii), the engine will not be considered an emergency engine under 40 CFR Part 63, Subpart ZZZZ and will need to meet all requirements for non-emergency engines. [§63.6640(f)(1)]
 - a) There is no time limit on the use of emergency stationary RICE in emergency situations. [§63.6640(f)(1)(i)]
 - b) The permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [§63.6640(f)(1)(ii)]
 - c) The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that the permittee may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation shall be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by §63.6640(f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power. [§63.6640(f)(1)(iii)]

General Provisions:

The permittee shall refer to Table 8 to 40 CFR Part 63, Subpart ZZZZ for 40 CFR Part 63, Subpart A applicability. [§63.6665]

Recordkeeping:

1. The permittee shall retain the following records: [§63.6655(a)]
 - a) Records of the occurrence and duration of each malfunction of the engine. [§63.6655(a)(2)]

- b) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore the malfunctioning engine its normal or usual manner of operation. [§63.6655(a)(5)]
2. The permittee shall retain records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE according to the maintenance plan. [§63.6655(e)]
3. The permittee shall retain records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the permittee shall retain records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [§63.6655(f)]
4. Records shall be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
5. As specified in §63.10(b)(1), the permittee shall retain each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]
6. The permittee shall retain each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]
7. Records may be retained in written and/or electronic format.

Reporting:

1. The permittee shall submit a semi-annual Compliance Report. [§63.6650(a)]
2. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee submit each report according to the following requirements: [§63.6650(b)]
 - a) The first Compliance Report shall cover the period beginning on May 3, 2013 and ending on June 30th. [§63.6650(b)(1)]
 - b) Each subsequent Compliance Report shall cover the semi-annual reporting period from January 1st through June 30th or the semi-annual reporting period from July 1st through December 31st. [§63.6650(b)(3)]
 - c) The permittee may submit the first and subsequent Compliance Reports with the semi-annual monitoring report required by this Title V permit. [§63.6650(b)(5)]
3. The Compliance Report shall contain the following information: [§63.6650(c)]
 - a) Company name and address. [§63.6650(c)(1)]
 - b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)(2)]
 - c) Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
 - d) If a malfunction occurred during the reporting period, the Compliance Report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period. The report shall also include a description of actions taken by the permittee during the malfunction to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]
 - e) If there are no deviations from any operating limitations, a statement that there were no deviations from the operating limitations during the reporting period. [§63.6650(c)(5)]
4. For each deviation from an operating limitation, the Compliance Report shall contain the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(d)]

- a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
- b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(d)(2)]
- 5. The permittee shall report all deviations in the semi-annual monitoring report required by this Title V permit. The permittee may submit Compliance Reports along with, or as part of, the semi-annual monitoring report required by this Title V permit, provided the Compliance Report includes all required information concerning deviations from any operating limitation. Submission of the Compliance Report shall be deemed to satisfy any obligation to report the same deviations in the semi-annual monitoring report. However, submission of a Compliance Report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [§63.6650(f)]
- 6. The permittee shall report any deviations from the compliance date, operational limitations, continuous compliance requirements, general provisions, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 018	
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
Emission Unit	Description
EP52	Emergency Generator
EP53	Emergency Fire Pump Engine

Emission Limitation:

The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of SO₂ or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour time period.

Operational Limitation:

The permittee shall not combust any diesel containing sulfur in excess of 15 ppm (0.0015 percent).

Monitoring/Recordkeeping:

The permittee shall retain fuel purchase receipts indicating the sulfur content of the diesel.

Reporting:

The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 019	
10 CSR 10-6.060 Construction Permits Required Construction Permit 122002-002, Issued December 4, 2002	
Emission Unit	Description
EP18	Plant 2 Methanol Process

Operational Limitations:

Special Condition 4.A: The permittee shall control emissions from EP18 Plant 2 Methanol Process using a catalytic oxidizer. The catalytic oxidizer shall be in use at all times EP18 is in operation. The catalytic oxidizer shall be operated and maintained in accordance with manufacturer's specifications.

Monitoring/Recordkeeping:

1. The permittee shall maintain an operating and maintenance log for the catalytic oxidizer using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - c) Dates and times of all bag replacements.
2. The permittee shall retain a copy of the manufacturer's specifications.
3. Records may be kept in either written or electronic form.
4. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
5. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations from the operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 020	
10 CSR 10-6.060 Construction Permits Required Construction Permit 122002-002, Issued December 4, 2002	
Emission Unit	Description
EP19A	T2441 – 16,000 gallon Plant 2 Methanol Storage Tank
EP19B	T2442 – 16,000 gallon Plant 2 Methanol Storage Tank
EP23	T2122 – 40,000 gallon Plant 2 HCl Storage Tank
EP37	T951 – 475 gallon Plant 2 HCl Day Tank for DI System

Operational Limitations:

Special Condition 4.B: The permittee shall control emissions from EP19A T2441 – 16,000 gallon Plant 2 Methanol Storage Tank, EP19B T2442 – 16,000 gallon Plant 2 Methanol Storage Tank, EP23 T2122 – 40,000 gallon Plant 2 HCl Storage Tank, and EP37 T951 – 475 gallon Plant 2 HCl Storage Tank using a packed tower scrubber with a mist eliminator. The packed tower scrubber with a mist eliminator shall be in use at all times EP19A, EP19B, EP23, and EP37 are in operation. The packed

tower scrubber with a mist eliminator shall be operated and maintained in accordance with manufacturer's specifications.

Monitoring/Recordkeeping:

1. The permittee shall maintain an operating and maintenance log for the packed tower scrubber with a mist eliminator using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - c) Dates and times of all bag replacements.
2. The permittee shall retain a copy of the manufacturer's specifications.
3. Records may be kept in either written or electronic form.
4. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
5. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations from the operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 021	
10 CSR 10-6.060 Construction Permits Required Construction Permit 122002-002, Issued December 4, 2002	
Emission Unit	Description
EP36	Plant 2 Decolorizing Process

Operational Limitations:

Special Condition 4.C: The permittee shall control emissions from EP36 Plant 2 Decolorizing Process using a scrubber. The scrubber shall be in use at all times EP36 is in operation. The scrubber shall be operated and maintained in accordance with manufacturer's specifications.

Monitoring/Recordkeeping:

1. The permittee shall maintain an operating and maintenance log for the scrubber using Attachment C or an equivalent form approved by the Air Pollution Control Program. The log shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - c) Dates and times of all bag replacements.
2. The permittee shall retain a copy of the manufacturer's specifications.
3. Records may be kept in either written or electronic form.
4. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
5. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations from the operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 022	
10 CSR 10-6.060 Construction Permits Required Construction Permit 122002-002, Issued December 4, 2002	
Emission Unit	Description
EP24	Plant 2 Product Loading
EP38	Plant 2 Product Pneumatic Transfer

Operational Limitations:

Special Condition 4.D.1: The permittee shall control emissions from EP24 Plant 2 Product Loading and EP38 Plant 2 Product Pneumatic Transfer using baghouses. The baghouses shall be in use at all times EP24 and EP38 are in operation. The baghouses shall be operated and maintained in accordance with manufacturer's specifications. Each baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Missouri Department of Natural Resources' employees may easily observe them. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Monitoring/Recordkeeping:

1. Special Condition 4.D.2: The permittee shall monitor and record the operating pressure drop across the baghouses and drum filters at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
2. Special Condition 4.D.3: The permittee shall maintain an operating and maintenance log for the baghouses using Attachment C or an equivalent form approved by the Air Pollution Control Program. The logs shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - c) Dates and times of all bag replacements.
3. The permittee shall retain a copy of the manufacturer's specifications.
4. Records may be kept in either written or electronic form.
5. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
6. All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations from the operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

IV. 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), the Code of State Regulations (CSR), and local ordinances 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 10-6.045 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 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) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on residential premises having not more than four dwelling units, provided that the refuse originates on the same premises.
 - b) Yard waste.
3. Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the permittee fails to comply with the conditions or any provisions of the permit.
4. The permittee may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least 200 yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if the permittee fails to comply with the provisions or any condition of the open burning permit.
 - a) In a nonattainment area, as defined in 10 CSR 10-6.020(2)(N)5., the director shall not issue a permit under this section unless the permittee can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
5. Reporting and Recordkeeping. 40 CFR Part 60, Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in §60.2245 - §60.2260. The provisions of 40 CFR Part 60, Subpart CCCC promulgated as of September 22, 2005 shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with 40 CFR Part 60, Subpart CCCC, sources shall conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
6. Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A – Test Methods, Method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

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 listed information 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 §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 listed information 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 §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 §§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 18 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 10-6.110 Submission of Emission Data, Emission Fees and Process Information

1. The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
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 report.
6. The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1st after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1st.
7. The reporting period shall end on December 31st of each calendar year. Each report shall contain the required information for each emission unit for the 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:

1. 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.
2. The permittee shall maintain the following monitoring schedule:
 - a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance.
 - b) Should no violation of this regulation be observed during this period then-
 - i) The permittee may observe once every two weeks for a period of eight weeks.
 - ii) If a violation is noted, monitoring reverts to weekly.
 - iii) 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.
 - c) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.
 - d) If the permittee is has already progressed to the observations every two weeks or every month at the issuance of this permit, the permittee may continue forward from that point in the monitoring schedule. The permittee shall revert back to weekly monitoring if a violation is noted.

Recordkeeping:

1. The permittee shall document all readings on Attachment D, or an equivalent form approved by the Air Pollution Control Program, noting the following:
 - a) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
 - b) Whether equipment malfunctions contributed to an exceedance.
 - c) 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 10-6.165 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 volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

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 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

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 40 CFR Part 82, 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 40 CFR Part 82, 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 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

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:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 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.

V. 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 Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually 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 40 CFR 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.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in 10 CSR 10-6.065(6)(C)7.A 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.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semi-annual 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 §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 §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.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 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)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 semi-annually (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 EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and 40 CFR 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 applicable 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 §303 of the Act or §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 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 Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., 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.
- 1) §502(b)(10) changes. Changes that, under §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.
 - a) Before making a change under this provision, the permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., 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 Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program 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 Air Pollution Control Program as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

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

- 1) 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:
 - a) 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;
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., 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.
 - c) 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
 - d) 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 Toshihiko Hirao, President. On January 16, 2013, the Air Pollution Control Program was informed that Tatsuya Ogawa, President, is

now the responsible official. 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 permittee shall notify the Director of the Air Pollution Control Program of the change. Said 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 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 receives notice from EPA that a petition for disapproval of a permit pursuant to §70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
2. The Missouri Department of Natural Resources 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. The Missouri Department of Natural Resources 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.

VI. Attachments

Attachments follow.

Attachment A
 Methanol Compliance Worksheet

This sheet covers the period from _____ to _____.
 (month, year) (month, year)

Emission Unit	Description	Amount of Material Produced¹ (tons)	Methanol Emission Factor² (lb Methanol/ton of material produced)	Control Efficiency (%)	Controlled Methanol Emissions (tons)³
EP18	Plant 2 Methanol Process		21.82	96	
EP19A	Plant 2 Methanol Storage Tanks		0.2618	0 ⁴	
EP19B					
EP28	Methanol Wastewater Treatment		1.1781	0	
Total Methanol Emissions for this Month⁵ (tons):					
12-Month Rolling Total Methanol Emissions⁶ (tons):					

¹Only list the amount of material produced using Methanol (67-56-1).

²Methanol Emission Factors are based upon a product batch weight of 25.25 tons.

³Controlled Methanol Emissions (tons) =

Amount of Material Produced (tons) x Methanol Emission Factor (lb/ton) x (1 – Control Efficiency (%) / 100) x 0.0005 (lb/ton)

⁴The Methanol Emission Factor for EP19A and EP19B Plant 2 Methanol Storage Tanks already includes control; therefore, no additional control efficiency is given for the scrubber with a mist eliminator.

⁵Total Methanol Emissions for this Month (tons) = the sum of Control Methanol Emissions (tons) from each emission unit.

⁶12-Month Rolling Total Methanol Emissions (tons) = Total Methanol Emissions for this Month (tons) + the sum of the previous 11 month's Total Methanol Emissions (tons). **The permittee is in compliance with Permit Condition 001 if 12-Month Rolling Total Methanol Emissions are less than 10.0 tons.**

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 January 10, 2011
- 2) 2011, 2010, 2009, 2008, and 2007 Emissions Inventory Questionnaires
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition

Other Air Regulations Determined Not to Apply to the Operating Permit

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

10 CSR 10-6.100 *Alternate Emission Limits* is not applicable to the installation and has not been applied within this permit. This rule applies to installations that emit VOC in ozone nonattainment areas. [10 CSR 10-6.100(1)(A)] The installation is in an ozone attainment area.

10 CSR 10-6.345 *Control of NO_x Emissions From Upwind Sources* is not applicable to the installation and has not been applied within this permit. This regulation applies to installations located in Perry, St. Genevieve, St. Francois, Washington, and Warren counties. [10 CSR 10-6.345(1)(A)] The installation is located in Cape Girardeau county.

10 CSR 10-6.360 *Control of NO_x Emissions From Electric Generating Units and Non-Electric Generating Boilers* is not applicable to the installation and has not been applied within this permit. This regulation applies to non-electric generating boilers that have a maximum design heat input greater than 250 MMBtu/hr. [10 CSR 10-6.360(1)(B)2] The installation's largest boiler is only 100 MMBtu/hr.

10 CSR 10-6.390 *Control of NO_x Emissions From Large Stationary Internal Combustion Engines* is not applicable to the installation and has not been applied within this permit. This regulation applies to large stationary internal combustion engines greater than 1,300 HP. [10 CSR 10-6.390(1)] The installation's large stationary internal combustion engine is only 300 HP.

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes* is not applicable to the installation and has not been applied within this permit. This regulation applies to operations, processes, or activities that emit particulate matter. [10 CSR 10-6.400(1)(A)] This regulation exempts emission units that at maximum design capacity have a potential to emit less than 0.5 lb/hr of particulate matter. [10 CSR 10-6.400(1)(B)12] This regulation exempts the burning of fuel for indirect heating. [10 CSR 10-6.400(1)(B)6] EP53 Diesel Fired Emergency Fire Pump emits particulate matter and does not qualify for any of the exemptions; however, diesel is a liquid fuel and is excluded from the definition of *process weight* at 10 CSR 10-6.400(2)(A).

10 CSR 10-6.405 *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating* is not applicable to the installation and has not been applied within this permit. This regulation applies to installations combusting fuel for the primary purpose of producing steam, hot

water, hot air, or other indirect heating of liquids, gases, or solids. [10 CSR 10-6.405(1)(B)] The installation is exempt from this regulation as 10 CSR 10-6.405(1)(E) exempts installation that exclusively combust fuel oil #2, natural gas, and propane.

Construction Permits

Construction Permit 0983-006 to 0983-009, Issued September 13, 1983:

- ◆ This permit is for the installation of an l-lysine production facility.
- ◆ Special Condition A of this permit requires compliance with the Odor Rule (previously 10 CSR 10-3.090 now 10 CSR 10-6.165). Special Condition A was not included within the permit as 10 CSR 10-6.165 Restriction of Emission of Odors has already been applied within this permit (see Section IV. Core Permit Requirements).

Construction Permit 0284-020, Issued February 22, 1984:

- ◆ This permit is for the installation of a boiler.
- ◆ This permit contains no special conditions.

Construction Permit 0190-002, Issued January 10, 1990:

- ◆ This permit is for the installation of EP-02 Process #31 Boiler and drying system.
- ◆ This permit contains no special conditions.

Construction Permit 0693-020, Issued June 25, 1993:

- ◆ This permit allows the installation to combust both natural gas and fuel oil #2 in EP-02 Process #31 Boiler.
- ◆ This permit contains no special conditions.

Construction Permit 1099-021, Issued October 18, 1999:

Construction Permit 1099-021A, Issued February 14, 2000:

Construction Permit 1099-021B, Issued March 1, 2000:

- ◆ This Section (5) NSR permit is for the construction of a new manufacturing plant and an expansion of the existing plant to increase l-lysine production and produce two new feed additives.
- ◆ Amendment A clarifies that NSPS Dc rather than NSPS Db applies to the new boiler.
- ◆ Amendment B clarifies the units of the emission factor for EP-28 on Attachment B as lb/ton methanol used rather than lb/ton ethanol used.
- ◆ Special Conditions 1 and 2 have been applied within this permit (see Permit Condition 014).
- ◆ Special Conditions 3, 4, and 5 were superseded by Construction Permit 12002-002.
- ◆ Special Condition 6 has been applied within this permit (see Permit Condition 012).

Construction Permit 122002-002, Issued December 4, 2002:

Construction Permit 122002-002A, Issued July 27, 2006:

- ◆ This Section (5) NSR permit is for the modification of the existing FNA feed additive process line to allow for production of argenine, glutamine, and other amino acids in the BFK process line.
- ◆ Amendment A increases the carbon black usage limit in Special Condition 3.A.
- ◆ Special Condition 1 supersedes Special Conditions 3, 4, and 5 of Construction Permit 1099-021.
- ◆ Special Conditions 2 and 3 were superseded by Construction Permit 082008-017.
- ◆ Special Condition 4.A has been applied within this permit (see Permit Condition 019).

- ◆ Special Condition 4.B has been applied within this permit (see Permit Condition 020).
- ◆ Special Condition 4.C has been applied within this permit (see Permit Condition 021).
- ◆ Special Condition 4.D has been applied within this permit (see Permit Condition 022).

Construction Permit 082008-017, Issued August 22, 2008:

- ◆ This Section (6) NSR permit is for the installation of four 11.56 MMBtu/hr natural gas fired boilers and the addition of an aftercooler to Plant 2 resulting in increased throughput.
- ◆ The installation only installed two of the four boilers (EP-44 and EP-45). As the two year effective period for construction under this permit has already passed, the installation is no longer allowed to construct the other two boilers.
- ◆ Special Condition 1 superseded Special Conditions 2 and 3 of Construction Permit 122002-002A.
- ◆ Special Condition 2 has been applied within this permit (see Permit Condition 001).
- ◆ Special Condition 3 has been applied within this permit (see Permit Condition 002).
- ◆ Special Condition 4 has been applied within this permit (see Permit Condition 003).
- ◆ Special Condition 5 has been applied within this permit (see Permit Condition 004).

Construction Permit 112011-002, Issued November 2, 2011:

- ◆ This Section (5) NSR permit is for the installation of two conical dryers and associated handling equipment.
- ◆ Special Conditions 1 and 2 have been applied within this permit (see Permit Condition 005).

Construction Permit 072012-010, Issued July 23, 2012:

- ◆ This Section (5) NSR permit is for an increase in amino acid production at Plant 1 and modifications to the amino acid production process at Plant 2.
- ◆ Special Condition 1 has been applied within this permit (see Permit Condition 006).
- ◆ Special Condition 2 has been applied within this permit (see Permit Condition 007).
- ◆ Special Condition 3 has been applied within this permit (see Permit Condition 008).
- ◆ Special Condition 4 has been applied within this permit (see Permit Conditions 006 and 007).

Temporary Construction Permit 052012-002, Issued May 4, 2012:

- ◆ This temporary construction permit was for the use of a 615 HP diesel generator.
- ◆ This temporary construction permit expired May 15, 2012.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60, Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* is applicable to EP02 Process #31 Boiler, EP17 MP-901C Process Boiler, EP44 MP-901D Process Boiler, and EP45 MP-901E Process Boiler and has been applied within this permit (see Permit Conditions 009 and 010). This regulation is not applicable to EP41 WWTP Package Boiler as the regulation applies to units greater than or equal to 10 MMBtu/hr. [§60.40c]

40 CFR Part 60, Subparts K, Ka, and Kb – *Standards of Performance for Storage Vessels* are not applicable to the installation at this time and have not been applied within this permit. These regulations do not apply to tanks constructed prior to June 11, 1973. [§60.110(c), §60.110a(a), and §60.110b(a)] This regulation does not apply to storage vessels constructed between June 11, 1973 and July 23, 1984 of less than 40,000 gallons. [§60.110(c) and §60.110a(a)] This regulation does not apply to storage

vessels constructed after July 23, 1984, of less than 75 m³ (19,812 gallons). [§60.110b(a)] The following tanks are exempt from this regulation as follows:

Emission Unit	Description	Applicability
EP03	T106 - 26,400 gallon HCl Storage Tank	HCl is not a VOL
EP23	T2122 - 40,000 gallon Plant 2 HCl Storage Tank	
EP30	T2230A - 81,000 gallon Plant 2 Fermentation Tank Vent A	The permittee shall retain records demonstrating these tanks do not contain VOL or that the maximum true vapor pressure does not exceed 3.5 kPa
EP31	T2230B - 81,000 gallon Plant 2 Fermentation Tank Vent B	
EP32	T2230C - 81,000 gallon Plant 2 Fermentation Tank Vent C	
EP33	T230D - 81,000 gallon Plant 1 Fermentation Tank Vent A	
EP34	T230E - 81,000 gallon Plant 1 Fermentation Tank Vent B	
EP35	T230F - 81,000 gallon Plant 1 Fermentation Tank Vent C	
T301D	72,000 gallon Fermentation Broth Tank	
T301E & F	(2) 80,000 gallon Broth Tanks	
T399	40,000 gallon Evaporator Slurry Tank	
T840A	75,000 gallon Sludge Storage Tank	
T840B	125,000 gallon Sludge Storage Tank	
T2301	(2) 80,000 gallon Broth Tanks	
T2323	40,000 gallon Rich Cut Tank	
RC2330	(2) 40,000 gallon Resin Columns	
T101	528,000 gallon Wastewater Utility Tank	Wastewater is not a VOL
T617	160,000 gallon Wastewater Utility Tank	
T105	21,000 gallon Sulfuric Acid Tank	Sulfuric acid is not a VOL
T108	(2) 26,000 gallon Anhydrous Ammonia Storage Tanks	Anhydrous Ammonia is not a VOL
T204	(3) 38,000 gallon Feeding Tanks	The permittee shall retain records demonstrating these tanks do not contain VOL or that the maximum true vapor pressure does not exceed 15.0 kPa
T351	(2) 31,700 gallon Decolorizing Tanks	
T838	36,800 gallon Liquid Sludge Blending Tank	
T2201	26,500 gallon Glucose Storage Tank	
T2311	21,000 gallon Resin Column Feed Tank	
T2322	32,000 gallon Tail Cut Tank	
RC2320	(3) 31,700 gallon Resin Columns	
EP08	T903 - 67,000 gallon Fuel Oil #2 Storage Tank, South Site	True vapor pressure of fuel oil #2 < 3.5 kPa
T260	(2) 26,000 gallon Hot Water Tanks	Hot water is not a VOL
T2260	26,500 gallon Hot Water Tank	
T301C	72,000 gallon DI Water Storage Tank	DI water is not a VOL
T952	110,000 gallon Deionized Water Storage Tank	
T2123	40,000 gallon NaOH Storage Tank	NaOH is not a VOL

40 CFR Part 60, Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* is applicable to the installation and has been applied within this permit (see Permit Condition 015). This regulation is not applicable to EP53 Emergency Fire Pump Engine as the engine was constructed prior to July 11, 2005. [§60.4200(a)(2)]

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63, Subpart ZZZZ – *National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* is applicable to the installation and has been

applied within this permit (see Permit Conditions 016 and 017).

40 CFR Part 63, Subpart JJJJJJ – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* is applicable to EP02 Process #31 Boiler and EP17 MP-901C Process Boiler and has been applied within this permit (see Permit Condition 011). This regulation is not applicable to EP41 WWTP Package Boiler, EP44 MP-901D Process Boiler, or EP45 MP-901E Process Boiler as gas-fired boilers are not subject. [§63.11195(e)]

40 CFR Part 63, Subpart DDDDDDD – *National Emission Standards for Hazardous Air Pollutants for Area Sources: Prepared Feeds Manufacturing* is not applicable to the installation and has not been applied within this permit. The installation does meet the definition of *prepared feeds manufacturing facility* as they are primary engaged in manufacturing *animal feed*. *Animal feed* includes animal feed concentrates, supplements, and premixes. The installation does not use materials containing chromium or manganese and; therefore, doesn't meet the applicability requirements of §63.11619(a).

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61, Subpart M – *National Emission Standards for Asbestos* is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

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.

Greenhouse Gas Emissions

This installation is a major source for greenhouse gases. Major stationary sources are required by the Clean Air Act to obtain Part 70 operating permits. 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.

Updated Potential to Emit for the Installation

Pollutant	Controlled Potential to Emit (tons per year) ¹
CO	71.68
CO _{2e}	138,326.06
NH ₃	11.68
NO _x	119.93
PM	16.64
PM ₁₀	11.13
PM _{2.5}	11.13
SO _x	221.97
VOC	87.07
HAP	7.44
Methanol (67-56-1)	4.32
Hydrogen Chloride (7647-01-0)	1.53
Hexane (110-54-3)	1.52
Formaldehyde (50-00-0)	0.06
Polycyclic Organic Matter (POM)	0.01

¹This PTE is based upon 8,760 annual hours of uncontrolled operation unless otherwise stated:

- The PTEs for EP02 and EP17 were based upon the worst-case fuel for each pollutant.
- The PTE for EP03 includes 93% HCl and HAP control for the scrubber required by Permit Condition 002.
- The PTE for EP18 includes 99% PM, PM₁₀, and PM_{2.5} control for the fabric filter required by Permit Condition 003 and 96% Methanol and HAP control for the catalytic oxidizer required by Permit Condition 019.
- The PTEs for EP19A and EP19B include 90% Methanol, HAP, and VOC control for the packed tower scrubber with a mist eliminator required by Permit Condition 020.
- The PTEs for EP23 and EP37 include 90% HCl and HAP control for the packed tower scrubber with a mist eliminator required by Permit Condition 020.
- The PTEs for EP24 and EP38 include 99% PM, PM₁₀, and PM_{2.5} control for the baghouses required by Permit Condition 022.
- The PTEs for EP25, EP26, EP27, and EP29 include 99% PM, PM₁₀, and PM_{2.5} control for baghouses required by Permit Condition 006.
- The PTEs for EP36 and EP39 include 97% PM, PM₁₀, and PM_{2.5} control for the baghouses required by Permit Condition 006.
- The PTE for EP42 includes 98% PM, PM₁₀, and PM_{2.5} control for the baghouse required by Permit Condition 006.
- The PTEs for EP40 and EP51 include 99% PM, PM₁₀, and PM_{2.5} control for the baghouses required by Permit Condition 006 and 50% SO_x control for the scrubbers required by Permit Condition 007.
- The PTE for EP48 includes 99% PM, PM₁₀, and PM_{2.5} control for the baghouse required by Permit Condition 003.
- The PTEs for EP49 and EP50 include 99% PM, PM₁₀, and PM_{2.5} control for the baghouses required by Permit Condition 005.
- The PTEs for EP52 and EP53 are based upon 500 hours of annual operation due to their emergency engine status.

Other Regulatory Determinations

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants* is applicable to the installation and has been applied within this permit (see Permit Condition 013). This regulation is not applicable to EP02 Process #31 Boiler or EP17 MP-901C Process Boiler as 10 CSR 10-6.220(1)(H) exempts emission sources regulated under 10 CSR 10-6.070 (see Permit Condition 009). This regulation is not applicable to EP52 Emergency Generator or EP53 Diesel Fired Emergency Fire Pump as 10 CSR 10-6.220(1)(A) exempts internal combustion engines. This regulation is applicable to the following emission units, but was not applied within this permit as potential emissions of particulate matter from the emission units

were calculated to be less than 0.5 pounds per hour and are not expected to exceed the opacity limits while being properly maintained and operated; no further monitoring, recordkeeping, or reporting is required at this time:

Emission Unit	Description	PM PTE (lb/hr)
EP18	Plant 2 Methanol Process	0.24
EP25	Plant 1 Filter Aid Vent	0.01
EP26	Plant 1 Dryer Vent	0.005
EP27	Plant 1 Hopper and Bagging Vent	0.05
EP29	Plant 1 Dry Crystal Conveyor Vent	0.05
EP36	Plant 2 Sodium Metabisulfite Vent	0.005
EP38	Plant 2 Product Pneumatic Transfer	0.001
EP39	Plant 1 Decolorization System Vent	0.06
EP40	Plant 1 Sodium Metabisulfite Addition	0.00003
EP41	WWTP Package Boiler	0.01
EP42	Plant 1 Bulk Ammonium Sulfate Unloading	0.00004
EP44	MP-901 D Process Boiler	0.08
EP45	MP-901 E Process Boiler	0.08
EP48	Aftercooler	0.16
EP49	Receiving Tanks	0.03
EP50	Vacuum System	0.09
EP-51	Plant 1 Evaporation Process Scrubber Vent	0.001
	Propane Space Heaters	0.01

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is applicable to the installation and has been applied within this permit (see Permit Condition 018). This regulation applies to sulfur compound emission sources. [10 CSR 10-6.260(1)(A). EP02 Process #31 Boiler and EP17 MP-901C Process Boiler are exempt from this regulation per 10 CSR 10-6.260(1)(A)1 as they are subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070 (see Permit Condition 009). The following emission units are exempt from this regulation per 10 CSR 10-6.260(1)(A)2 as they exclusively combust pipeline grade natural gas or liquefied petroleum gas:

Emission Unit	Description
EP41	WWTP Package Boiler
EP44	MP-901 D Process Boiler
EP45	MP-901 E Process Boiler
-	Propane Space Heaters

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

Any regulation which is not specifically listed in either 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 which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

Alana L. Rugen, EIT
Environmental Engineer II

Mr. Tatsuya Ogawa
President
BioKyowa Inc.
P.O. Box 1550
Cape Girardeau, MO 63702

Re: BioKyowa Inc. 031-0064
Permit Number: OP2013-028

Dear Mr. Ogawa:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Alana Rugen at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:ark

Enclosures

c: Southeast Regional Office
PAMS File: 2011-01-015