MISSOURI
DEPARTMENT OF
NATURAL RESOURCES
Air Pollution Control Program

Draft

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: MMYYYY-###
Expiration Date:
Installation ID: 143-0004
Project Number: 2015-04-093

Installation Name and Address
New Madrid Power Plant
41 St. Jude Road
New Madrid, MO 63866
New Madrid County

Parent Company's Name and Address
Associated Electric Cooperative, Inc.
P.O. Box 754
Springfield MO, 65801

Installation Description:
New Madrid Power Plant was originally designed and initially constructed prior to 1971, to operate two coal-fired steam generating boilers for the generation of electric power. The main sources of air pollutants from this installation include two coal-fired steam generating boilers, and coal and ash handling systems. Other insignificant activities are located at the facility including, but not limited to: fuel oil and gasoline tanks, used oil storage tank(s), ethylene glycol storage tank(s), sulfuric acid tank(s), various parts washers, and fuel powered maintenance equipment. The installation is a major source of NO_x, SO_x, CO, PM_{10}, $PM_{2.5}$, VOC, Combined HAP, Hydrogen Fluoride, Hydrogen Chloride, and Formaldehyde.

Prepared by
Alana L. Hess
Operating Permit Unit

Director or Designee
Department of Natural Resources

Effective Date

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I. Installation Equipment Listing

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. These emission sources are also subject to plant wide emissions limitations.

Emission Source	Description	Applicable Requirements
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the unit prior to 1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System	Construction Permits 122009-001 and 122010-012, MACT UUUUU, Acid Rain Program, CAIR, CSAPR, 10 CSR 10-6.220, 10 CSR 10-6.260, 10 CSR 10-6.261
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the unit prior to 1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System	
EP-03	1474 HP diesel Emergency Generator, 1983, Caterpillar 3512	10 CSR 10-6.260, 10 CSR 10-6.261, MACT ZZZZ
EP-04	Rotary Car Dumper Coal Unloading System, 830 tph, 1993, Heyl & Patterson, Inc. Control Equipment: Low Temperature Fabric Filter	NSPS Y, Construction Permit 1292-014
EP-05A	Railcar Unloading Conveyors #A1, A2, B1, & B2, 830 tph, 1970, Jervis B. Webb Control Equipment: Low Temperature Fabric Filter	Construction Permit 1292-014, 10 CSR 10-6.220
EP-05B	Radial Stacker Coal Conveyors #C1, C2, D1, & D2, 830 tph, 1970, Jervis B. Webb	

Emission Source	Description	Applicable Requirements
	Control Equipment: Dust Suppression & Water Spray	
EP-05C	Railcar Unloading Coal Conveyor #A3, 830 tph, 1980, Roberts & Schaefer, Inc. Control Equipment: Low Temperature Fabric Filter	NSPS Y, Construction Permit 1292-014
EP-05D	Coal Conveyors #6 (1A), 7 (1B), 8 (2A), & 9 (3A), 830 tph, 1993, Roberts & Schaefer, Inc. Control Equipment: Low Temperature Fabric Filter	
EP-06	(4) Coal Crushers, 830 tph, 1993, Pennsylvania Crushers S x CBG 225-FG Control Equipment: Low Temperature Fabric Filter	
EP-07	(2) Flyash Silo Systems: Collects ash from the ESPs and air heater hoppers and transfers the ash to a pair of storage silos, 1993, United Conveyor Corp. Control Equipment: Low Temperature Fabric Filter	Construction Permit 1292-014, 10 CSR 10-6.220
EP-09	(8) 300 HP Diesel Barge River Pumps, 2002, Caterpillar	Construction Permit 122002-013, 10 CSR 10-6.260, 10 CSR 10-6.261
EP-11	Fly Ash Truck Loading, 40 tph	Construction Permit 082006-011, 10 CSR 10-6.220
EP-12	Fly Ash Truck Unloading, 40 tph	
EP-14	Bottom Ash Truck Loading, 40 tph	
EP-15	Bottom Ash Truck Unloading, 40 tph	
FE-04	Fly Ash Hauling – Paved Haul Road to Landfill, 0.152 miles, 40 tph	Construction Permit 082006-011
FE-05	Fly Ash & Bottom Ash Hauling – Unpaved Haul Road to Landfill, 0.975 miles, 80 tph	
FE-06	Landfill Maintenance Vehicular Activity, 0.1 miles, 0.5 tph	
FE-07	Landfill Wind Erosion, 25 acres	
EP-13	(2) 345 HP Diesel Barge River Pumps, 2006, Caterpillar	Construction Permit 052006-001, 10 CSR 10-6.260, 10 CSR 10-6.261
EU0290	Tioga Heater #1 at Crusher House, 2017, 2.4 MMBtu/hr fuel oil #2	10 CSR 10-6.220, 10 CSR 10-6.260, 10 CSR 10-6.261
EU0300	Tioga Heater #2 at Crusher House, 2016, 2.4 MMBtu/hr fuel oil #2	
FE-03	Fly Ash Unloading to Ash Ponds	10 CSR 10-6.220
EP-16	PAC Silo with inherent bin vent filter, 90,000 scf/hr, 2190 tpy	
IA-20	Soot Blowing Air Compressor Oil Storage Tanks: (3) 1,000 gallons Soot Blowing Electric Air Compressor Vents	

Emission Source	Description	Applicable Requirements
EP-17	365 HP diesel Fire Pump Engine, 2016, Cummins CFP9EEZSL9	10 CSR 10-6.260? 10 CSR 10-6.261? NSPS IIII or JJJJ? MACT ZZZZ Need fuel type and tier rating to evaluate rule applicability.

EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance. These emission sources are subject to plant wide emissions limitations.

Emission Source	Description
EP-08	3,000 gallon Gasoline Storage Tank
FE-01	Coal Pile, 32 acres
FE-02	Unpaved Slag Haul Road, 0.25 miles, 40 tph
FE-08	Paved PAC Haul Road, 0.73 miles, 20 tph
IA-01	Fuel Oil #2/Diesel Storage Tanks: (2) 25,000 gallons and (1) 340 gallons
IA-03	Used Oil Storage Tanks: (1) 1,750 gallons and (1) 3,000 gallons
IA-04	Ethylene Glycol Storage Tanks: (4) 17,800 gallons and (1) 1,000 gallons
IA-05	Transmission Fluid Storage Tank: (1) 360 gallons
IA-06	Mobile Oil Storage Tank: (1) 440 gallons
IA-07	Lubricating Oil Storage Tanks: (2) 1,035 gallons Bulk Oil Storage Tank: (1) 660 gallons
IA-08	Yard Diesel Storage Tank: (1) 8,500 gallons
IA-10	Asbestos Abatement Activities (associated with repair/replacement of plant equipment)
IA-11	Sulfuric Acid Storage Tank: (1) 9,500 gallons
IA-12	Turbine Hydraulic System Storage Tanks: (2) 790 gallons and (1) 200 gallons Lube Oil Vapor Extraction System Storage Tanks: (2) 4,000 gallons, (2) 13,840 gallons, and (2) 9,200 gallons Boiler Feed Pump Lube Oil Vapor Extraction System Storage Tanks: (4) 1,450 gallons and (2) 540 gallons Lube Oil Vapor Extraction System Vent
IA-13	Miscellaneous Hydraulic Equipment on Boilers #1 and #2
IA-14	Propane Storage Tanks: (3) 500 gallons and (1) 1,000 gallons
IA-15	Oil Spills and Leaks from Transformers, Equipment, etc.
IA-17	Parts Washers: (1) 78 gallons, (1) 36 gallons, (5) 27 gallons, and (1) 15 gallons
IA-18	Ethylene Glycol Electric Heater Vents
IA-19	Seal Oil Vacuum Pump Discharge Vent
IA-21	Acetylene Cylinders Used in Maintenance Activities
IA-22	Portable Gasoline Powered Pumps Used for Sumps and Maintenance Equipment
IA-23	Portable Diesel Generators Used for Equipment Power at various locations for maintenance or start-up activities
IA-24	Small Portable Pumps for various feed water, oil lubricating, and maintenance systems
IA-25	Coal Yard Fuel Oil Additive Storage Tank: (1) 100 gallons
IA-26	Mobile Equipment Used Oil Storage Tanks: (2) 1,000 gallons
IA-27	Diesel Storage Tank in Truck Bed: (1) 100 gallons
IA-28	LPG Heaters: (2) 2.29 MMBtu/hr and (2) 2 MMBtu/hr
IA-29	Temporary Seasonal Portable (skid-mounted) Tioga Heaters
IA-30	(4) Portable Diesel Heaters for space heating in coal yard tunnels as necessary

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the CFR and CSR for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Specific Limitations.

None.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the CFR and 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 PSD Permit 122010-012, Issued December 17, 2010	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the unit prior to 1970) Fuels: Subbituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the unit prior to 1970) Fuels: Subbituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

CO BACT Standards:

1. The permittee shall not emit more than 0.55 pounds of CO per million British thermal units (lb/MMBtu) of heat input each from EP-01 Boiler #1 and EP-02 Boiler #2 based on a 30-day rolling average. This limit is exclusive of emissions occurring during start-up, shutdown and malfunction. [Special Condition 2.A]
2. The permittee shall not emit more than 34,449 tons per year of CO combined from EP-01 Boiler #1 and EP-02 Boiler #2. This limit is inclusive of emissions during start-up, shutdown, and malfunction. [Special Condition 2.B]
3. The permittee shall operate CO CEMS on EP-01 Boiler #1 and EP-02 Boiler #2 to measure, record and report CO emissions compliance. [Special Condition 2.C]
   a) During periods of CO CEMS monitor downtime, the permittee shall estimate the missing emissions for substitution similar to the CO_2 missing data procedures of 40 CFR 75.

Monitoring:

1. The permittee shall install, certify, operate, calibrate, test and maintain CEMS for CO and any necessary auxiliary monitoring equipment in accordance with all applicable regulations. If there are conflicting regulatory requirements, the more stringent shall apply. [Special Condition 3.A]
2. CEMS certification shall be made pursuant to NSPS Appendix B, Performance Specification 4. [Special Condition 3.B]

3. Periodic quality assurance assessments shall be conducted according to the procedures outlined in NSPS Appendix F. [Special Condition 3.C]
4. The permittee shall install and operate a data acquisition and handling system to calculate emissions in terms of the emission limitations specified in this permit. [Special Condition 3.D]

Recordkeeping:

The permittee shall maintain all records required by this permit, on-site, for the most recent 60 months of operation and shall make such records available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 4 and §70.6(a)(3)(ii)]

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after an exceedance of any of the CO BACT standards. [§70.6(a)(3)(iii)]
2. The permittee shall report CO emissions and any deviations from this permit condition in the semi-annual monitoring report and in the annual compliance certification required by Section V of this permit. [Special Condition 5 and §70.6(a)(3)(iii)]

PERMIT CONDITION 002 10 CSR 10-6.060 Construction Permits Required Construction Permit 122009-001, Issued December 2, 2009	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the unit prior to 1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the unit prior to 1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

Operational Limitation:
The permittee shall control metal HAP emissions from Boilers 1 and 2 using an ESP. The ESP shall be maintained in accordance with the manufacturer's specifications.

Monitoring/Recordkeeping/Reporting:
In accordance with MACT UUUUU (see Permit Condition 003).

PERMIT CONDITION 003 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units[1]	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in 1967) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

Emission Limitations and Work Practice Standards

1. The permittee shall meet the requirements in §63.9991(a)(1). The permittee shall meet these requirements at all times. [§63.9991(a)]
   a) The permittee shall meet each emission limit and work practice standard in Tables 2 and 3 to MACT UUUUU that applies, for each EGU, except as provided under §63.10009. [§63.9991(a)(1)]
2. As provided in §63.6(g), the Administrator may approve use of an alternative to the work practice standards in §63.9991. [§63.9991(b)]

Table 2 to MACT UUUUU – *Emission Limits for Existing EGUs*

For the following pollutants...	**The permittee shall meet the following emission limits and work practice standards...**	**Using these requirements, as appropriate (*e.g.*, specified sampling volume or test run duration) and limitations with the test methods in Table 5 to MACT UUUUU...**
Filterable PM	0.03 lb/MMBtu or 0.3 lb/MWh[2]	Collect a minimum of 1 dscm per run
HCl	0.002 lb/MMBtu or 0.02 lb/MWh	For Method 26A in NSPS Appendix A-8, collect a minimum of 0.75 dscm per run; for Method 26, collect a minimum of 120 liters per run. For ASTM D6348-03[3] or Method 320 in MACT Appendix A, sample for a minimum of 1 hour.

[1] SOURCE: 77 FR 9464, Feb. 16, 2012, as amended at 77 FR 23402, Apr. 19, 2012; 78 FR 24084, Apr. 24, 2013; 79 FR 68788, Nov. 19, 2014; 80 FR 15514, Mar. 24, 2015; 81 FR 20180, Apr. 6, 2016; 82 FR 16739, Apr. 6, 2017

[2] Gross output.

[3] Incorporated by reference, see §63.14.

For the following pollutants...	The permittee shall meet the following emission limits and work practice standards...	Using these requirements, as appropriate (*e.g.*, specified sampling volume or test run duration) and limitations with the test methods in Table 5 to MACT UUUUU...
Hg	1.2 lb/TBtu or 0.013 lb/GWh	Sorbent trap monitoring system

Table 3 to MACT UUUUU – *Work Practice Standards*

EGU Type	Work Practice Standards
An existing EGU	Conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, or each 48 calendar months if neural network combustion optimization software is employed, as specified in §63.10021(e).
A coal-fired EGU during startup	The permittee shall operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, the permittee shall use clean fuels as defined in §63.10042 for ignition. Once the permittee converts to firing coal, the permittee shall engage all of the applicable control technologies except SCR. The permittee shall start the SCR systems appropriately to comply with relevant standards applicable during normal operation. The permittee shall comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in MACT UUUUU. The permittee shall keep records during startup periods. The permittee shall provide reports concerning activities and startup periods, as specified in §63.10011(g) and §63.10021(h) and (i). The permittee shall comply with the Hg emission limit at all times. The permittee shall collect monitoring data during startup periods, as specified in §63.10020(a) and (e). The permittee shall keep records during startup periods, as provided in §§63.10032 and 63.10021(h). The permittee shall provide reports concerning activities and startup periods, as specified in §§63.10011(g), 63.10021(i), and 63.10031.

General Compliance Requirements:

1. The permittee shall be in compliance with the emission limits in MACT UUUUU. These limits apply at all times except during periods of startup and shutdown; however, for coal-fired EGUs, the permittee is required to meet the work practice requirements in Table 3 to MACT UUUUU during periods of startup or shutdown. [§63.10000(a)]
2. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director 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. [§63.10000(b)]
3. Initial performance testing is required for all pollutants, to demonstrate compliance with the applicable emission limits. [§63.10000(c)(1)]

a) The permittee may conduct initial performance testing in accordance with §63.10005(h), to determine whether the EGU qualifies as a LEE for one or more applicable emission limits, except as otherwise provided in §63.10000(c)(1)(i)(A)[4]: [§63.10000(c)(1)(i)]
   i) Except as provided in §63.10000(c)(1)(i)(C), the permittee may not pursue the LEE option if the coal-fired EGU is equipped with a main stack and a bypass stack or bypass duct configuration that allows the effluent to bypass any pollutant control device. [§63.10000(c)(1)(i)(A)]
   ii) The permittee may pursue the LEE option provided that: [§63.10000(c)(1)(i)(C)]
      (1) The EGU's control device bypass emissions are measured in the bypass stack or duct or the control device bypass exhaust is routed through the EGU main stack so that emissions are measured during the bypass event; or [§63.10000(c)(1)(i)(C)(1)]
      (2) Except for hours during which only clean fuel is combusted, the permittee bypasses the EGU control device only during emergency periods for no more than a total of two percent of the EGU's annual operating hours; the permittee uses clean fuels to the maximum extent possible during an emergency period; and the permittee prepares and submits a report describing the emergency event, its cause, corrective action taken, and estimates of emissions released during the emergency event. The permittee shall include these emergency emissions along with performance test results in assessing whether the EGU maintains LEE status. [§63.10000(c)(1)(i)(C)(2)]

b) For a qualifying LEE for Hg emissions limits, the permittee shall conduct a 30-day performance test using Method 30B at least once every 12 calendar months to demonstrate continued LEE status. [§63.10000(c)(1)(ii)]

c) For a qualifying LEE of any other applicable emissions limits, the permittee shall conduct a performance test at least once every 36 calendar months to demonstrate continued LEE status. [§63.10000(c)(1)(iii)]

d) If the coal-fired EGU does not qualify as a LEE for filterable PM, the permittee shall demonstrate compliance through an initial performance test and the permittee shall monitor continuous performance through compliance performance testing repeated quarterly. [§63.10000(c)(1)(iv)]

e) If the coal-fired EGU does not qualify as a LEE for HCl, the permittee shall demonstrate initial and continuous compliance by conducting an initial and periodic quarterly performance stack test for HCl. [§63.10000(c)(1)(v)]

f) If the coal-fired EGU does not qualify as a LEE for Hg, the permittee shall demonstrate initial and continuous compliance through use of a sorbent trap monitoring system, in accordance with MACT UUUUU Appendix A. [§63.10000(c)(1)(vi)]
   i) The permittee shall use one sorbent trap monitoring system to demonstrate compliance with the mercury emissions limit at all times (including startup periods and shutdown periods) and to report average mercury concentration. The permittee shall follow the startup or shutdown requirements that follow and as given in Table 3 to MACT UUUUU. [§63.10000(c)(1)(vi)(B)]

[4] The EGUs do not currently meet LEE requirements; however, the EGUs may achieve LEE status during the life of this permit. HCl emissions from both EGUs were less than 50% of the applicable standard during initial performance testing, 2016 third quarter performance testing, and 2016 fourth quarter performance testing. PM emissions from EP-02 were less than 50% of the applicable standard during initial performance testing, 2016 third quarter performance testing, and 2016 fourth quarter performance testing. PM emissions from EP-01 were less than 50% of the applicable standard during 2016 fourth quarter performance testing.

4. The permittee shall develop a site-specific monitoring plan. This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS prepared under Appendix B to NSPS, and that meet the requirements of §63.10010. Using the process described in §63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in this paragraph and, if approved, include those in the site-specific monitoring plan. The monitoring plan shall address the provisions in §63.10000(d)(2) through (5). [§63.10000(d)(1)]
5. The site-specific monitoring plan shall include the information specified in §63.10000(d)(5)(i) through (d)(5)(vii). Alternatively, the requirements of §63.10000(d)(5)(i) through (d)(5)(vii) are considered to be met for a particular CMS or sorbent trap monitoring system if: [§63.10000(d)(2)]
   a) The CMS or sorbent trap monitoring system is installed, certified, maintained, operated, and quality-assured according to Appendix A to MACT UUUUU; and [§63.10000(d)(2)(i)]
   b) The recordkeeping and reporting requirements of Appendix A to MACT UUUUU, that pertain to the CMS are met. [§63.10000(d)(2)(ii)]
6. The permittee shall operate and maintain the CMS according to the site-specific monitoring plan. [§63.10000(d)(4)]
7. The provisions of the site-specific monitoring plan must address the following items: [§63.10000(d)(5)]
   a) Installation of the CMS or sorbent trap monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). See §63.10010(a) for further details. [§63.10000(d)(5)(i)]
   b) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. [§63.10000(d)(5)(ii)]
   c) Schedule for conducting initial and periodic performance evaluations. [§63.10000(d)(5)(iii)]
   d) Performance evaluation procedures and acceptance criteria (e.g., calibrations), including the quality control program in accordance with the general requirements of §63.8(d). [§63.10000(d)(5)(iv)]
   e) On-going operation and maintenance procedures, in accordance with the general requirements of §§63.8(c)(1)(ii), (c)(3), and (c)(4)(ii). [§63.10000(d)(5)(v)]
   f) Conditions that define a CMS that is out of control consistent with §63.8(c)(7)(i) and for responding to out of control periods consistent with §§63.8(c)(7)(ii) and (c)(8). [§63.10000(d)(5)(vi)]
   g) On-going recordkeeping and reporting procedures, in accordance with the general requirements of §§63.10(c), (e)(1), and (e)(2)(i), or as specifically required under MACT UUUUU. [§63.10000(d)(5)(vii)]
8. As part of the demonstration of continuous compliance, the permittee shall perform periodic tune-ups of the EGU(s), according to §63.10021(e). [§63.10000(e)]

<u>LEE Requirements:</u>

1. The provisions of this paragraph apply to all pollutants with emissions limits from existing EGUs. The permittee may pursue this compliance option unless prohibited pursuant to §63.10000(c)(1)(i). [§63.10005(h)]
   a) An EGU may qualify for LEE status for Hg, HCl, or filterable PM if the permittee collects performance test data that meet the requirements of §63.10005(h), and if those data demonstrate: [§63.10005(h)(1)]

i) For all pollutants except Hg, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to MACT UUUUU for all required testing for three consecutive years; or [§63.10005(h)(1)(i)]

ii) For Hg emissions from an existing EGU, either: [§63.10005(h)(1)(ii)]

(1) Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to MACT UUUUU (expressed either in units of lb/TBtu or lb/GWh); or [§63.10005(h)(1)(ii)(A)]

(2) Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to MACT UUUUU (expressed either in units of lb/TBtu or lb/GWh). [§63.10005(h)(1)(ii)(B)]

b) For all pollutants except Hg, the permittee shall conduct all required performance tests described in §63.10007 to demonstrate that a unit qualifies for LEE status. [§63.10005(h)(2)]

i) When conducting emissions testing to demonstrate LEE status, the permittee shall increase the minimum sample volume specified in Table 2 to MACT UUUUU nominally by a factor of two. [§63.10005(h)(2)(i)]

ii) Follow the instructions in §63.10007(e) and Table 5 to MACT UUUUU to convert the test data to the units of the applicable standard. [§63.10005(h)(2)(ii)]

c) For Hg, the permittee shall conduct a 30- (or 90-) boiler operating day performance test using Method 30B in NSPS Appendix A-8 to determine whether a unit qualifies for LEE status. Locate the Method 30B sampling probe tip at a point within 10 percent of the duct area centered about the duct's centroid at a location that meets Method 1 in NSPS Appendix A-1 and conduct at least three nominally equal length test runs over the 30- (or 90-) boiler operating day test period. The permittee may use a pair of sorbent traps to sample the stack gas for a period consistent with that given in Section 5.2.1 of MACT UUUUU Appendix A. Collect Hg emissions data continuously over the entire test period (except when changing sorbent traps or performing required reference method QA procedures). As an alternative to constant rate sampling per Method 30B, the permittee may use proportional sampling per Section 8.2.2 of Performance Specification 12B in NSPS Appendix B. [§63.10005(h)(3)]

i) Depending on whether the permittee intends to assess LEE status for Hg in terms of the lb/TBtu or lb/GWh emission limit in Table 2 to MACT UUUUU or in terms of the annual Hg mass emissions limit of 29.0 lb/year, the permittee will have to collect some or all of the following data during the 30-boiler operating day test period (see §63.10005(h)(3)(iii)): [§63.10005(h)(3)(i)]

(1) Diluent gas (CO_2) data, using either Method 3A in NSPS Appendix A-3 or a diluent gas monitor that has been certified according to 40 CFR Part 75. [§63.10005(h)(3)(i)(A)]

(2) Stack gas flow rate data, using either Method 2, 2F, or 2G in NSPS Appendices A-1 and A-2, or a flow rate monitor that has been certified according to 40 CFR Part 75. [§63.10005(h)(2)(i)(B)]

(3) Stack gas moisture content data, using either Method 4 in NSPS Appendix A-1, or a moisture monitoring system that has been certified according to 40 CFR Part 75. Alternatively, an appropriate fuel-specific default moisture value from §75.11(b) may be used in the calculations. [§63.10005(h)(2)(i)(C)]

(4) Hourly gross output data (megawatts), from facility records. [§63.10005(h)(2)(i)(D)]

ii) If the permittee uses CEMS to measure CO_2 concentration, and/or flow rate, and/or moisture, record hourly average values of each parameter throughout the 30-boiler operating day test period. If the permittee opts to use EPA reference methods rather than CEMS for

any parameter, the permittee shall perform at least one representative test run on each operating day of the test period, using the applicable reference method. [§63.10005(h)(2)(ii)]

iii) Calculate the average Hg concentration, in $\mu g/m^3$ (dry basis), for the 30- (or 90-) boiler operating day performance test, as the arithmetic average of all Method 30B sorbent trap results. Also calculate, as applicable, the average values of CO_2 concentration, stack gas flow rate, stack gas moisture content, and gross output for the test period. Then: [§63.10005(h)(2)(iii)]

(1) To express the test results in units of lb/TBtu, follow the procedures in §63.10007(e). Use the average Hg concentration and diluent gas values in the calculations. [§63.10005(h)(2)(iii)(A)]

(2) To express the test results in units of lb/GWh, use Equations A-3 and A-4 in Section 6.2.2 of MACT UUUUU Appendix A, replacing the hourly values "C_h", "Q_h", "B_{ws}" and "$(MW)_h$" with the average values of these parameters from the performance test. [§63.10005(h)(2)(iii)(B)]

(3) To calculate pounds of Hg per year, use one of the following methods: [§63.10005(h)(2)(iii)(C)]

(a) Multiply the average lb/TBtu Hg emission rate (determined according to §63.10005(h)(3)(iii)(A)) by the maximum potential annual heat input to the unit (TBtu), which is equal to the maximum rated unit heat input (TBtu/hr) times 8,760 hours. If the maximum rated heat input value is expressed in units of MMBtu/hr, multiply it by 10^{-6} to convert it to TBtu/hr; or [§63.10005(h)(2)(iii)(C)(1)]

(b) Multiply the average lb/GWh Hg emission rate (determined according to §63.10005(h)(3)(iii)(B)) by the maximum potential annual electricity generation (GWh), which is equal to the maximum rated electrical output of the unit (GW) times 8,760 hours. If the maximum rated electrical output value is expressed in units of MW, multiply it by 10^{-3} to convert it to GW; or [§63.10005(h)(2)(iii)(C)(2)]

Testing Requirements:

1. For affected units meeting the LEE requirements of §63.10005(h), the permittee shall repeat the performance test once every three years (once every year for Hg) according to Table 5 to MACT UUUUU and §63.10007. Should subsequent emissions testing results show the unit does not meet the LEE eligibility requirements, LEE status is lost. If this should occur: [§63.10006(b)]
   a) For all pollutant emission limits except for Hg, the permittee shall conduct emissions testing quarterly, except as otherwise provided in §63.10021(d)(1). [§63.10006(b)(1)]
   b) For Hg, the permittee shall have three calendar years of testing and sorbent trap monitoring system data that satisfy the LEE emissions criteria to reestablish LEE status. [§63.10006(b)(2)]
2. The permittee shall conduct all applicable periodic emissions tests for filterable PM emissions according to Table 5 to MACT UUUUU, §63.10007, and §63.10000(c), except as otherwise provided in §63.10021(d)(1). [§63.10006(c)]
3. The permittee shall conduct all applicable periodic HCl emissions tests according to Table 5 to MACT UUUUU and §63.10007 at least quarterly, except as otherwise provided in §63.10021(d)(1). [§63.10006(d)]
4. Time between performance tests. [§63.10006(f)]
   a) Notwithstanding the provisions of §63.10021(d)(1), the requirements listed in §63.10006(g) and (h), and the requirements of §63.10006(f)(3), the permittee shall complete performance tests for the EGU as follows: [§63.10006(f)(1)]

i) At least 45 calendar days, measured from the test's end date, shall separate performance tests conducted every quarter; [§63.10006(f)(1)(i)]
ii) For annual testing: [§63.10006(f)(1)(ii)]
(1) At least 320 calendar days, measured from the test's end date, shall separate performance tests; [§63.10006(f)(1)(ii)(A)]
(2) At least 320 calendar days, measured from the test's end date, shall separate annual sorbent trap mercury testing for 30-boiler operating day LEE tests; [§63.10006(f)(1)(ii)(B)]
(3) At least 230 calendar days, measured from the test's end date, shall separate annual sorbent trap mercury testing for 90-boiler operating day LEE tests; and [§63.10006(f)(1)(ii)(C)]
iii) At least 1,050 calendar days, measured from the test's end date, shall separate performance tests conducted every three years. [§63.10006(f)(1)(iii)]

b) For units demonstrating compliance through quarterly emission testing, the permittee shall conduct a performance test in the 4th quarter of a calendar year if the EGU has skipped performance tests in the first three quarters of the calendar year. [§63.10006(f)(2)]
c) If the EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, the permittee shall complete an additional performance test in that period as follows: [§63.10006(f)(3)]
i) At least 15 calendar days shall separate two performance tests conducted in the same quarter. [§63.10006(f)(3)(i)]
ii) At least 107 calendar days shall separate two performance tests conducted in the same calendar year. [§63.10006(f)(3)(ii)]
iii) At least 350 calendar days shall separate two performance tests conducted in the same three year period. [§63.10006(f)(3)(iii)]

5. If the permittee elects to demonstrate compliance using emissions averaging under §63.10009, the permittee shall continue to conduct performance stack tests at the appropriate frequency given in §63.10006(c) through (f). [§63.10006(g)]
6. If a performance test on a non-mercury LEE shows emissions in excess of 50 percent of the emission limit and if the permittee chooses to reapply for LEE status, the permittee shall conduct performance tests at the appropriate frequency given in §63.10006(c) through (e) for that pollutant until all performance tests over a consecutive three-year period show compliance with the LEE criteria. [§63.10006(h)]
7. The permittee shall conduct a performance tune-up according to §63.10021(e). [§63.10006(i)]
a) For EGUs not employing neural network combustion optimization during normal operation, each performance tune-up specified in §63.10021(e) shall be no more than 36 calendar months after the previous performance tune-up. [§63.10006(i)(1)]
b) For EGUs employing neural network combustion optimization systems during normal operation, each performance tune-up specified in §63.10021(e) shall be no more than 48 calendar months after the previous performance tune-up. [§63.10006(i)(2)]
8. Except as otherwise provided in §63.10007, the permittee shall conduct all required performance tests according to §63.7(d), (e), (f), and (h). The permittee shall also develop a site-specific test plan according to the requirements in §63.7(c). [§63.10007(a)]
a) The permittee shall collect quality-assured CEMS data for all unit operating conditions, including startup and shutdown (see §63.10011(g) and Table 3 to MACT UUUUU), except as otherwise provided in §63.10020(b). Emission rates determined during startup periods and shutdown periods (as defined in §63.10042) are not to be included in the compliance

determinations, except as otherwise provided in §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). [§63.10007(a)(1)]

b) Operate the unit at maximum normal operating load conditions during each periodic (e.g., quarterly) performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run. [§63.10007(a)(2)]

9. The permittee shall conduct each performance test (including traditional three-run stack tests, 30-boiler operating day tests based on sorbent trap monitoring system data and 30-boiler operating day Hg emissions tests for LEE qualification) according to the requirements in Table 5 MACT UUUUU. [§63.10007(b)]
10. Except for a 30-boiler operating day performance test based on sorbent trap monitoring system data, where the concept of test runs does not apply, the permittee shall conduct a minimum of three separate test runs for each performance test, as specified in §63.7(e)(3). Each test run shall comply with the minimum applicable sampling time or volume specified in Table 2 to MACT UUUUU. Sections 63.10005(d) and (h), respectively, provide special instructions for conducting performance tests based on sorbent trap monitoring systems, and for conducting emission tests for LEE qualification. [§63.10007(d)]
11. To use the results of performance testing to determine compliance with the applicable emission limits in Table 2 to MACT UUUUU, proceed as follows: [§63.10007(e)]
    a) Except for a 30-boiler operating day performance test based on sorbent trap monitoring system data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), the permittee shall use the method detection level as the measured emissions level for that pollutant in calculating compliance. [§63.10007(e)(1)]
    b) If the limits are expressed in lb/MMBtu or lb/TBtu, the permittee shall use the F-factor methodology and equations in Sections 12.2 and 12.3 of EPA Method 19 in NSPS Appendix A-7. In cases where an appropriate F-factor is not listed in Table 19-2 of Method 19, the permittee may use F-factors from Table 1 in Section 3.3.5 of 40 CFR Part 75 Appendix F, or F-factors derived using the procedures in Section 3.3.6 of 40 CFR Part 75 Appendix F. Use the following factors to convert the pollutant concentrations measured during the initial performance tests to units of lb/scf, for use in the applicable Method 19 equations: [§63.10007(e)(2)]
        i) Multiply HCl ppm by 9.43×10^{-8}; [§63.10007(e)(2)(ii)]
        ii) Multiply Hg concentrations (µg/scm) by 6.24×10^{-11}. [§63.10007(e)(2)(v)]
    c) To determine compliance with emission limits expressed in lb/MWh or lb/GWh, the permittee shall first calculate the pollutant mass emission rate during the performance test, in units of lb/hr. For Hg, if a sorbent trap monitoring system is used, use Equation A-2 or A-3 in MACT UUUUU Appendix A (as applicable). In all other cases, use an equation that has the general form of Equation A-2 or A-3, replacing the value of K with 6.24×10^{-8} lb-scm/mg-scf for HCl (when performance stack testing is used), and defining C_h as the average HCl concentration in ppm. This calculation requires stack gas volumetric flow rate (scfh) and (in some cases) moisture content data (see §§63.10005(h)(3) and 63.10010). Then, if the applicable emission limit is in units of lb/GWh, use Equation A-4 in MACT UUUUU Appendix A to calculate the pollutant emission rate in lb/GWh. In this calculation, define $(M)_h$ as the calculated pollutant mass emission rate for the performance test (lb/h), and define $(MW)_h$ as the average electrical load during the performance test (megawatts). If the applicable emission limit is in lb/MWh rather than lb/GWh, omit the 10^3 term from Equation A-4 to determine the pollutant emission rate in lb/MWh. [§63.10007(e)(3)]

12. If the permittee elects to (or is required to) use sorbent trap monitoring systems to continuously collect Hg emissions data, the following default values are available for use in the emission rate calculations during startup periods or shutdown periods (as defined in §63.10042). For the purposes of MACT UUUUU, these default values are not considered to be substitute data. [§63.10007(f)]
    a) Diluent cap values. If the permittee uses sorbent trap monitoring systems to comply with a heat input-based emission rate limit, the permittee may use the following diluent cap values for a startup or shutdown hour in which the measured CO_2 concentration is below the cap value: [§63.10007(f)(1)]
        i) The permittee may use 5% for CO_2. [§63.10007(f)(1)(ii)]
    b) Default gross output. If the permittee uses sorbent trap monitoring systems to continuously collect Hg emissions data, the following default value is available for use in the emission rate calculations during startup periods or shutdown periods (as defined in §63.10042). For the purposes of MACT UUUUU, this default value is not considered to be substitute data. For a startup or shutdown hour in which there is heat input to an affected EGU but zero gross output, the permittee shall calculate the pollutant emission rate using a value equivalent to 5% of the maximum sustainable gross output, expressed in megawatts, as defined in Section 6.5.2.1(a)(1) of 40 CFR Part 75 Appendix A. This default gross output is either the nameplate capacity of the EGU or the highest gross output observed in at least four representative quarters of EGU operation. For a monitored common stack, the default gross output is used only when all EGUs are operating (i.e., combusting fuel) are in startup or shutdown mode, and have zero electrical generation. Under those conditions, a default gross output equal to 5% of the combined maximum sustainable gross output of the EGUs that are operating but have a total of zero gross output shall be used to calculate the hourly gross output-based pollutant emissions rate. [§63.10007(f)(2)]
13. Upon request, the permittee shall make available to the Director such records as may be necessary to determine whether the performance tests have been done according to the requirements of §63.10007. [§63.10007(g)]

Table 5 to MACT UUUUU – *Performance Testing Requirements*

To conduct a performance test for the following pollutant...	Using...	The permittee shall perform the following activities, as applicable to the input- or output-based emission limit...	Using...[5]
Filterable PM	Emissions Testing	a. Select sampling ports location and the number of traverse points	Method 1 at NSPS Appendix A-1.
		b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2A, 2C, 2F, 2G or 2H at NSPS Appendix A-1 or A-2.

[5] See Table 2 to MACT UUUUU for required sample volumes and/or sampling run times.

To conduct a performance test for the following pollutant...	Using...	The permittee shall perform the following activities, as applicable to the input- or output-based emission limit...	Using...[5]
		c. Determine O_2 and CO_2 concentrations of the stack gas	Method 3A or 3B at NSPS Appendix A-2, or ANSI/ASME PTC 19.10-1981.[6]
		d. Measure the moisture content of the stack gas	Method 4 at NSPS Appendix A-3.
		e. Measure the filterable PM concentration	Method 5 at NSPS Appendix A-3. Note that the Method 5 front half temperature shall be 160° ±14 °C (320° ±25 °F).
		f. Convert emissions concentration to lb/MMBtu or lb/MWh emissions rates	Method 19 F-factor methodology at NSPS Appendix A-7, or calculate using mass emissions rate and gross output data (see §63.10007(e)).
HCl	Emissions Testing	a. Select sampling ports location and the number of traverse points.	Method 1 at NSPS Appendix A-1.
		b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2A, 2C, 2F, 2G or 2H at NSPS Appendix A-1 or A-2.
		c. Determine O_2 and CO_2 concentrations of the stack gas	Method 3A or 3B at NSPS Appendix A-2, or ANSI/ASME PTC 19.10-1981.
		d. Measure the moisture content of the stack gas	Method 4 at NSPS Appendix A-3.
		e. Measure the HCl emissions concentration	Method 26 or Method 26A at NSPS Appendix A-8 or Method 320 at MACT Appendix A or ASTM 6348-03[6] with (1) the following conditions when using ASTM D6348-03: (A) The test plan preparation and implementation in the Annexes to ASTM D6348-03, Sections A1 through A8 are mandatory;

[6] Incorporated by reference, see §63.14.

To conduct a performance test for the following pollutant...	Using...	The permittee shall perform the following activities, as applicable to the input- or output-based emission limit...	Using...[5]
			(B) For ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent (%) R shall be determined for each target analyte (see Equation A5.5);
			(C) For the ASTM D6348-03 test data to be acceptable for a target analyte, %R shall be 70% ≥ R ≤ 130%; and
			(D) The %R value for each compound shall be reported in the test report and all field measurements corrected with the calculated %R value for that compound using the following equation: $Reported\ Result = \frac{(Measured\ Concentration\ in\ Stack)}{\%R}\ x\ 100$
			(2) spiking levels nominally no greater than two times the level corresponding to the applicable emission limit. Method 26A shallbe used if there are entrained water droplets in the exhaust stream.
		f. Convert emissions concentration to lb/MMBtu or lb/MWh emissions rates	Method 19 F-factor methodology at NSPS Appendix A-7, or calculate using mass emissions rate and gross output data (see §63.10007(e)).
Hg	Hg CEMS	a. Install, certify, operate, and maintain the CEMS	Sections 3.2.1 and 5.1 of MACT UUUUU Appendix A.
		b. Install, certify, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems	40 CFR Part 75 and §63.10010(a), (b), (c), and (d).
		c. Convert hourly emissions concentrations to 30 boiler operating day rolling average lb/TBtu or lb/GWh emissions rates	Section 6 of MACT UUUUU Appendix A.

Emissions Averaging[7]:

1. General eligibility. [§63.10009(a)]
   a) The permittee may use emissions averaging as described in §63.10009(a)(2) as an alternative to meeting the requirements of §63.9991 for filterable PM, HCl, or Hg on an EGU-specific basis if: [§63.10009(a)(1)]
      i) The permittee has more than one existing EGU in the same subcategory located at one or more contiguous properties, belonging to a single major industrial grouping, which are under common control of the same person (or persons under common control); and [§63.10009(a)(1)(i)]
      ii) The permittee uses sorbent trap monitoring systems for determining Hg emissions or quarterly emissions testing for demonstrating compliance. [§63.10009(a)(1)(ii)]
   b) The permittee may demonstrate compliance by emissions averaging among the existing EGUs in the same subcategory, if the averaged Hg emissions are equal to or less than 1.2 lb/TBtu or 0.013 lb/GWh on a 30-boiler operating day basis or if the averaged emissions of individual, other pollutants from other subcategories of such EGUs are equal to or less than the applicable emissions limit in Table 2 to MACT UUUUU, according to the procedures in §63.10009. Note that except for the alternate Hg emissions limit from EGUs in the "unit designed for coal ≥8,300 Btu/lb" subcategory, the averaging time for emissions averaging for pollutants is 30 days (rolling daily) using data from CEMS or a combination of data from CEMS and manual performance (LEE) testing. The averaging time for emissions averaging for the alternate Hg limit (equal to or less than 1.0 lb/TBtu or 0.011 lb/GWh) is 90-boiler operating days (rolling daily) using data from sorbent trap monitoring, or a combination of monitoring data and data from manual performance (LEE) testing. For the purposes of this paragraph, 30- (or 90-) group boiler operating days is defined as a period during which at least one unit in the emissions averaging group operates on each of the 30 or 90 days. The permittee shall calculate the weighted average emissions rate for the group in accordance with the procedures in this paragraph using the data from all units in the group including any that operate fewer than 30 (or 90) days during the preceding 30 (or 90) group boiler days. [§63.10009(a)(2)]
      i) The permittee may choose to have the EGU emissions averaging group meet either the heat input basis (MMBtu or TBtu, as appropriate for the pollutant) or gross output basis (MWh or GWh, as appropriate for the pollutant). [§63.10009(a)(2)(i)]
      ii) The permittee may not mix bases within the EGU emissions averaging group. [§63.10009(a)(2)(ii)]
2. Equations. Use the following equations when performing calculations for the EGU emissions averaging group: [§63.10009(b)]
   a) Group eligibility equations.

$$\mathrm{WAER_m} = \frac{\left[\sum_{j=1}^{p} \mathrm{Herm_j} \times \mathrm{Rmm_j}\right] + \sum_{k=1}^{m} \mathrm{Ter_k} \times \mathrm{Rmt_k}}{\left(\sum_{j=1}^{p} \mathrm{Rmm_j}\right) + \sum_{k=1}^{m} \mathrm{Rmt_k}} \quad \text{Equation 1a}$$

Where:
WAERm = Maximum Weighted Average Emission Rate in terms of lb/heat input or lb/gross output,
$\mathrm{Herm_{i,j}}$ = hourly emissions rate (e.g., lb/MMBtu, lb/MWh) from sorbent trap monitoring as determined during the initial compliance determination for EGU j,

[7] The permittee does not comply using emissions averaging at this time; however, the permittee may employ this option during future compliance demonstrations.

Rmm_j = Maximum rated heat input, MMBtu/h, or maximum rated gross output, MWh/h, for EGU j,
p = number of EGUs in emissions averaging group that rely on CEMS,
Ter_k = Emissions rate (lb/MMBtu or lb/MWh) as determined during the initial compliance determination for EGU k,
Rmt_k = Maximum rated heat input, MMBtu/h, or maximum rated gross output, MWh/h, for EGU k, and
m = number of EGUs in emissions averaging group that rely on emissions testing.

$$WAER_m = \frac{\sum\left[\left(\sum_{j=1}^{p} Herm_{i,j}\right) \text{ x } Smm_j \text{ x } Cfm_{j_j}\right] + \sum_{k=1}^{m} Ter_k \text{ x } Smt_k \text{ x } Cft_k}{\sum\left[\sum_{j=1}^{p} Smm_j \text{ x } Cfm_j\right] + \sum_{k=1}^{m} Smt_k \text{ x } Cft_k} \quad \text{Equation 1b}$$

Where:
Variables with similar names share the descriptions for Equation 1a of §63.10009,
Smm_j = maximum steam generation, lb_{steam}/h or lb/gross output, for EGU j,
Cfm_j = conversion factor, calculated from the most recent compliance test results, in terms units of heat output or gross output per pound of steam generated (MMBtu/lb_{steam} or MWh/lb_{steam}) from EGU j,
Smt_k = maximum steam generation, lb_{steam}/h or lb/gross output, for EGU k, and
Cft_k = conversion factor, calculated from the most recent compliance test results, in terms units of heat output or gross output per pound of steam generated (MMBtu/lb_{steam} or MWh/lb_{steam}) from EGU k. [§63.10009(b)(1)]

b) Weighted 30-boiler operating day rolling average emissions rate equations for pollutants other than Hg. Use Equation 2a or 2b of §63.10009 to calculate the 30 day rolling average emissions daily.

$$WAER = \frac{\sum_{i=1}^{p}[\sum_{i=1}^{n}(Her_i \text{ x } Rm_i)]_p + \sum_{i=1}^{m}(Ter_i \text{ x } Rt_i)}{\sum_{i=1}^{p}[\sum_{i=1}^{n}(Rm_i)]_p + \sum_{i=1}^{m} Rt_i} \quad \text{Equation 2a}$$

Where:
Her_i = hourly emission rate (e.g., lb/MMBtu, lb/MWh) from unit i's CEMS for the preceding 30-group boiler operating days,
Rm_i = hourly heat input or gross output from unit i for the preceding 30-group boiler operating days,
p = number of EGUs in emissions averaging group that rely on sorbent trap monitoring,
n = number of hours that hourly rates are collected over 30-group boiler operating days,
Ter_i = Emissions rate from most recent emissions test of unit i in terms of lb/heat input or lb/gross output,
Rt_i = Total heat input or gross output of unit i for the preceding 30-boiler operating days, and
m = number of EGUs in emissions averaging group that rely on emissions testing.

$$WAER = \frac{\sum_{i=1}^{p}[\sum_{i=1}^{n}(Her_i \text{ x } Sm_i \text{ x } Cfm_i)]_p + \sum_{i=1}^{m}(Ter_i \text{ x } St_i \text{ x } Cft_i)}{\sum_{i=1}^{p}[\sum_{i=1}^{n}(Sm_i \text{ x } Cfm_i)]_p + \sum_{i=1}^{m} St_i \text{ x } Cft_i} \quad \text{Equation 2b}$$

Where:
variables with similar names share the descriptions for Equation 2a of §63.10009,
Sm_i= steam generation in units of pounds from unit i that uses CEMS for the preceding 30-group boiler operating days,
Cfm_i= conversion factor, calculated from the most recent compliance test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that uses CEMS from the preceding 30 group boiler operating days,

St_i= steam generation in units of pounds from unit i that uses emissions testing, and
Cft_i= conversion factor, calculated from the most recent compliance test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that uses emissions testing. [§63.10009(b)(2)]

c) Weighted 90-boiler operating day rolling average emissions rate equations for Hg emissions. Use Equation 3a or 3b of §63.10009 to calculate the 90-day rolling average emissions daily.

$$\text{WAER}= \frac{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Her}_i \text{ x } \text{Rm}_i)]_p + \sum_{i=1}^{m}(\text{Ter}_i \text{ x } \text{Rt}_i)}{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Rm}_i)]_p + \sum_{i=1}^{m}\text{Rt}_i} \text{Equation 3a}$$

Where:
Her_i = hourly emission rate from unit i's Hg sorbent trap monitoring system for the preceding 90-group boiler operating days,
Rm_i = hourly heat input or gross output from unit i for the preceding 90-group boiler operating days,
p = number of EGUs in emissions averaging group that rely on CEMS,
n = number of hours that hourly rates are collected over the 90-group boiler operating days,
Ter_i = Emissions rate from most recent emissions test of unit i in terms of lb/heat input or lb/gross output,
Rt_i = Total heat input or gross output of unit i for the preceding 90-boiler operating days, and
m = number of EGUs in emissions averaging group that rely on emissions testing.

$$\text{WAER}= \frac{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Her}_i \text{ x } \text{Sm}_i \text{ x } \text{Cfm}_i)]_p + \sum_{i=1}^{m}(\text{Ter}_i \text{ x } \text{St}_i \text{ x } \text{Cft}_i)}{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Sm}_i \text{ x } \text{Cfm}_i)]_p + \sum_{i=1}^{m}\text{St}_i \text{ x } \text{Cft}_i} \text{Equation 3b}$$

Where:
variables with similar names share the descriptions for Equation 2a of §63.10009,
Sm_i = steam generation in units of pounds from unit i that uses Hg sorbent trap monitoring for the preceding 90-group boiler operating days,
Cfm_i = conversion factor, calculated from the most recent compliance test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that us
es sorbent trap monitoring from the preceding 90-group boiler operating days,
St_i = steam generation in units of pounds from unit i that uses emissions testing, and

d) Cft_i = conversion factor, calculated from the most recent emissions test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that uses emissions testing. [§63.10009(b)(3)]

3. Separate stack requirements. For a group of two or more existing EGUs in the same subcategory that each vent to a separate stack, the permittee may average filterable PM, HCl, or Hg emissions to demonstrate compliance with the limits in Table 2 to MACT UUUUU if the permittee satisfies the requirements in §63.10009(d) through (j). [§63.10009(c)]
4. For each existing EGU in the averaging group: [§63.10009(d)]
   a) The emissions rate achieved during the initial performance test for the HAP being averaged shall not exceed the emissions level that was being achieved 180 days after April 16, 2015, or the date on which emissions testing done to support the emissions averaging plan is complete (if the Director does not require submission and approval of the emissions averaging plan), or the date that the permittee begins emissions averaging, whichever is earlier; or[§63.10009(d)(1)]

b) The control technology employed during the initial performance test shall not be less than the design efficiency of the emissions control technology employed 180 days after April 16, 2015 or the date that the permittee begins emissions averaging, whichever is earlier. [§63.10009(d)(2)]

5. The weighted-average emissions rate from the existing EGUs participating in the emissions averaging option shall be in compliance with the limits in Table 2 to MACT UUUUU at all times following the date that the permittee begins emissions averaging. [§63.10009(e)]
6. Emissions averaging group eligibility demonstration. The permittee shall demonstrate the ability for the EGUs included in the emissions averaging group to demonstrate initial compliance according to §63.10009(f)(1) or (2) using the maximum rated heat input or gross output over a 30- (or 90-) boiler operating day period of each EGU and the results of the initial performance tests. For this demonstration and prior to preparing the emissions averaging plan, the permittee shall conduct required emissions monitoring for 30- (or 90-) days of boiler operation and any required manual performance testing to calculate maximum weighted average emissions rate in accordance with §63.10009. The Director may require the permittee to submit a proposed emissions averaging plan and supporting data for approval. If the Director requires approval of the plan, the permittee may not begin using emissions averaging until the Director approves the plan. [§63.10009(f)]
   a) The permittee shall use Equation 1a in §63.10009(b) to demonstrate that the maximum weighted average emissions rates of filterable PM, HCl, or Hg emissions from the existing units participating in the emissions averaging option do not exceed the emissions limits in Table 2 to MACT UUUUU. [§63.10009(f)(1)]
   b) If the permittee is not capable of monitoring heat input or gross output, and the EGU generates steam for purposes other than generating electricity, the permittee may use Equation 1b of §63.10009(b) as an alternative to using Equation 1a of §63.10009(b) to demonstrate that the maximum weighted average emissions rates of filterable PM, HCl, or Hg emissions from the existing units participating in the emissions averaging group do not exceed the emission limits in Table 2 to MACT UUUUU. [§63.10009(f)(2)]
7. The permittee shall determine the weighted average emissions rate in units of the applicable emissions limit on a 30 group boiler operating day rolling average basis (or, if applicable, on a 90 group boiler operating day rolling average basis for Hg) according to §63.10009(g)(1) and (2). The first averaging period ends on the 30th (or, if applicable, 90th for the alternate Hg emission limit) group boiler operating day after the date that the permittee begins emissions averaging. [§63.10009(g)]
   a) The permittee shall use Equation 2a or 3a of §63.10009(b) to calculate the weighted average emissions rate using the actual heat input or gross output for each existing unit participating in the emissions averaging option. [§63.10009(g)(1)]
   b) If the permittee is not capable of monitoring heat input or gross output, the permittee may use Equation 2b or 3b of §63.10009(b) as an alternative to using Equation 2a of §63.10009(b) to calculate the average weighted emission rate using the actual steam generation from the units participating in the emissions averaging option. [§63.10009(g)(2)]
8. Sorbent trap monitoring use. If an EGU in the emissions averaging group uses a sorbent trap monitor for Hg emissions to demonstrate compliance, the permittee shall use those data to determine the 30 (or 90) group boiler operating day rolling average emissions rate. [§63.10009(h)]
9. Emissions testing. If the permittee uses manual emissions testing to demonstrate compliance for one or more EGUs in the emissions averaging group, the permittee shall use the results from the most recent performance test to determine the 30 (or 90) day rolling average. The permittee may use sorbent trap data in combination with data from the most recent manual performance test in calculating the 30 (or 90) group boiler operating day rolling average emissions rate. [§63.10009(i)]

10. Emissions averaging plan. The permittee shall develop an implementation plan for emissions averaging according to the following procedures and requirements in §63.10009(j)(1) and (2). [§63.10009(j)]
    a) The permittee shall include the information contained in §63.10009(j)(1)(i) through (v) in the implementation plan for all the emissions units included in an emissions averaging: [§63.10009(j)(1)]
        i) The identification of all existing EGUs in the emissions averaging group, including for each either the applicable HAP emission level or the control technology installed as of 180 days after February 16, 2015, or the date on which the permittee completes the emissions measurements used to support the emissions averaging plan (if the Director does not require submission and approval of the emissions averaging plan), or the date that the permittee begins emissions averaging, whichever is earlier; and the date on which the permittee is requesting emissions averaging to commence; [§63.10009(j)(1)(i)]
        ii) The process weighting parameter (heat input, gross output, or steam generated) that will be monitored for each averaging group; [§63.10009(j)(1)(ii)]
        iii) The specific control technology or pollution prevention measure to be used for each emission EGU in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple EGUs, the permittee shall identify each EGU; [§63.10009(j)(1)(iii)]
        iv) The means of measurement (e.g., sorbent trap monitoring, manual performance test) of filterable PM, HCl, or Hg emissions in accordance with the requirements in §63.10007 and to be used in the emissions averaging calculations; and[§63.10009(j)(1)(iv)]
        v) A demonstration that emissions averaging can produce compliance with each of the applicable emission limit(s) in accordance with §63.10009(b)(1). [§63.10009(j)(1)(v)]
    b) If, as described in §63.10009(f), the Director requests the permittee to submit the averaging plan for review and approval, the permittee shall receive approval before initiating emissions averaging. [§63.10009(j)(2)]
        i) The Director shall use following criteria in reviewing and approving or disapproving the plan: [§63.10009(j)(2)(i)]
            (1) Whether the content of the plan includes all of the information specified in §63.10009(j)(1); and[§63.10009(j)(2)(i)(A)]
            (2) Whether the plan presents information sufficient to determine that compliance will be achieved and maintained. [§63.10009(j)(2)(i)(B)]
        ii) The Director shall not approve an emissions averaging implementation plan containing any of the following provisions: [§63.10009(j)(2)(ii)]
            (1) Any averaging between emissions of different pollutants or between units located at different facilities; or[§63.10009(j)(2)(ii)(A)]
            (2) The inclusion of any emissions unit other than an existing unit in the same subcategory. [§63.10009(j)(2)(ii)(B)]
11. The permittee shall demonstrate compliance with MACT UUUUU on a continuous basis by meeting the requirements of §63.10022(a)(1) through (4). [§63.10022(a)]
    a) For each 30- (or 90-) day rolling average period, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.10009(f) and (g); [§63.10022(a)(1)]
    b) For each existing EGU participating in the emissions averaging option, operate in accordance with the startup or shutdown work practice requirements given in Table 3 to MACT UUUUU. [§63.10022(a)(4)]

12. Any instance where the permittee fails to comply with the continuous monitoring requirements in §63.10022(a)(1) is a deviation. [§63.10022(b)]

Monitoring, Operation, and Maintenance Requirements:

1. For the sorbent trap monitoring systems used to provide data under MACT UUUUU, the continuous monitoring system installation requirements for these exhaust configurations are as follows: [§63.10010(a)]
   a) Single unit-single stack configurations. For an affected unit that exhausts to the atmosphere through a single, dedicated stack, the permittee shall either install the required sorbent trap monitoring systems in the stack or at a location in the ductwork downstream of all emissions control devices, where the pollutant and diluents concentrations are representative of the emissions that exit to the atmosphere. [§63.10010(a)(1)]
2. If the permittee uses a CO_2 CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the CO_2 concentrations shall be monitored at a location that represents emissions to the atmosphere, i.e., at the outlet of the EGU, downstream of all emission control devices. The permittee shall install, certify, maintain, and operate the CEMS according to 40 CFR Part 75. Use only quality-assured CO_2 data in the emissions calculations; do not use 40 CFR Part 75 substitute data values. [§63.10010(b)]
3. If the permittee is required to use a stack gas flow rate monitor, either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 2 to MACT UUUUU, the permittee shall install, certify, operate, and maintain the monitoring system and conduct on-going quality-assurance testing of the system according to 40 CFR Part 75. Use only unadjusted, quality-assured flow rate data in the emissions calculations. Do not apply bias adjustment factors to the flow rate data and do not use substitute flow rate data in the calculations. [§63.10010(c)]
4. If the permittee is required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 2 to MACT UUUUU, the permittee shall install, certify, operate, and maintain a moisture monitoring system in accordance with 40 CFR Part 75. Alternatively, for coal-fired units, the permittee may use appropriate fuel-specific default moisture values from §75.11(b) to estimate the moisture content of the stack gas. If the permittee installs and operates a moisture monitoring system, do not use substitute moisture data in the emissions calculations. [§63.10010(d)]
5. If the permittee uses a sorbent trap monitoring system, the permittee shall install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with MACT UUUUU Appendix A. The permittee shall calculate and record a 30- (or, if alternate emissions averaging is used, 90-) boiler operating day rolling average Hg emission rate, in units of the standard, updated after each new boiler operating day. Each 30- (or, if alternate emissions averaging is used, 90-) boiler operating day rolling average emission rate, calculated according to Section 6.2 of MACT UUUUU Appendix A, is the average of all of the valid hourly Hg emission rates in the preceding 30- (or, if alternate emissions averaging is used, a 90-) boiler operating days. Section 7.1.4.3 of MACT UUUUU Appendix A explains how to reduce sorbent trap monitoring system data to an hourly basis. [§63.10010(g)]

Continuous Compliance Requirements:

1. The permittee shall monitor and collect data according to §63.10020 and the site-specific monitoring plan required by §63.10000(d). [§63.10020(a)]

2. The permittee shall operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. The permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. [§63.10020(b)]
3. The permittee may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. The permittee shall use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system. [§63.10020(c)]
4. Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments), failure to collect required data is a deviation from the monitoring requirements. [§63.10020(d)]
5. The permittee shall demonstrate continuous compliance with each emissions limit, operating limit, and work practice standard in Tables 2 and 3 to MACT UUUUU that applies, according to the monitoring specified in Table 7 to MACT UUUUU and §63.10021(b) through (g). [§63.10021(a)]
6. Except as otherwise provided in §63.10020(c), if the permittee uses a sorbent trap monitoring system to measure Hg emissions, the permittee shall demonstrate continuous compliance by using all quality-assured hourly data recorded by the sorbent trap monitoring system and the other required monitoring systems (e.g., flow rate, CO_2, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day (or, if alternate emissions averaging is used for Hg, 90-boiler operating day) rolling average basis, updated at the end of each new boiler operating day. Use Equation 8 to determine the 30- (or, if applicable, 90-) boiler operating day rolling average.

$$Boiler\ operating\ day\ average = \frac{\sum_{i=1}^{n} Her_i}{n} \quad \text{Equation 8}$$

   Where:
   Her_i is the hourly emissions rate for hour i and n is the number of hourly emissions rate values collected over 30- (or, if applicable, 90-) boiler operating days. [§63.10021(b)]
7. If the permittee uses quarterly performance testing to demonstrate compliance with one or more applicable emissions limits in Table 2 to MACT UUUUU, the permittee: [§63.10021(d)]
   a) May skip performance testing in those quarters during which less than 168 boiler operating hours occur, except that a performance test shall be conducted at least once every calendar year. [§63.10021(d)(1)]
   b) Shall conduct the performance test as defined in Table 5 to MACT UUUUU and calculate the results of the testing in units of the applicable emissions standard. [§63.10021(d)(2)]
8. Conduct periodic performance tune-ups of the EGU(s), as specified in §63.10021(e)(1) through (9). For the first tune-up, the permittee may perform the burner inspection any time prior to the tune-up or the permittee may delay the first burner inspection until the next scheduled EGU outage provided the permittee meets the requirements of §63.10005. Subsequently, the permittee shall perform an

inspection of the burner at least once every 36 calendar months unless the EGU employs neural network combustion optimization during normal operations in which case the permittee shall perform an inspection of the burner and combustion controls at least once every 48 calendar months. If the EGU is offline when a deadline to perform the tune-up passes, the permittee shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit. [§63.10021(e)]

a) As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows: [§63.10021(e)(1)]
   i) Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO shall be installed within three calendar months after the burner inspection, [§63.10021(e)(1)(i)]
   ii) Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the permittee; [§63.10021(e)(1)(ii)]
b) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type; [§63.10021(e)(2)]
c) As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors; [§63.10021(e)(3)]
d) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors; [§63.10021(e)(4)]
e) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O_2 probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary; [§63.10021(e)(5)]
f) Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles; [§63.10021(e)(6)]
g) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppmv and oxygen in volume percent, before and after the tune-up 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). The permittee may use portable CO, NO_x and O_2 monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system; [§63.10021(e)(7)]

h) Maintain on-site and submit, if requested by the Director, an annual report containing the information in §63.10021(e)(1) through (e)(9) including: [§63.10021(e)(8)]
   i) The concentrations of CO and NO_x in the effluent stream in ppmv, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems; [§63.10021(e)(8)(i)]
   ii) A description of any corrective actions taken as a part of the combustion adjustment; and [§63.10021(e)(8)(ii)]
   iii) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period; and [§63.10021(e)(8)(iii)]

i) Report the date of all tune-ups electronically, in accordance with §63.10031(f). The tune-up report date is the date when tune-up requirements in §63.10021(e)(6) and (7) are completed. [§63.10021(e)(9)]

9. The permittee shall submit the reports required under §63.10031 and, if applicable, the reports required under appendices A and B to this subpart. The electronic reports required by Appendices A to MACT UUUUU shall be sent to the Administrator electronically in a format prescribed by the Administrator, as provided in §63.10031. Sorbent trap monitoring system data shall be submitted using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Other data, including sorbent trap monitoring system performance test detail reports, shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool, the Compliance and Emissions Data Reporting Interface, or alternate electronic file format, all as provided for under §63.10031. [§63.10021(f)]
10. The permittee shall report each instance in which the permittee did not meet an applicable emissions limit or operating limit in Tables 2 and 3 to MACT UUUUU or failed to conduct a required tune-up. These instances are deviations from the requirements of MACT UUUUU These deviations shall be reported according to §63.10031. [§63.10021(g)]
11. The permittee shall follow the startup or shutdown requirements as given in Table 3 to MACT UUUUU for each coal-fired EGU. [§63.10021(h)]
    a) The permittee may use the diluent cap and default gross output values, as described in §63.10007(f), during startup periods or shutdown periods. [§63.10021(h)(1)]
    b) The permittee shall operate all CMS, collect data, calculate pollutant emission rates, and record data during startup periods or shutdown periods. [§63.10021(h)(2)]
    c) The permittee shall report the information as required in §63.10031. [§63.10021(h)(3)]
    d) The permittee may choose to submit an alternative non-opacity emission standard, in accordance with the requirements contained in §63.10011(g)(4). Until promulgation in the Federal Register of the final alternative non-opacity emission standard, the permittee shall comply with paragraph (1) of the definition of "startup" in §63.10042. [§63.10021(h)(4)]
12. The permittee shall provide reports as specified in §63.10031 concerning activities and periods of startup and shutdown. [§63.10021(i)]

Table 7 to MACT UUUUU – *Demonstrating Continuous Compliance*

If the permittee uses one of the following to meet applicable emissions limits, operating limits, or work practice standards ...	**The permittee shall demonstrate continuous compliance by ...**
1. A sorbent trap monitoring system to measure Hg	Calculating the 30- (or 90-) boiler operating day rolling arithmetic average emissions rate in units of the applicable emissions standard basis at the end of each boiler operating day using all of the quality assured hourly average sorbent

If the permittee uses one of the following to meet applicable emissions limits, operating limits, or work practice standards ...	The permittee shall demonstrate continuous compliance by ...
	trap data for the previous 30- (or 90-) boiler operating days, excluding data recorded during periods of startup or shutdown.
4. Quarterly performance testing for coal-fired EGUs to measure compliance with one or more non-PM (or its alternative emission limits) applicable emissions limit in Table 2 to MACT UUUUU, or PM (or its alternative emission limits) applicable emissions limit in Table 2 to MACT UUUUU	Calculating the results of the testing in units of the applicable emissions standard.
5. Conducting periodic performance tune-ups of the EGU(s)	Conducting periodic performance tune-ups of the EGU(s), as specified in §63.10021(e).
6. Work practice standards for coal-fired EGUs during startup	Operating in accordance with Table 3 to MACT UUUUU
7. Work practice standards for coal-fired EGUs during shutdown	Operating in accordance with Table 3 to MACT UUUUU

General Provisions:

The permittee shall comply with 40 CFR Part 63, Subpart A as indicated by Table 9 to MACT UUUUU.

Notification, Reports, and Records

1. The permittee shall submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply by the dates specified. [§63.10030(a)]
2. When the permittee is required to conduct a performance test, the permittee shall submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [§63.10030(d)]
3. The permittee shall submit the notifications in §63.10000(h)(2) and (i)(2) that may apply to you by the dates specified. [§63.10030(f)]
4. The permittee shall submit each report in Table 8 to MACT UUUUU that applies. If the permittee is required to (or elects to) continuously monitor Hg emissions, the permittee shall also submit the electronic reports required under Appendix A to MACT UUUUU, at the specified frequency. [§63.10031(a)]
5. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee shall submit each report by the date in Table 8 to MACT UUUUU and according to the requirements in §63.10031(b)(1) through (5). [§63.10031(b)]
   a) Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [§63.10031(b)(3)]
   b) Each subsequent compliance report shall be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [§63.10031(b)(4)]
   c) For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70, and if the permitting authority has established dates for submitting semiannual reports pursuant to §70.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in §63.10031(b)(1) through (4). [§63.10031(b)(5)]

6. The compliance report shall contain the information required in §63.10031(c)(1) through (9). [§63.10031(c)]
   a) The information required by the summary report located in 63.10(e)(3)(vi). [§63.10031(c)(1)]
   b) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or the permittee's basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. [§63.10031(c)(2)]
   c) Indicate whether the permittee burned new types of fuel during the reporting period. If the permittee did burn new types of fuel the permittee shall include the date of the performance test where that fuel was in use. [§63.10031(c)(3)]
   d) Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in §63.10021(e)(6) and (7) were completed. [§63.10031(c)(4)]
   e) The permittee shall report emergency bypass information annually from EGUs with LEE status. [§63.10031(c)(6)]
   f) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test, if applicable. If the permittee is conducting stack tests once every three years to maintain LEE status, consistent with §63.10006(b), the date of each stack test conducted during the previous three years, a comparison of emission level the permittee achieved in each stack test conducted during the previous three years to the 50 percent emission limit threshold required in §63.10005(h)(1)(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions. [§63.10031(c)(7)]
   g) A certification. [§63.10031(c)(8)]
   h) If the permittee has a deviation from any emission limit, work practice standard, or operating limit, the permittee shall also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation. [§63.10031(c)(9)]
7. For each excess emissions occurring at an affected source where the permittee is using a CMS to comply with that emission limit or operating limit, the permittee shall include the information required in §63.10(e)(3)(v) in the compliance report specified in §63.10031(c). [§63.10031(d)]
8. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR Part 70 shall report all deviations as defined in MACT UUUUU in the semiannual monitoring report required by §70.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 to MACT UUUUU along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in MACT UUUUU, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [§63.10031(e)]
9. Within 60 days after the date of completing each performance test, the permittee shall submit the performance test reports required by MACT UUUUU to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using those test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE.

Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media shall be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted shall be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the Air Pollution Control Program, the permittee shall also submit these reports, including the confidential business information, to the Air Pollution Control Program in the format specified by the Air Pollution Control Program. [§63.10031(f)]

a) Within 60 days after the date of completing each sorbent trap monitoring system performance evaluation test, as defined in §63.2 and required by MACT UUUUU, the permittee shall submit the relative accuracy test audit (RATA) data required by MACT UUUUU to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (www.epa.gov/cdx). The RATA data shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (http://www.epa.gov/ttn/chief/ert/index.html). Only RATA data compounds listed on the ERT Web site are subject to this requirement. Owners or operators who claim that some of the information being submitted for RATAs is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) by registered letter to EPA and the same ERT file with the CBI omitted to EPA via CDX as described earlier in this paragraph. The compact disk or other commonly used electronic storage media shall be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. At the discretion of the Air Pollution Control Program, the permittee shall also submit these RATAs to the Air Pollution Control Program in the format specified by the Air Pollution Control Program. The permittee shall submit calibration error testing, drift checks, and other information required in the performance evaluation as described in §63.2 and as required in this chapter. [§63.10031(f)(1)]
b) Reports for a Hg sorbent trap monitoring system and any supporting monitors for such systems (such as a diluent or moisture monitor) shall be submitted using the ECMPS Client Tool, as provided for in MACT UUUUU Appendix A and §63.10021(f). [§63.10031(f)(3)]
c) Submit the compliance reports required under §63.10031(c) and (d) and the notification of compliance status required under §63.10030(e) to EPA's WebFIRE database by using the CEDRI that is accessed through EPA's CDX (www.epa.gov/cdx). The permittee shall use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. [§63.10031(f)(4)]
d) All reports required by MACT UUUUU not subject to the requirements in §63.10031(f) and §63.10031(f)(1) through (4) shall be sent to the Administrator at the appropriate address listed in §63.13. If acceptable to both the Administrator and the permittee, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to §63.10031(f) and §63.10031(f)(1) through (4) in paper format. [§63.10031(f)(5)]

10. If the permittee had a malfunction 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 and which caused or may have caused any applicable emission limitation to be exceeded. [§63.10031(g)]

11. The permittee shall keep records according to §63.10032(a)(1) and (2). If the permittee is required to (or elects to) continuously monitor Hg emissions, the permittee shall also keep the records required under MACT UUUUU Appendix A. [§63.10032(a)]
    a) A copy of each notification and report that the permittee submitted to comply with MACT UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in §63.10(b)(2)(xiv). [§63.10032(a)(1)]
    b) Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in §63.10(b)(2)(viii). [§63.10032(a)(2)]
12. For each CEMS, the permittee shall keep records according to §63.10031(b)(1) through (4). [§63.10032(b)]
    a) Records described in §63.10(b)(2)(vi) through (xi). [§63.10032(b)(1)]
    b) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). [§63.10032(b)(2)]
    c) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i). [§63.10032(b)(3)]
    d) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. [§63.10032(b)(4)]
13. The permittee shall keep the records required in Table 7 to MACT UUUUU. [§63.10032(c)]
14. For each EGU subject to an emission limit, the permittee shall also keep the records in §63.10032(d)(1) through (3). [§63.10032(d)]
    a) The permittee shall keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used. [§63.10032(d)(1)]
    b) If the permittee combusts non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the permittee shall keep a record which documents how the secondary material meets each of the legitimacy criteria. If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(2), the permittee shall keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the permittee shall keep a record which documents how the fuel satisfies the requirements of the petition process. [§63.10032(d)(2)]
    c) For an EGU that qualifies as an LEE under §63.10005(h), the permittee shall keep annual records that document that the emissions in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year. [§63.10032(d)(3)]
15. If the permittee elects to average emissions consistent with §63.10009, the permittee shall additionally keep a copy of the emissions averaging implementation plan required in §63.10009(g), all calculations required under §63.10009, including daily records of heat input or steam generation, as applicable, and monitoring records consistent with §63.10022. [§63.10032(e)]
16. Regarding startup periods or shutdown periods: [§63.10032(f)]
    a) The permittee shall keep records of the occurrence and duration of each startup or shutdown. [§63.10032(f)(1)]
17. The permittee shall keep records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.10032(g)]

18. The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.10032(h)]
19. The permittee shall keep records of the type(s) and amount(s) of fuel used during each startup or shutdown. [§63.10032(i)]
20. Records shall be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§63.10033(a)]
21. As specified in §63.10(b)(1), the permittee shall keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.10033(b)]
22. The permittee shall keep each record on site for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The permittee may keep the records off site for the remaining three years. [§63.10033(c)]
23. Records shall be retained in either hard copy or electronic form.
24. These records shall be made available for inspection to the Department of Natural Resources' personnel upon request. [§70.6(a)(3)(ii)]

Table 8 to MACT UUUUU – *Reporting Requirements*

The permittee shall submit a ...	The report shall contain ...	The permittee shall submit the report ...
1. Compliance report	a. Information required in §63.10031(c)(1) through (9); and	Semiannually according to the requirements in §63.10031(b).
	b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies and there are no deviations from the requirements for work practice standards in Table 3 to MACT UUUUU that apply, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and	
	c. If the permittee has a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report shall contain the information in §63.10031(d). If there were periods during which the CMSs, including continuous emissions monitoring systems and continuous parameter monitoring systems, were out-of-control, as specified in §63.8(c)(7), the report shall contain the information in §63.10031(e).	

PERMIT CONDITION 004 10 CSR 10-6.270 Acid Rain Source Permits Required 40 CFR Parts 72, 73, and 75 through 78[8]	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in 1967) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

Requirements:

1. The permittee shall comply with their Acid Rain Source Permit for each of the boilers pursuant to Title IV of the Clean Air Act. The installation's Acid Rain Source Permit is incorporated into this Part 70 Operating Permit as Attachment E. The Acid Rain Source Permit will remain effective as long as this Part 70 Operating Permit remains effective. [§72.30(a)]
2. The designated representative shall submit a complete Acid Rain permit application as part of their Part 70 Operating Permit renewal application.
3. The permittee shall make the Acid Rain Source Permit available to any Missouri Department of Natural Resources' personnel upon request. [§70.6(a)(3)(ii)]
4. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

[8] Source: 58 FR 3650, Jan. 11, 1993, as amended at 58 FR 15648, Mar. 23, 1993; 58 FR 33770, June 21, 1993; 58 FR 40747, July 30, 1993; 59 FR 60230, 60238, Nov. 22, 1994; 60 FR 17113, Apr. 4, 1995; 60 FR 18468, Apr. 11, 1995; 60 FR 18761, Apr. 13, 1995; 60 FR 26526, May 17, 1995; 60 FR 40296, Aug. 8, 1995; 61 FR 25581, May 22, 1996; 61 FR 59157, Nov. 20, 1996; 61 FR 59162, Nov. 22, 1996; 61 FR 67162, Dec. 19, 1996; 62 FR 3464, Jan. 23, 1997; 62 FR 32040, June 12, 1997; 62 FR 34150, June 24, 1997; 62 FR 55475, Oct. 24, 1997; 62 FR 66279, Dec. 18, 1997; 63 FR 51714, Sept. 28, 1998; 63 FR 57499, Oct. 27, 1998; 63 FR 68404, Dec. 11, 1998; 64 FR 25842, May 13, 1999; 64 FR 28588, May 26, 1999; 64 FR 37582, July 12, 1999; 64 FR 55838, Oct. 15, 1999; 63 FR 57498, Oct. 27, 1999; 66 FR 12978, Mar. 1, 2001; 67 FR 40476, June 12, 2002; 67 FR 53504, Aug. 16, 2002; 67 FR 57274, Sept. 9, 2002; 69 FR 21644, Apr. 21, 2004; 70 FR 25334, May 12, 2005; 70 FR 28678, May 18, 2005; 71 FR 25377, Apr. 28, 2006; 72 FR 51527, Sept. 7, 2007; 72 FR 59205, Oct. 19, 2007; 73 FR 4340, Jan. 24, 2008; 75 FR 75078, Dec. 1, 2010; 76 FR 17306, Mar. 28, 2011; 76 FR 20536, Apr. 13, 2011; 76 FR 48378, Aug. 8, 2011; 76 FR 50132, Aug. 12, 2011; 77 FR 2460, Jan. 18, 2012; 81 FR 74602, Oct. 26, 2016
56 FR 65601, Dec. 17, 1991, as amended at 61 FR 28763, June 6, 1996; 63 FR 5735, Feb. 4, 1998;

PERMIT CONDITION 005 10 CSR 10-6.362 Clean Air Interstate Rule Annual NO_x Trading Program 10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO_x Trading Program 10 CSR 10-6.366 Clean Air Interstate Rule SO_2 Trading Program 40 CFR Part 96 NO_x Budget Trading Program and CAIR NO_x and SO_2 Trading Programs for State Implementation Plans[9]	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in 1967) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

Requirements:

1. The permittee shall comply with their CAIR Permit for each of the boilers. The installation's CAIR Permit is incorporated into this Part 70 Operating Permit as Attachment F. The CAIR Permit will remain effective as long as this Part 70 Operating Permit remains effective. [§72.30(a)]
2. The designated representative shall submit a complete CAIR Permit application as part of their Part 70 Operating Permit renewal application.
3. The permittee shall make the CAIR Permit available to any Missouri Department of Natural Resources' personnel upon request. [§70.6(a)(3)(ii)]
4. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

[9] This permit condition is a state only requirement. EPA replaced CAIR with CSAPR as of January 1, 2015. CAIR is still an applicable state requirement as 10 CSR 10-6.362, 10 CSR 10-6.364, and 10 CSR 10-6.366 remain in Missouri's Code of State Regulations and SIP. This permit condition will no longer be applicable if Missouri rescinds 10 CSR 10-6.362, 10 CSR 10-6.364, and 10 CSR 10-6.366 and 10 CSR 10-6.362, 10 CSR 10-6.364, and 10 CSR 10-6.366 are removed from Missouri's approved SIP. No action is required on the part of the permittee to remove this permit condition from this operating permit upon rescission of these regulations from Missouri's Code of State Regulation and removal of these regulations from Missouri's approved SIP.
SOURCE: 63 FR 57514, Oct. 27, 1998, as amended at 63 FR 71225, Dec. 24, 1998; 70 FR 25339, May 12, 2005; 71 FR 25380, Apr. 28, 2006; 71 FR 74794, Dec. 13, 2006; 72 FR 59205, Oct. 19, 2007

PERMIT CONDITION 006 10 CSR 10-6.372 Cross-State Air Pollution Rule Annual NO_x Trading Allowance Allocations 10 CSR 10-6.374 Cross-State Air Pollution Rule Ozone Season NO_x Trading Allowance Allocations 10 CSR 10-6.376 Cross-State Air Pollution Rule Annual SO_2 Trading Allowance Allocations 40 CFR Part 97, Subparts AAAAA, CCCCC, and EEEEE[10]	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in 1967) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

The CSAPR subject units, and the unit-specific monitoring provisions at this source are identified in the following table. These units are subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 2 Trading Program, and CSAPR SO_2 Group 1 Trading Program.

Parameter	CEMS requirements pursuant to 40 CFR Part 75, Subpart B (for SO_2 monitoring) and 40 CFR Part 75, Subpart H (for NO_x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75, Appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to §75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E
SO_2	EP-01 & EP-02	N/A	N/A	N/A	N/A
NO_x	EP-01 & EP-02	N/A	N/A	N/A	N/A
Heat Input	EP-01 & EP-02	N/A	N/A	N/A	N/A

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (CSAPR NO_x Annual Trading Program), 97.830 through 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and 97.630 through 97.635 (CSAPR SO_2 Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements

[10] SOURCE: 76 FR 48379, Aug. 8, 2011, as amended at 77 FR 10334, Feb. 21, 2012; 77 FR 34844, June 12, 2012; 79 FR 71672, Dec. 3, 2014; 81 FR 74604, Oct. 26, 2016

applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.

2. The permittee shall submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.
3. If the permittee wants to use an alternative monitoring system, the permittee shall submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO_2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
4. If the permittee wants to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.630 through 97.634 (CSAPR SO_2 Group 1 Trading Program), the permittee shall submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO_2 Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at http://www.epa.gov/airmarkets/emissions/petitions.html.
5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and 97.630 through 97.634 (CSAPR SO_2 Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with §70.7(e)(2)(i)(B), may be used to add or change this unit's monitoring system description.

CSAPR NO_x Annual Trading Program Requirements:

1. *Designated representative requirements*. The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.413 through 97.418. [§97.406(a)]
2. *Emissions monitoring, reporting, and recordkeeping requirements*. [§97.406(b)]
   a) The permittee, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), §97.431 (initial monitoring system certification and recertification procedures), §97.432 (monitoring system out-of-control periods), §97.433 (notifications concerning monitoring), §97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements). [§97.406(b)(1)]
   b) The emissions data determined in accordance with §§97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under §97.411(a)(2) and (b) and §97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under §97.406(c), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location

determined in accordance with §§97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. [§97.406(b)(2)]

3. *NO_x emissions requirements*. [§97.406(c)]
   a) *CSAPR NO_x Annual emissions limitation*. [§97.406(c)(1)]
      i) As of the allowance transfer deadline for a control period in a given year, the permittee shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under §97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source. [§97.406(c)(1)(i)]
      ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in §97.406(c)(1)(i), then: [§97.406(c)(1)(ii)]
         (1) The permittee shall hold the CSAPR NO_x Annual allowances required for deduction under §97.424(d); and [§97.406(c)(1)(ii)(A)]
         (2) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act. [§97.406(c)(1)(ii)(B)]
   b) *CSAPR NO_x Annual assurance provisions*. [§97.406(c)(2)]
      i) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in Missouri exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for Missouri and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Annual allowances available for deduction for such control period under §97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.425(b), of multiplying— [§97.406(c)(2)(i)]
         (1) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in Missouri for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and [§97.406(c)(2)(i)(A)]
         (2) The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in Missouri for such control period exceed the state assurance level. [§97.406(c)(2)(i)(B)]
      ii) The permittee shall hold the CSAPR NO_x Annual allowances required under §97.406(c)(2)(i), as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. [§97.406(c)(2)(ii)]
      iii) Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in Missouri during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of Missouri NO_x Annual trading

budget under §97.410(a) and the state's variability limit under §97.410(b). [§97.406(c)(2)(iii)]

iv) It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in Missouri during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in Missouri during a control period exceeds the common designated representative's assurance level. [§97.406(c)(2)(iv)]

v) To the extent the permittee fails to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with §97.406(c)(2)(i) through (iii), [§97.406(c)(2)(v)]

(1) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and [§97.406(c)(2)(v)(A)]

(2) Each CSAPR NO_x Annual allowance that the permittee fails to hold for such control period in accordance with §97.406(c)(2)(i) through (iii) and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act. [§97.406(c)(2)(v)(B)]

c) *Compliance periods.* [§97.406(c)(3)]

i) A CSAPR NO_x Annual unit shall be subject to the requirements under §97.406(c)(1) for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter. [§97.406(c)(3)(i)]

ii) A CSAPR NO_x Annual unit shall be subject to the requirements under §97.406(c)(2) for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.430(b) and for each control period thereafter. [§97.406(c)(3)(ii)]

d) *Vintage of CSAPR NO_x Annual allowances held for compliance*. [§97.406(c)(4)]

i) A CSAPR NO_x Annual allowance held for compliance with the requirements under §97.406(c)(1)(i) for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for such control period or a control period in a prior year. [§97.406(c)(4)(i)]

ii) A CSAPR NO_x Annual allowance held for compliance with the requirements under §97.406(c)(1)(ii)(A) and (2)(i) through (iii) for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. [§97.406(c)(4)(ii)]

e) *Allowance Management System requirements*. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA. [§97.406(c)(5)]

f) *Limited authorization*. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows: [§97.406(c)(6)]

i) Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and [§97.406(c)(6)(i)]

ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart AAAAA, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act. [§97.406(c)(6)(ii)]

g) *Property right*. A CSAPR NO_x Annual allowance does not constitute a property right. [§97.406(c)(7)]

4. *Title V permit revision requirements.* [§97.406(d)]
   a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA. [§97.406(d)(1)]
   b) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to §§97.430 through 97.435, and the requirements for a CEMS (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to §75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with this paragraph and §70.7(e)(2)(i)(B). [§97.406(d)(2)]
5. *Additional recordkeeping and reporting requirements.* [§97.406(e)]
   a) Unless otherwise provided, the permittee shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the Administrator. [§97.406(e)(1)]
      i) The certificate of representation under §97.416 for the designated representative for the source and each CSAPR NO_x Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.416 changing the designated representative. [§97.406(e)(1)(i)]
      ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA. [§97.406(e)(1)(ii)]
      iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program. [§97.406(e)(1)(iii)]
   b) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in §97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Part 70. [§97.406(e)(2)]
6. *Liability.* [§97.406(f)]
   a) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the permittee. [§97.406(f)(1)]
   b) Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the permittee. [§97.406(f)(2)]
7. *Effect on other authorities.* No provision of the CSAPR NO_x Annual Trading Program or exemption under §97.405 shall be construed as exempting or excluding the permittee, and the designated representative, from compliance with any other provision of the Missouri's state implementation plan, a federally enforceable permit, or the Clean Air Act. [§97.406(g)]

CSAPR NO_x Ozone Season Group 2 Trading Program Requirements:

1. *Designated representative requirements.* The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.813 through 97.818. [§97.806(a)]
2. *Emissions monitoring, reporting, and recordkeeping requirements.* [§97.806(b)]
   a) The permittee, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), §97.831 (initial monitoring system certification and recertification procedures), §97.832 (monitoring system out-of-control periods), §97.833 (notifications concerning monitoring), §97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.835 (petitions for alternatives to monitoring, recordkeeping, and reporting requirements). [§97.806(b)(1)]
   b) The emissions data determined in accordance with §§97.830 through 97.835 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under §§97.811(a)(2) and (b) and §97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under §97.806(c), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. [§97.806(b)(2)]
3. *NO_x emissions requirements*— [§97.806(c)]
   a) *CSAPR NO_x Ozone Season Group 2 emissions limitation.* [§97.806(c)(1)]
      i) As of the allowance transfer deadline for a control period in a given year, the permittee shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under §97.824(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source. [§97.806(c)(1)(i)]
      ii) If total NO_x emissions during a control period in a given year from the CSAPR NOx Ozone Season Group 2 units at a CSAPR NOX Ozone Season Group 2 source are in excess of the CSAPR NOx Ozone Season Group 2 emissions limitation set forth in §97.806(c)(1)(i), then: [§97.806(c)(1)(ii)]
         (1) The permittee shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under §97.824(d); and [§97.806(c)(1)(ii)(A)]
         (2) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act. [§97.806(c)(1)(ii)(B)]
   b) *CSAPR NO_x Ozone Season Group 2 assurance provisions.* [§97.806(c)(2)]
      i) If total NO_x emissions during a control period in a given year from all base CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in Missouri exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for

such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for Missouri and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under §97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.825(b), of multiplying— [§97.806(c)(2)(i)]

(1) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the Missouri for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and [§97.806(c)(2)(i)(A)]

(2) The amount by which total NO_x emissions from all base CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in Missouri for such control period exceed the state assurance level. [§97.806(c)(2)(i)(B)]

ii) The permittee shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under §97.806(c)(2)(i), as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. [§97.806(c)(2)(ii)]

iii) Total NO_x emissions from all base CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in Missouri during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the Missouri NO_x Ozone Season Group 2 trading budget under §97.810(a) and the state's variability limit under §97.810(b). [§97.806(c)(2)(iii)]

iv) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO_x emissions from all base CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in Missouri during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the base CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in Missouri during a control period exceeds the common designated representative's assurance level. [§97.806(c)(2)(iv)]

v) To the extent the permittee fails to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with §97.806(c)(2)(i) through (iii), [§97.806(c)(2)(v)]

(1) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and [§97.806(c)(2)(v)(A)]

(2) Each CSAPR NO_x Ozone Season Group 2 allowance that the permittee fails to hold for such control period in accordance with §97.806(c)(2)(i) through (iii) and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act. [§97.806(c)(2)(v)(B)]

c) *Compliance periods.* [§97.806(c)(3)]

i) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under §97.806(c)(1) for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.830(b) and for each control period thereafter. [§97.806(c)(3)(i)]

ii) A base CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under §97.806(c)(2) for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.830(b) and for each control period thereafter. [§97.806(c)(3)(ii)]

d) *Vintage of CSAPR NO_x Ozone Season Group 2 allowances held for compliance.* [§97.806(c)(4)]
   i) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under §97.806(c)(1)(i) for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated or auctioned for such control period or a control period in a prior year. [§97.806(c)(4)(i)]
   ii) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under §97.806(c)(1)(ii)(A) and (c)(2)(i) through (iii) for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. [§97.806(c)(4)(ii)]

e) *Allowance Management System requirements.* Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE. [§97.806(c)(5)]

f) *Limited authorization.* A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows: [§97.806(c)(6)]
   i) Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and [§97.806(c)(6)(i)]
   ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act. [§97.806(c)(6)(ii)]

g) *Property right.* A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right. [§97.806(c)(7)]

4. *Title V permit requirements.* [§97.806(d)]
   a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE. [§97.806(d)(1)]
   b) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to §§97.830 through 97.835, and the requirements for a CEMS (pursuant to 40 CFR Part 75, Subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to §75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with this paragraph and §70.7(e)(2)(i)(B). [§97.806(d)(2)]

5. *Additional recordkeeping and reporting requirements.* [§97.806(e)]
   a) Unless otherwise provided, the permittee shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the Administrator. [§97.806(e)(1)]

i) The certificate of representation under §97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.816 changing the designated representative. [§97.806(e)(1)(i)]
ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE. [§97.806(e)(1)(ii)]
iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program. [§97.806(e)(1)(iii)]

b) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in §97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Part 70. [§97.806(e)(2)]

6. *Liability.* [§97.806(f)]
   a) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the permittee. [§97.806(f)(1)]
   b) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the permittee. [§97.806(f)(2)]
7. *Effect on other authorities.* No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under §97.805 shall be construed as exempting or excluding the permittee, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of Missouri's approved State implementation plan, a federally enforceable permit, or the Clean Air Act. [§97.806(g)]

<u>CSAPR SO_2 Group 1 Trading Program Requirements:</u>

1. *Designated representative requirements.* The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with §§97.613 through 97.618. [§97.606(a)]
2. *Emissions monitoring, reporting, and recordkeeping requirements.* [§97.606(b)]
   a) The permittee, and the designated representative, of each CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of §97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), §97.631 (initial monitoring system certification and recertification procedures), §97.632 (monitoring system out-of-control periods), §97.633 (notifications concerning monitoring), §97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and §97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements). [§97.606(b)(1)]
   b) The emissions data determined in accordance with §§97.630 through 97.635 shall be used to calculate allocations of CSAPR SO_2 Group 1 allowances under §97.611(a)(2) and (b) and

§97.612 and to determine compliance with the CSAPR SO_2 Group 1 emissions limitation and assurance provisions under §97.606(c), provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with §§97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero. [§97.606(b)(2)]

3. *SO_2 emissions requirements.* [§97.606(c)]
   a) *CSAPR SO_2 Group 1 emissions limitation*. [§97.606(c)(1)]
      i) As of the allowance transfer deadline for a control period in a given year, the permittee shall hold, in the source's compliance account, CSAPR SO_2 Group 1 allowances available for deduction for such control period under §97.624(a) in an amount not less than the tons of total SO_2 emissions for such control period from all CSAPR SO_2 Group 1 units at the source. [§97.606(c)(1)(i)]
      ii) If total SO_2 emissions during a control period in a given year from the CSAPR SO_2 Group 1 units at a CSAPR SO_2 Group 1 source are in excess of the CSAPR SO_2 Group 1 emissions limitation set forth in §97.606(c)(1)(i), then: [§97.606(c)(1)(ii)]
         (1) The permittee shall hold the CSAPR SO_2 Group 1 allowances required for deduction under §97.624(d); and [§97.606(c)(1)(ii)(A)]
         (2) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act. [§97.606(c)(1)(ii)(B)]
   b) *CSAPR SO_2 Group 1 assurance provisions*. [§97.606(c)(2)]
      i) If total SO_2 emissions during a control period in a given year from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in Missouri exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO_2 emissions during such control period exceeds the common designated representative's assurance level for Missouri and such control period, shall hold (in the assurance account established for the permittee of such group) CSAPR SO_2 Group 1 allowances available for deduction for such control period under §97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with §97.625(b), of multiplying— [§97.606(c)(2)(i)]
         (1) The quotient of the amount by which the common designated representative's share of such SO_2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in Missouri for such control period, by which each common designated representative's share of such SO_2 emissions exceeds the respective common designated representative's assurance level; and [§97.606(c)(2)(i)(A)]
         (2) The amount by which total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in Missouri for such control period exceed the state assurance level. [§97.606(c)(2)(i)(B)]
      ii) The permittee shall hold the CSAPR SO_2 Group 1 allowances required under §97.606(c)(2)(i), as of midnight of November 1 (if it is a business day), or midnight of the

first business day thereafter (if November 1 is not a business day), immediately after the year of such control period. [§97.606(c)(2)(ii)]

iii) Total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in Missouri during a control period in a given year exceed the state assurance level if such total SO_2 emissions exceed the sum, for such control period, of the Missouri SO_2 Group 1 trading budget under §97.610(a) and the state's variability limit under §97.610(b). [§97.606(c)(2)(iii)]

iv) It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO_2 emissions from all CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in Missouri during a control period exceed the state assurance level or if a common designated representative's share of total SO_2 emissions from the CSAPR SO_2 Group 1 units at CSAPR SO_2 Group 1 sources in the during a control period exceeds the common designated representative's assurance level. [§97.606(c)(2)(iv)]

v) To the extent the permittee fails to hold CSAPR SO_2 Group 1 allowances for a control period in a given year in accordance with §97.606(c)(2)(i) through (iii), [§97.606(c)(2)(v)]

(1) The permittee shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and [§97.606(c)(2)(v)(A)]

(2) Each CSAPR SO_2 Group 1 allowance that the permittee fails to hold for such control period in accordance with §97.606(c)(2)(i) through (iii) and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act. [§97.606(c)(2)(v)(B)]

c) *Compliance periods.* [§97.606(c)(3)]

i) A CSAPR SO_2 Group 1 unit shall be subject to the requirements under §97.606(c)(1) for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under §97.630(b) and for each control period thereafter. [§97.606(c)(3)(i)]

ii) A CSAPR SO_2 Group 1 unit shall be subject to the requirements under §97.606(c)(2) for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under §97.630(b) and for each control period thereafter. [§97.606(c)(3)(ii)]

d) *Vintage of CSAPR SO_2 Group 1 allowances held for compliance*. [§97.606(c)(4)]

i) A CSAPR SO_2 Group 1 allowance held for compliance with the requirements under §97.606(c)(1)(i) for a control period in a given year must be a CSAPR SO_2 Group 1 allowance that was allocated or auctioned for such control period or a control period in a prior year. [§97.606(c)(4)(i)]

ii) A CSAPR SO_2 Group 1 allowance held for compliance with the requirements under §97.606(c)(1)(ii)(A) and (2)(i) through (iii) for a control period in a given year must be a CSAPR SO_2 Group 1 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year. [§97.606(c)(4)(ii)]

e) *Allowance Management System requirements*. Each CSAPR SO_2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC. [§97.606(c)(5)]

f) *Limited authorization*. A CSAPR SO_2 Group 1 allowance is a limited authorization to emit one ton of SO_2 during the control period in one year. Such authorization is limited in its use and duration as follows: [§97.606(c)(6)]

i) Such authorization shall only be used in accordance with the CSAPR SO_2 Group 1 Trading Program; and [§97.606(c)(6)(i)]
ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act. [§97.606(c)(6)(ii)]

g) *Property right*. A CSAPR SO_2 Group 1 allowance does not constitute a property right. [§97.606(c)(7)]

4. *Title V permit revision requirements.* [§97.606(d)]
   a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO_2 Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC. [§97.606(d)(1)]
   b) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to §§97.630 through 97.635, and the requirements for a CEMS (pursuant to 40 CFR Part 75, Subpart B), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to §75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E), Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with this paragraph and §70.7(e)(2)(i)(B). [§97.606(d)(2)]
5. *Additional recordkeeping and reporting requirements*. [§97.606(e)]
   a) Unless otherwise provided, the permittee shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of five years from the date the document is created. This period may be extended for cause, at any time before the end of five years, in writing by the Administrator. [§97.606(e)(1)]
      i) The certificate of representation under §97.616 for the designated representative for the source and each CSAPR SO_2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under §97.616 changing the designated representative. [§97.606(e)(1)(i)]
      ii) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC. [§97.606(e)(1)(ii)]
      iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO_2 Group 1 Trading Program. [§97.606(e)(1)(iii)]
   b) The designated representative of a CSAPR SO_2 Group 1 source and each CSAPR SO_2 Group 1 unit at the source shall make all submissions required under the CSAPR SO_2 Group 1 Trading Program, except as provided in §97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Part 70. [§97.606(e)(2)]
6. *Liability*. [§97.606(f)]
   a) Any provision of the CSAPR SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 source or the designated representative of a CSAPR SO_2 Group 1 source shall also apply to the permittee. [§97.606(f)(1)]

b) Any provision of the CSAPR SO_2 Group 1 Trading Program that applies to a CSAPR SO_2 Group 1 unit or the designated representative of a CSAPR SO_2 Group 1 unit shall also apply to the permittee. [§97.606(f)(2)]

7. *Effect on other authorities*. No provision of the CSAPR SO_2 Group 1 Trading Program or exemption under §97.605 shall be construed as exempting or excluding the permittee, and the designated representative, from compliance with any other provision of Missouri's state implementation plan, a federally enforceable permit, or the Clean Air Act. [§97.606(g)]

PERMIT CONDITION 007 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants[11]	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in 1967) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

Emission Limitation:

1. The permittee shall not cause or permit to be discharged into the atmosphere from any existing emission unit any visible emissions with an opacity greater than 40 percent for any continuous six-minute period. [10 CSR 10-6.220(3)(A)1]
2. Exception: The permittee may discharge into the atmosphere from any source of emissions for one continuous six-minute period in any 60 minutes air contaminants with an opacity up to 60 percent. [10 CSR 10-6.220(3)(A)2]

Monitoring:

1. The permittee shall install, calibrate, and maintain a COMS according to the following conditions: [10 CSR 10-6.220(3)(F)1]
   a) Source operating time includes any time fuel is being combusted and/or a fan is being operated. [10 CSR 10-6.220(3)(F)1.A]
   b) Cycling time. Cycling times include the total time a monitoring system requires to sample, analyze, and record an emission measurement. Continuous monitoring systems for measuring opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 10-second period. [10 CSR 10-6.220(3)(F)1.B]
   c) Certification. All COMS shall be certified by the Director after review and acceptance of a demonstration of conformance with NSPS Appendix B Performance Specification 1. [10 CSR 10-6.220(3)(F)1.C]
   d) Audit authority. All COMS shall be subject to audits conducted by Department of Natural Resources' personnel, and all COMS records shall be made available upon request by Department of Natural Resources' personnel. [10 CSR 10-6.220(3)(F)1.D]
2. If the COMS is malfunctioning, a non-department qualified observer measurement may be used as a temporary substitute. [10 CSR 10-6.220(3)(G)]

[11] As effective December 30, 2016

Reporting and Recordkeeping:

1. The permittee shall submit a quarterly written report to the Director. All quarterly reports shall be postmarked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data: [10 CSR 10-6.220(4)(A)]
   a) A summary including total time for each cause of excess emissions and/or monitor downtime; [10 CSR 10-6.220(4)(A)1]
   b) Nature and cause of excess emissions, if known; [10 CSR 10-6.220(4)(A)2]
   c) The six-minute average opacity values greater than the opacity emission requirements (the average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions); [10 CSR 10-6.220(4)(A)3]
   d) The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and [10 CSR 10-6.220(4)(A)4]
   e) If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired, or adjusted, this information shall be stated in the report. [10 CSR 10-6.220(4)(A)5]
2. The permittee shall maintain a file (hard copy or electronic version) of the following information for a minimum of five years from the date the data was collected: [10 CSR 10-6.220(4)(B) and §70.6(a)(3)(ii)]
   a) All information reported in the quarterly summaries; and [10 CSR 10-6.220(4)(B)1]
   b) All six-minute opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records. [10 CSR 10-6.220(4)(B)2]
3. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

PERMIT CONDITION 008 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds[12]	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in 1967) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

Emission Limitation:

The permittee shall limit their SO_2 emissions into the atmosphere to 10.0 pounds of SO_2 per MMBtu actual heat input averaged on any consecutive three-hour basis. [10 CSR 10-6.260(3)(B)2.B]

Monitoring/Recordkeeping:

1. The permittee shall demonstrate compliance with the emission limitations using an SO_2 CEMS. The SO_2 CEMS shall be certified by the permittee as being installed and operational in accordance with Performance Specifications 2 and 3 of NSPS Appendix B. The SO_2 CEMS shall be operated and maintained in accordance with the procedures and standards set out at §60.13(d) and (e)(2). [10 CSR 10-6.260(3)(B)3.A(V)]
2. The permittee shall maintain a file of the following: [10 CSR 10-6.260(4)(B)]
   a) All information reported in the quarterly reports; [10 CSR 10-6.260(4)(B)1]
   b) All other data collected by the SO_2 CEMS or necessary to convert the monitoring data to the units of the emission limit. [10 CSR 10-6.260(4)(B)2]
   c) All SO_2 CEMS performance evaluations; [10 CSR 10-6.260(4)(B)3]
   d) All SO_2 CEMS calibration checks; [10 CSR 10-6.260(4)(B)4]
   e) Monitoring system, monitoring device, and performance testing measurements; and [10 CSR 10-6.260(4)(B)5]
   f) Adjustments and maintenance performed on these systems or devices. [10 CSR 10-6.260(4)(B)6]
3. All records shall be maintained for five years and shall be made available for inspection to the Department of Natural Resources upon request. [§70.6(a)(3)(ii)]

[12] This regulation was rescinded by the State of Missouri on November 30, 2015. The regulation remains in this operating permit as it is contained in Missouri's SIP and remains an applicable federal requirement. This is a federal only requirement. This permit condition will no longer be applicable when EPA takes final action to incorporate 10 CSR 10-6.261 in Missouri's SIP in place of 10 CSR 10-6.260. No action is required on the part of the permittee to remove this permit condition from this operating permit upon incorporation of 10 CSR 10-6.261 into Missouri's SIP.

Reporting:

1. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]
2. The permittee shall submit a written report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 of excess emissions for each calendar quarter within 30 days following the end of the quarter. Each report shall: [10 CSR 10-6.260(4)(A)]
   a) Contain the magnitude of SO_2 emissions as follows: [10 CSR 10-6.260(4)(A)1]
      i) The magnitude shall be reported in pounds per MMBtu of all daily (00:01 to 24:00) averages of SO_2 emissions greater than the emission rate. [10 CSR 10-6.260(4)(A)1.A]
   b) Identify each period during which the SO_2 CEMS was inoperative, except for zero and span checks and the nature of repairs and adjustments performed to make the system operative; and [10 CSR 10-6.260(4)(A)2]
   c) Contain a statement that no excess emissions occurred during the quarter, except as reported or during periods when the SO_2 CEMS was inoperative. Data reduction and conversion procedures shall conform to the provisions of §60.13(h) and §60.45(e) and (f); [10 CSR 10-6.260(4)(A)3]

PERMIT CONDITION 009 10 CSR 10-6.261 Control of Sulfur Dioxide Emissions[13]	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in 1967) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, COMS, Sorbent Trap Monitoring System

Emission Limitation:

The permittee shall limit their SO_2 emissions into the atmosphere to 10.0 pounds of SO_2 per MMBtu actual heat input averaged on any consecutive three-hour basis. [10 CSR 10-6.261(3)(A)]

Compliance Method:

1. Compliance shall be determined as follows: [10 CSR 10-6.261(3)(E)]
   a) SO_2 CEMS data. [10 CSR 10-6.261(3)(E)1]

Recordkeeping and Reporting:

1. The permittee shall — [10 CSR 10-6.261(4)(A)]
   a) Report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the Director[14] for each calendar quarter within 30 days following the end of the quarter. In all cases, the notification shall be a written report and shall include, at a minimum, the following: [10 CSR 10-6.261(4)(A)1]
      i) Name and location of source; [10 CSR 10-6.261(4)(A)1.A]
      ii) Name and telephone number of person responsible for the source; [10 CSR 10-6.261(4)(A)1.B]
      iii) Identity and description of the equipment involved; [10 CSR 10-6.261(4)(A)1.C]
      iv) Time and duration of the period of SO_2 excess emissions; [10 CSR 10-6.261(4)(A)1.D]
      v) Type of activity; [10 CSR 10-6.261(4)(A)1.E]
      vi) Estimate of the magnitude of the SO_2 excess emissions expressed in pounds per hour and the operating data and calculations used in estimating the magnitude; [10 CSR 10-6.261(4)(A)1.F]

[13] This regulation has not yet been adopted into Missouri's SIP; therefore, this regulation is a state only requirement. Upon adoption into Missouri's SIP this regulation will be both a state and federal requirement. As effective November 30, 2015

[14] P.O. Box 176, Jefferson City, MO 65102

vii) Measures taken to mitigate the extent and duration of the SO_2 excess emissions; and [10 CSR 10-6.261(4)(A)1.G]

viii) Measures taken to remedy the situation which caused the SO_2 excess emissions and the measures taken or planned to prevent the recurrence of these situations; [10 CSR 10-6.261(4)(A)1.H]

b) Maintain a list of modifications to each boiler's operating procedures or other routine procedures instituted to prevent or minimize the occurrence of any excess SO_2 emissions; [10 CSR 10-6.261(4)(A)2]

c) Maintain a record of data, calculations, results, records, and reports from any SO_2 emissions performance test, SO_2 continuous emission monitoring, fuel deliveries, and/or fuel sampling tests; and [10 CSR 10-6.261(4)(A)3]

d) Maintain a record of SO_2 monitoring data, performance evaluations, calibration checks, monitoring system and device performance tests, and any adjustments and maintenance performed on these systems or devices. [10 CSR 10-6.261(4)(A)4]

2. The permittee shall also— [10 CSR 10-6.261(4)(B)]
   a) If SO_2 CEMS is already used to satisfy other requirements (other than only to demonstrate compliance with 10 CSR 10-6.261), continue to follow all correlating SO_2 CEMS requirements[15]. [10 CSR 10-6.261(4)(B)1]
3. All required reports and records shall be retained on-site for a minimum of five years and made available within five business days upon written or electronic request by the Director. [10 CSR 10-6.261(4)(F)]
4. The permittee shall furnish the Director all data necessary to determine compliance status. [10 CSR 10-6.261(4)(G)]
5. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

[15] The SO_2 CEMS are used to satisfy the requirements of the Acid Rain Program and CSAPR.

PERMIT CONDITION 010 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines[16]	
Emission Source	**Description**
EP-03	1474 HP diesel Emergency Generator, 1983, Caterpillar 3512

Applicability:

1. Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions do not have to meet the requirements of this regulation per §63.6590(b)(3)(iii). In order to be considered an emergency stationary RICE, the RICE shall comply with the requirements specified in §63.6640(f) and meet the following criteria:
   a) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
   b) The stationary RICE is operated under limited circumstances for situations not included in Applicability 1.a, as specified in §63.6640(f).
2. The permittee shall operate the emergency stationary RICE according to the requirements in §63.6640(f)(1) through (3). In order for the engine to be considered an emergency stationary RICE under MACT ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §63.6640(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in §63.6640(f)(1) through (3), the engine will not be considered an emergency engine under MACT ZZZZ and shall meet all requirements for non-emergency engines. [§63.6640(f)]
   a) There is no time limit on the use of emergency stationary RICE in emergency situations. [§63.6640(f)(1)]
   b) The permittee may operate the emergency stationary RICE for any combination of the purposes specified in §63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §63.6640(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph. [§63.6640(f)(2)]
      i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [§63.6640(f)(2)(i)]
   c) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency

[16] Source: 69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3603, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6700, Jan. 30, 2013; 78 FR 14457, Mar. 6, 2013; 79 FR 11290, Feb. 27, 2014

situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in §63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, 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. [§63.6640(f)(3)]

Reporting:

The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

PERMIT CONDITION 011 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds[12]	
Emission Source	**Description**
EP-03	1474 HP Diesel Emergency Generator, 1983, Caterpillar 3512
EP-09	(8) 300 HP Diesel Barge River Pumps, 2002, Caterpillar
EP-13	(2) 345 HP Diesel Barge River Pumps, 2006, Caterpillar

Emission Limitation:
The permittee shall not cause or permit the emission into the atmosphere gases containing more than 500 ppmv of SO_2 or more than 35 mg/m^3 of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three-hour period. [10 CSR 10-6.260(3)(A)2]

Operational Limitation:
The engines shall only burn fuel oils #1 and #2 containing less than 8,480 ppm sulfur by weight[17].

Compliance Methods:
1. The permittee shall demonstrate compliance using: [10 CSR 10-6.260(3)(A)4]
   a) Fuel delivery records; or
   b) Fuel sampling and analysis.

Recordkeeping and Reporting:
1. The permittee shall maintain a record of data, calculations, results, records, and reports from any fuel deliveries, and/or fuel sampling tests.
2. If using fuel delivery records to demonstrate compliance, the permittee shall also maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable:
   a) The name, address, and contact information of the fuel supplier;
   b) The type of fuel (diesel, #2 fuel oil, etc.); and
   c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur.
3. All required reports and records shall be retained on-site for a minimum of five years and made available within five business days upon written or electronic request by the Administrator. [§70.6(a)(3)(ii)]
4. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

[17] Compliance with the operational limitation demonstrates compliance with the emission limitation as AP-42 Table 3.4-1 (October 1996) provides an emission factor of 1.01S lb/MMBtu SO_x, where S is the sulfur content (%). Using an F factor of 10,320 wscf/MMBtu from NSPS Appendix A Method 19 Table 19-1, a conversion factor of 1.660E-7 lb/scf per ppmv from NSPS Appendix A Method 19, and the sulfur content limit of 8,480 ppm, 1.01S lb/MMBtu SO_x converts to 499.95 ppmv SO_2.

PERMIT CONDITION 012 10 CSR 10-6.261 Control of Sulfur Dioxide Emissions[13]	
Emission Source	**Description**
EP-03	1474 HP Diesel Emergency Generator, 1983, Caterpillar 3512
EP-09	(8) 300 HP Diesel Barge River Pumps, 2002, Caterpillar
EP-13	(2) 345 HP Diesel Barge River Pumps, 2006, Caterpillar

Fuel Restriction:
The permittee shall not combust fuel in these engines which contains greater than 8,812 ppm sulfur by weight. [10 CSR 10-6.261(3)(C)]

Compliance Methods:
1. The permittee shall demonstrate compliance using: [10 CSR 10-6.261(3)(E)3]
   a) Fuel delivery records; or
   b) Fuel sampling and analysis.

Reporting and Recordkeeping:
1. The permittee shall report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the Director for each calendar quarter within 30 days following the end of the quarter. In all cases, the notification shall be a written report and shall include, at a minimum, the following: [10 CSR 10-6.261(4)(A)1]
   a) Name and location of source;
   b) Name and telephone number of person responsible for the source;
   c) Identity and description of the equipment involved;
   d) Time and duration of the period of SO_2 excess emissions;
   e) Type of activity;
   f) Estimate of the magnitude of the SO_2 excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude;
   g) Measures taken to mitigate the extent and duration of the SO_2 excess emissions; and
   h) Measures taken to remedy the situation which caused the SO_2 excess emissions and the measures taken or planned to prevent the recurrence of these situations;
2. The permittee shall maintain a list of modifications to the source's operating procedures or other routine procedures instituted to prevent or minimize the occurrence of any excess SO_2 emissions; [10 CSR 10-6.261(4)(A)2]
3. The permittee shall maintain a record of data, calculations, results, records, and reports from any fuel deliveries, and/or fuel sampling tests. [10 CSR 10-6.261(4)(A)3]
4. If using fuel delivery records to demonstrate compliance, the permittee shall also maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable: [10 CSR 10-6.261(4)(C)]
   a) The name, address, and contact information of the fuel supplier;
   b) The type of fuel (diesel, #2 fuel oil, etc.);
   c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
   d) The heating value of the fuel.

5. If using fuel sampling and analysis to demonstrate compliance, the permittee shall also follow the requirements in 10 CSR 10-6.261(5)(D). [10 CSR 10-6.261(4)(D)]
6. All required reports and records shall be retained on-site for a minimum of five years and made available within five business days upon written or electronic request by the Director. [10 CSR 10-6.261(4)(F)]
7. The permittee shall furnish the Director all data necessary to determine compliance status. [10 CSR 10-6.261(4)(G)]
8. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

PERMIT CONDITION 013 10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart Y – Standards of Performance for Coal Preparation and Processing Plants[18]	
Emission Source	**Description**
EP-04	Rotary Car Dumper Coal Unloading System, 830 tph, 1993, Heyl & Patterson, Inc. Control Equipment: Low Temperature Fabric Filter
EP-05C	Railcar Unloading Coal Conveyor #A3, 830 tph, 1980, Roberts & Schaefer, Inc. Control Equipment: Low Temperature Fabric Filter
EP-05D	Coal Conveyors #6 (1A), 7 (1B), 8 (2A), & 9 (3A), 830 tph, 1993, Roberts & Schaefer, Inc. Control Equipment: Low Temperature Fabric Filter
EP-06	(4) Coal Crushers, 830 tph, 1993, Pennsylvania Crushers S x CBG 225-FG Control Equipment: Low Temperature Fabric Filter

Standards for Coal Processing and Conveying Equipment and Transfer and Loading Systems:
The permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, or coal transfer and loading system processing coal gases which exhibit 20 percent opacity or greater. [§60.254(a)]

Performance Tests and Other Compliance Requirements:
1. The permittee shall conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257. [§60.255(a)]
2. Monitoring schedule:
   a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then:
      i) The permittee shall conduct observations once every two weeks for a period of eight weeks. If a violation is noted, the permittee shall revert to weekly monitoring. Should no violation of this regulation be observed during this period then:
         (1) The permittee shall conduct observations once per month. If a violation is noted, the permittee shall revert to weekly monitoring.
3. If the permittee reverts to weekly monitoring at any time, the monitoring schedule shall progress in an identical manner from the initial monitoring schedule.
4. Observations are only required when the emission units are operating and when the weather conditions allow.
5. Issuance of a new, amended, or modified operating permit does not restart the monitoring schedule.
6. The permittee shall conduct visible emissions observation on these emission units using the procedures contained in U.S. EPA Test Method 22. Each Method 22 observation shall be conducted for a minimum of six-minutes. If no visible emissions are observed from the emission unit using Method 22, then no Method 9 is required for the emission unit.
7. For emission units with visible emissions, the permittee shall have a certified Method 9 observer conduct a U.S. EPA Test Method 9 opacity observation. The permittee may choose to forego Method 22 observations and instead begin with a Method 9 opacity observation. The certified Method 9 observer shall conduct each Method 9 opacity observation for a minimum of 30-minutes.

[18] SOURCE: 74 FR 51977, Oct. 8, 2009

Recordkeeping:

1. The permittee shall maintain records of all observation results for each emission unit using Attachments B and C or equivalent forms.
2. All records shall be maintained for five years and shall be made available for inspection to the Department of Natural Resources upon request. [§70.6(a)(3)(ii)]

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten days after an exceedance of the opacity limitation.
2. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

PERMIT CONDITION 014 10 CSR 10-6.060 Construction Permits Required Construction Permit 1292-014, Issued December 16, 1992	
Emission Source	**Description**
EP-04	Rotary Car Dumper Coal Unloading System, 830 tph, 1993, Heyl & Patterson, Inc. Control Equipment: Low Temperature Fabric Filter
EP-05A	Railcar Unloading Conveyors #A1, A2, B1, & B2, 830 tph, 1970, Jervis B. Webb Control Equipment: Low Temperature Fabric Filter
EP-05B	Radial Stacker Coal Conveyors #C1, C2, D1, & D2, 830 tph, 1970, Jervis B. Webb Control Equipment: Dust Suppression & Water Spray
EP-05C	Railcar Unloading Coal Conveyor #A3, 830 tph, 1980, Roberts & Schaefer, Inc. Control Equipment: Low Temperature Fabric Filter
EP-05D	Coal Conveyors #6 (1A), 7 (1B), 8 (2A), & 9 (3A), 830 tph, 1993, Roberts & Schaefer, Inc. Control Equipment: Low Temperature Fabric Filter
EP-06	(4) Coal Crushers, 830 tph, 1993, Pennsylvania Crushers S x CBG 225-FG Control Equipment: Low Temperature Fabric Filter
EP-07	(2) Flyash Silo Systems: Collects ash from the ESPs and air heater hoppers and transfers the ash to a pair of storage silos, 1993, United Conveyor Corp. Control Equipment: Low Temperature Fabric Filter

Operational Limitations:

1. The conveyors shall be totally enclosed. Conveyor belt speeds shall be limited in order to reduce dusting problems. [Special Condition 1]
2. Baghouse control shall be provided at all coal transfer points and storage vessels. Compliance with this condition may be obtained by ducting emissions from one or more transfer points or storage vessels to one or more baghouses. [Special Condition 2]
3. The transfer points, on to and off of the radial stacker, shall be controlled with wet suppression equipment. [Special Condition 3]
4. Dustless unloaders shall be used to transfer the ash from the storage silos to enclosed tank trucks. The ash referenced in this condition is that ash collected from the precipitator and the air heater hoppers. [Special Condition 4]

Monitoring:

1. Once every 24 hours, when the emission source is operating, the permittee shall ensure the proper operation of each low temperature fabric filter according to one of the following methods:
   a) Monitor and record the operating pressure drop across the control device. The operating pressure drop shall be maintained within the normal operating range for the control device. If the operating pressure drop is outside of the normal operating range, the permittee shall conduct a visible emissions observation. [§70.6(a)(3)(i)(B)]
   b) Conduct a 6-minute Method 22 visible emissions observation of the control device. If visible emissions are observed, the permittee shall investigate the cause and take corrective action to restore the control device to proper operation. [§70.6(a)(3)(i)(B)]
2. Once every 24 hours, when the emission source is operating, the permittee shall ensure the proper operation of the dust suppression and water spray control equipment by conducting a 6-minute Method 22 visible emissions observation. If visible emissions are observed, the permittee shall investigate the cause and take corrective action to restore the control equipment to proper operation. [§70.6(a)(3)(i)(B)]

Recordkeeping:

1. The permittee shall retain records of all pressure drop readings and visible emissions observations conducted on each low temperature fabric filter.
2. The permittee shall retain records of all visible emissions observations conducted on the dust suppression and water spray control equipment.
3. The permittee shall maintain an operating and maintenance log (using Attachment D or an equivalent form) for the low temperature fabric filters and dust suppression and water spray control equipment which shall include the following:
   a) Maintenance activities, with inspection schedule, repair actions, and replacements, etc. and
   b) Dates of all above schedules, incidents, activities, and actions.
4. The permittee shall maintain a malfunction log (using Attachment D or an equivalent form) for the low temperature fabric filters and dust suppression and water spray control equipment which shall include but not be limited to the following, incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions.
5. The permittee shall maintain all records required by this permit for not less than five years and shall make them available to any Department of Natural Resources' personnel upon request. [§70.6(a)(3)(ii)]

Reporting:

The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

PERMIT CONDITION 015 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants[11]	
Emission Source	**Description**
EP-05A	Railcar Unloading Conveyors #A1, A2, B1, & B2, 830 tph, 1970, Jervis B. Webb Control Equipment: Low Temperature Fabric Filter
EP-05B	Radial Stacker Coal Conveyors #C1, C2, D1, & D2, 830 tph, 1970, Jervis B. Webb Control Equipment: Dust Suppression & Water Spray
IA-20	Soot Blowing Air Compressor Oil Storage Tanks: (3) 1,000 gallons Soot Blowing Electric Air Compressor Vents

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 40 percent for any continuous six-minute period. [10 CSR 10-6.220(3)(A)1]
2. Exception: The permittee may discharge into the atmosphere from any emission unit visible emissions with an opacity up to 60 percent for one continuous six-minute period in any 60 minutes. [10 CSR 10-6.220(3)(A)2]
3. Failure to demonstrate compliance with 10 CSR 10-6.220(3)(A) solely because of the presences of uncombined water shall not be a violation. [10 CSR 10-6.220(3)(B)]

Monitoring:

1. Monitoring schedule:
   a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then:
      i) The permittee shall conduct observations once every two weeks for a period of eight weeks. If a violation is noted, the permittee shall revert to weekly monitoring. Should no violation of this regulation be observed during this period then:
         (1) The permittee shall conduct observations once per month. If a violation is noted, the permittee shall revert to weekly monitoring.
2. If the permittee reverts to weekly monitoring at any time, the monitoring schedule shall progress in an identical manner from the initial monitoring schedule.
3. Observations are only required when the emission units are operating and when the weather conditions allow.
4. Issuance of a new, amended, or modified operating permit does not restart the monitoring schedule.
5. The permittee shall conduct visible emissions observation on these emission units using the procedures contained in U.S. EPA Test Method 22. Each Method 22 observation shall be conducted for a minimum of six-minutes. If no visible emissions are observed from the emission unit using Method 22, then no Method 9 is required for the emission unit.
6. For emission units with visible emissions, the permittee shall have a certified Method 9 observer conduct a U.S. EPA Test Method 9 opacity observation. The permittee may choose to forego Method 22 observations and instead begin with a Method 9 opacity observation. The certified Method 9 observer shall conduct each Method 9 opacity observation for a minimum of 30-minutes.

Record Keeping:

1. The permittee shall maintain records of all observation results for each emission unit using Attachments B and C or equivalent forms.

2. All records shall be maintained for five years and shall be made available for inspection to the Department of Natural Resources upon request. [§70.6(a)(3)(ii)]

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten days after an exceedance of the emission limitation.
2. The permittee shall report any deviations from the 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 10-6.220 Restriction of Emission of Visible Air Contaminants[11]	
Emission Source	**Description**
EP-07	(2) Flyash Silo Systems: Collects ash from the ESPs and air heater hoppers and transfers the ash to a pair of storage silos, 1993, United Conveyor Corp. Control Equipment: Low Temperature Fabric Filter
EP-11	Fly Ash Truck Loading, 40 tph
EP-12	Fly Ash Truck Unloading, 40 tph
EP-14	Bottom Ash Truck Loading, 40 tph
EP-15	Bottom Ash Truck Unloading, 40 tph
EU0290	Tioga Heater #1 at Crusher House, 2017, 2.4 MMBtu/hr fuel oil #2
EU0300	Tioga Heater #2 at Crusher House, 2016, 2.4 MMBtu/hr fuel oil #2
FE-03	Fly Ash Unloading to Ash Ponds, 40 tph
EP-16	PAC Silo with inherent bin vent filter, 90,000 scf/hr, 2190 tpy

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 for any continuous six-minute period. [10 CSR 10-6.220(3)(A)1]
2. Exception: The permittee may discharge into the atmosphere from any emission unit visible emissions with an opacity up to 60 percent for one continuous six-minute period in any 60 minutes. [10 CSR 10-6.220(3)(A)2]
3. Failure to demonstrate compliance with 10 CSR 10-6.220(3)(A) solely because of the presences of uncombined water shall not be a violation. [10 CSR 10-6.220(3)(B)]

Monitoring:

1. Monitoring schedule:
   a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then:
      i) The permittee shall conduct observations once every two weeks for a period of eight weeks. If a violation is noted, the permittee shall revert to weekly monitoring. Should no violation of this regulation be observed during this period then:
         (1) The permittee shall conduct observations once per month. If a violation is noted, the permittee shall revert to weekly monitoring.
2. If the permittee reverts to weekly monitoring at any time, the monitoring schedule shall progress in an identical manner from the initial monitoring schedule.
3. Observations are only required when the emission units are operating and when the weather conditions allow.
4. Issuance of a new, amended, or modified operating permit does not restart the monitoring schedule.
5. The permittee shall conduct visible emissions observation on these emission units using the procedures contained in U.S. EPA Test Method 22. Each Method 22 observation shall be conducted for a minimum of six-minutes. If no visible emissions are observed from the emission unit using Method 22, then no Method 9 is required for the emission unit.
6. For emission units with visible emissions, the permittee shall have a certified Method 9 observer conduct a U.S. EPA Test Method 9 opacity observation. The permittee may choose to forego Method 22 observations and instead begin with a Method 9 opacity observation. The certified Method 9 observer shall conduct each Method 9 opacity observation for a minimum of 30-minutes.

Record Keeping:

1. The permittee shall maintain records of all observation results for each emission unit using Attachments B and C or equivalent forms.
2. All records shall be maintained for five years and shall be made available for inspection to the Department of Natural Resources upon request. [§70.6(a)(3)(ii)]

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten days after an exceedance of the emission limitation.
2. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 017 10 CSR 10-6.060 Construction Permits Required Construction Permit 122002-013, Issued December 16, 2002	
Emission Source	**Description**
EP-09	(8) 300 HP Diesel Caterpillar Barge River Pumps, 2002

Emission Limitation:
The permittee shall emit less than 40 tons of NO_x from the eight Caterpillar 300 HP diesel fired internal combustion engines (EP-09) in any consecutive 12 month period. [Special Condition 1.A]

Monitoring/Recordkeeping:
The permittee shall maintain records of monthly and 12-month rolling total NO_x emissions from EP-09 Eight 300 HP Diesel Barge River Pumps using Attachment G or an equivalent form. The permittee shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 1.B]

Reporting:
1. The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than 10 days after the end of the month during which records indicate an exceedance of the emission limitation. [Special Condition 1.C]
2. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

PERMIT CONDITION 018 10 CSR 10-6.060 Construction Permits Required Construction Permit 082006-011, Issued August 29, 2006	
Emission Source	**Description**
EP-11	Fly Ash Truck Loading, 40 tph
EP-12	Fly Ash Truck Unloading, 40 tph
EP-14	Bottom Ash Truck Loading, 40 tph
EP-15	Bottom Ash Truck Unloading, 40 tph
FE-04	Fly Ash Hauling – Paved Haul Road to Landfill, 0.152 miles, 40 tph
FE-05	Fly Ash & Bottom Ash Hauling – Unpaved Haul Road to Landfill, 0.975 miles, 80 tph
FE-06	Landfill Maintenance Vehicular Activity, 0.1 miles, 0.5 tph
FE-07	Landfill Wind Erosion, 25 acres

Emission Limitation:

The permittee shall emit less than 15 tons of PM_{10} in any consecutive 12 month period from the modified fly ash/bottom ash handling system (FE-04, FE-05, FE-06, FE-07, EP-11, EP-12, EP-14, and EP-15). [Special Condition 1.A]

Operational Limitations:

1. The permittee shall control particulate emissions from EP-11 Fly Ash Truck Loading by the application of water spray. [Special Condition 2.A]
2. The permittee shall not unload to the landfill any fly ash which has not been treated using the paddle mixer to add water to the ash. [Special Condition 2.B]
3. In accordance with 10 CSR 10-6.170, the permittee shall water the unpaved landfill haul road (FE-05) whenever conditions exist which would cause visible fugitive emissions to enter the ambient air beyond the property boundary. [Special Condition 3]
4. In accordance with 10 CSR 10-6.170, maintenance and/or repair of the paved landfill haul road surface (FE-04) shall be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these roads. [Special Condition 4]

Monitoring/Recordkeeping:

1. The permittee shall maintain an accurate record of monthly and 12-month rolling total PM_{10} emissions from the Utility Waste Disposal Process using Attachment H or an equivalent form. The permittee shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 1.B]
2. The permittee shall maintain records of the amount of water spray applied to control particulate emissions from EP-11 Fly Ash Truck Loading on a daily basis. [§70.6(a)(3)(i)(B)]
3. The permittee shall maintain records of all 10 CSR 10-6.170 visible emissions observations. [§70.6(a)(3)(i)(B)]
4. The permittee shall maintain records of all maintenance and repair activities conducted on the paved landfill haul road (FE-04). [§70.6(a)(3)(i)(B)]

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten days after the end of the month during which records indicate an exceedance of the emission limitation. [Special Condition 1.C]
2. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

PERMIT CONDITION 019 10 CSR 10-6.060 Construction Permits Required Construction Permit 052006-001, Issued May 1, 2006	
Emission Source	**Description**
EP-13	(2) 345 HP Diesel Barge River Pumps, 2006

Emission Limitation:
The permittee shall emit less than 40 tons of NO_x from EP-13 (2) Caterpillar 345 HP diesel fired internal combustion engines in any consecutive 12-month period. [Special Condition 1.A]

Monitoring/Recordkeeping:
The permittee shall maintain records of monthly and 12-month rolling total NO_x emissions from EP-13 (2) 345 HP Diesel Barge River Pumps using Attachment I or an equivalent form. The permittee shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 1.B]

Reporting:
1. The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than 10 days after the end of the month during which records indicate an exceedance of the emission limitation. [Special Condition 1.C]
2. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

PERMIT CONDITION 020 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds[12]	
Emission Source	**Description**
EU0290	Tioga Heater #1 at Crusher House, 2017, 2.4 MMBtu/hr fuel oil #2
EU0300	Tioga Heater #2 at Crusher House, 2016, 2.4 MMBtu/hr fuel oil #2

Emission Limitation:
The permittee shall limit their SO_2 emissions into the atmosphere to 10.0 pounds of SO_2 per MMBtu actual heat input averaged on any consecutive three-hour basis. [10 CSR 10-6.260(3)(B)2.B]

Operational Limitation:
The heaters shall only burn fuel oils #1 and #2 containing less than 0.5% sulfur by weight[19].

Compliance Methods:
1. The permittee shall demonstrate compliance using: [10 CSR 10-6.260(3)(A)4]
   a) Fuel delivery records; or
   b) Fuel sampling and analysis.

Recordkeeping and Reporting:
1. The permittee shall maintain a record of data, calculations, results, records, and reports from any fuel deliveries, and/or fuel sampling tests.
2. If using fuel delivery records to demonstrate compliance, the permittee shall also maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable:
   a) The name, address, and contact information of the fuel supplier;
   b) The type of fuel (diesel, #2 fuel oil, etc.); and
   c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur.
3. All required reports and records shall be retained on-site for a minimum of five years and made available within five business days upon written or electronic request by the Administrator. [§70.6(a)(3)(ii)]
4. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

[19] Compliance with the operational limitation demonstrates compliance with the emission limitation as AP-42 Section 1.3 "Fuel Oil Combustion" (May 2010) provides an emission factor of 142S lb/Mgal SO_x, where S is the sulfur content (%). Using a distillate oil heating value of 140 MMBtu/Mgal obtained from AP-42 Appendix A "Miscellaneous Data and Conversion Factors" (September 1985) and the sulfur content limit of 0.5%, 142S lb/Mgal SO_x converts to 0.51 lb/MMBtu SO_x.

PERMIT CONDITION 021 10 CSR 10-6.261 Control of Sulfur Dioxide Emissions[13]	
Emission Source	**Description**
EU0290	Tioga Heater #1 at Crusher House, 2017, 2.4 MMBtu/hr fuel oil #2
EU0300	Tioga Heater #2 at Crusher House, 2016, 2.4 MMBtu/hr fuel oil #2

Emission Limitation:
The permittee shall limit their SO_2 emissions into the atmosphere to 10.0 pounds of SO_2 per MMBtu actual heat input averaged on any consecutive three-hour basis. [10 CSR 10-6.261(3)(A)]

Fuel Restriction:
The heaters shall only burn fuel oils #1 and #2 containing less than 0.5% sulfur by weight[19].

Compliance Method:
1. Compliance shall be determined as follows: [10 CSR 10-6.261(3)(E)]
   a) Fuel delivery records; [10 CSR 10-6.261(3)(E)3.A]
   b) Fuel sampling and analysis; [10 CSR 10-6.261(3)(E)3.B]

Recordkeeping and Reporting:
1. The permittee shall — [10 CSR 10-6.261(4)(A)]
   a) Report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the Director[20] for each calendar quarter within 30 days following the end of the quarter. In all cases, the notification shall be a written report and shall include, at a minimum, the following: [10 CSR 10-6.261(4)(A)1]
      i) Name and location of source; [10 CSR 10-6.261(4)(A)1.A]
      ii) Name and telephone number of person responsible for the source; [10 CSR 10-6.261(4)(A)1.B]
      iii) Identity and description of the equipment involved; [10 CSR 10-6.261(4)(A)1.C]
      iv) Time and duration of the period of SO_2 excess emissions; [10 CSR 10-6.261(4)(A)1.D]
      v) Type of activity; [10 CSR 10-6.261(4)(A)1.E]
      vi) Estimate of the magnitude of the SO_2 excess emissions expressed in pounds per hour and the operating data and calculations used in estimating the magnitude; [10 CSR 10-6.261(4)(A)1.F]
      vii) Measures taken to mitigate the extent and duration of the SO_2 excess emissions; and [10 CSR 10-6.261(4)(A)1.G]
      viii) Measures taken to remedy the situation which caused the SO_2 excess emissions and the measures taken or planned to prevent the recurrence of these situations; [10 CSR 10-6.261(4)(A)1.H]
   b) Maintain a list of modifications to each boiler's operating procedures or other routine procedures instituted to prevent or minimize the occurrence of any excess SO_2 emissions; [10 CSR 10-6.261(4)(A)2]
   c) Maintain a record of data, calculations, results, records, and reports from any SO_2 emissions performance test, fuel deliveries, and/or fuel sampling tests; and [10 CSR 10-6.261(4)(A)3]
2. If using fuel delivery records to demonstrate compliance, the permittee shall also maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel

[20] P.O. Box 176, Jefferson City, MO 65102

delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable: [10 CSR 10-6.261(4)(C)]

a) The name, address, and contact information of the fuel supplier;
b) The type of fuel (diesel, #2 fuel oil, etc.);
c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
d) The heating value of the fuel.

3. If using fuel sampling and analysis to demonstrate compliance, the permittee shall also follow the requirements in 10 CSR 10-6.261(5)(D). [10 CSR 10-6.261(4)(D)]
4. All required reports and records shall be retained on-site for a minimum of five years and made available within five business days upon written or electronic request by the Director. [10 CSR 10-6.261(4)(F)]
5. The permittee shall furnish the Director all data necessary to determine compliance status. [10 CSR 10-6.261(4)(G)]
6. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit. [§70.6(a)(3)(iii)]

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the CFR, the 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 are only excerpts from the regulation or code, and are 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. 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.

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) Estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
   i) Measures taken to mitigate the extent and duration of the excess emissions; and
   j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
2. The permittee shall submit the paragraph 1 information to the Director in writing at least ten days prior to any maintenance, start-up or shutdown activity 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, notice shall be given as soon as practicable prior to the activity.
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 paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under §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. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall make such permit available within a reasonable period of time to any Missouri Department of Natural Resources' personnel upon request.

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

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*.

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

1. The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on 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. 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.
3. 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.

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 10-6.165 Restriction of Emission of Odors

This is a State Only permit requirement.

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 10-6.170 Restriction of PM 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 PM emissions to go beyond the premises of origin in quantities that the PM may be found on surfaces beyond the property line of origin. The nature or origin of the PM 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 PM 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) Issuance of a new, amended, or modified operating does not restart the monitoring schedule.

Recordkeeping:

1. The permittee shall document all readings on Attachment A, or an equivalent form, 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 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

This is a State Only permit requirement.

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 Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the 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.

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 at an installation:
   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 Source*s;
      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.

40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)

This is a Federal Only permit requirement.

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 of §82.108.
   c) The form of the label bearing the required warning statement must comply with the requirements of §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 described in §82.156.
   b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in §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 the record keeping requirements of §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 MVAC, the permittee is subject to all the applicable requirements contained 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 40 CFR Part 82, Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

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

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the CFR and 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, 10 CSR 10-6.065(6)(E)3.C 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. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

10 CSR 10-6.065(6)(C)1.C General Record Keeping 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 available within a reasonable period of time to any Missouri Department of Natural Resources' personnel upon request.
2. Reporting
   a) All reports shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.
   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.
   c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
   d) Submit supplemental reports as required or as needed. 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 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
      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 semiannual report shall be reported on the schedule specified in this permit.

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 §112(r)

If the installation is required to develop and register a risk management plan pursuant to §112(r) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

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

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

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

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

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

The permittee is being issued an Acid Rain Permit in conjunction with this operating permit (see Attachment E). The Acid Rain Permit will remain effective as long as this permit remains effective. The permittee shall submit an Acid Rain Permit renewal application in conjunction with their Title V operating permit renewal application.

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)1.I Reasonably Anticipated Operating Scenarios

At the time of permit issuance, the installation demonstrated compliance with the PM standard in MACT UUUUU by conducting quarterly stack testing as detailed in Permit Condition 003. If the installation installs PM CEMS, the installation shall comply with this alternate Permit Condition 003:

PERMIT CONDITION 003 10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart UUUUU – National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units[1]	
Emission Source	**Description**
EP-01	6,340 MMBtu/hr (design rating) Cyclone Boiler #1 Babcock and Wilcox RB-466 1972 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in 1967) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, PM CEMS, COMS, Sorbent Trap Monitoring System
EP-02	6,340 MMBtu/hr (design rating) Cyclone Boiler #2 Babcock and Wilcox RB-483 1977 (in service date; however, the installation had made significant commitments to the construction design and purchased the boiler in1970) Fuels: Subbituminous and Bituminous Coal, Fuel Oils #1 & #2 Control Equipment: Activated Carbon Injection, Over-fire Air, ESP, SCR Monitoring Equipment: SO_x CEMS, NO_x CEMS, CO CEMS, CO_2 CEMS, PM CEMS, COMS, Sorbent Trap Monitoring System

Emission Limitations and Work Practice Standards

1. The permittee shall meet the requirements in §63.9991(a)(1). The permittee shall meet these requirements at all times. [§63.9991(a)]
   a) The permittee shall meet each emission limit and work practice standard in Tables 2 and 3 to MACT UUUUU that applies, for each EGU, except as provided under §63.10009. [§63.9991(a)(1)]
2. As provided in §63.6(g), the Administrator may approve use of an alternative to the work practice standards in §63.9991. [§63.9991(b)]

Table 2 to MACT UUUUU – *Emission Limits for Existing EGUs*

For the following pollutants...	The permittee shall meet the following emission limits and work practice standards...	Using these requirements, as appropriate (*e.g.*, specified sampling volume or test run duration) and limitations with the test methods in Table 5 to MACT UUUUU...
Filterable PM	0.03 lb/MMBtu or 0.3 lb/MWh[2]	Collect a minimum of 1 dscm per run
HCl	0.002 lb/MMBtu or 0.02 lb/MWh	For Method 26A in NSPS Appendix A-8, collect a minimum of 0.75 dscm per run; for Method 26, collect a minimum of 120 liters per run. For ASTM D6348-03[3] or Method 320 in MACT Appendix A, sample for a minimum of 1 hour.
Hg	1.2 lb/TBtu or 0.013 lb/GWh	Sorbent trap monitoring system

Table 3 to MACT UUUUU – *Work Practice Standards*

EGU Type	Work Practice Standards
An existing EGU	Conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, or each 48 calendar months if neural network combustion optimization software is employed, as specified in §63.10021(e).
A coal-fired EGU during startup	The permittee shall operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, the permittee shall use clean fuels as defined in §63.10042 for ignition. Once the permittee converts to firing coal, the permittee shall engage all of the applicable control technologies except SCR. The permittee shall start the SCR systems appropriately to comply with relevant standards applicable during normal operation. The permittee shall comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in MACT UUUUU. The permittee shall keep records during startup periods. The permittee shall provide reports concerning activities and startup periods, as specified in §63.10011(g) and §63.10021(h) and (i). The permittee shall comply with the Hg emission limit at all times. The permittee shall collect monitoring data during startup periods, as specified in §63.10020(a) and (e). The permittee shall keep records during startup periods, as provided in §§63.10032 and 63.10021(h). The permittee shall provide reports concerning activities and startup periods, as specified in §§63.10011(g), 63.10021(i), and 63.10031.

General Compliance Requirements:

1. The permittee shall be in compliance with the emission limits in MACT UUUUU. These limits apply at all times except during periods of startup and shutdown; however, for coal-fired EGUs, the

permittee is required to meet the work practice requirements in Table 3 to MACT UUUUU during periods of startup or shutdown. [§63.10000(a)]

2. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director 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. [§63.10000(b)]
3. Initial performance testing is required for all pollutants, to demonstrate compliance with the applicable emission limits. [§63.10000(c)(1)]
   a) The permittee may conduct initial performance testing in accordance with §63.10005(h), to determine whether the EGU qualifies as a LEE for one or more applicable emission limits, except as otherwise provided in §63.10000(c)(1)(i)(A)[4]: [§63.10000(c)(1)(i)]
      i) Except as provided in §63.10000(c)(1)(i)(C), the permittee may not pursue the LEE option if the coal-fired EGU is equipped with a main stack and a bypass stack or bypass duct configuration that allows the effluent to bypass any pollutant control device. [§63.10000(c)(1)(i)(A)]
      ii) The permittee may pursue the LEE option provided that: [§63.10000(c)(1)(i)(C)]
         (1) The EGU's control device bypass emissions are measured in the bypass stack or duct or the control device bypass exhaust is routed through the EGU main stack so that emissions are measured during the bypass event; or [§63.10000(c)(1)(i)(C)(1)]
         (2) Except for hours during which only clean fuel is combusted, the permittee bypasses the EGU control device only during emergency periods for no more than a total of two percent of the EGU's annual operating hours; the permittee uses clean fuels to the maximum extent possible during an emergency period; and the permittee prepares and submits a report describing the emergency event, its cause, corrective action taken, and estimates of emissions released during the emergency event. The permittee shall include these emergency emissions along with performance test results in assessing whether the EGU maintains LEE status. [§63.10000(c)(1)(i)(C)(2)]
   b) For a qualifying LEE for Hg emissions limits, the permittee shall conduct a 30-day performance test using Method 30B at least once every 12 calendar months to demonstrate continued LEE status. [§63.10000(c)(1)(ii)]
   c) For a qualifying LEE of any other applicable emissions limits, the permittee shall conduct a performance test at least once every 36 calendar months to demonstrate continued LEE status. [§63.10000(c)(1)(iii)]
   d) If the coal-fired EGU does not qualify as a LEE for filterable PM, the permittee shall demonstrate compliance through an initial performance test and the permittee shall monitor continuous performance through use of a PM CEMS. [§63.10000(c)(1)(iv)]
   e) If the coal-fired EGU does not qualify as a LEE for HCl, the permittee shall demonstrate initial and continuous compliance by conducting an initial and periodic quarterly performance stack test for HCl. [§63.10000(c)(1)(v)]
   f) If the coal-fired EGU does not qualify as a LEE for Hg, the permittee shall demonstrate initial and continuous compliance through use of a sorbent trap monitoring system, in accordance with MACT UUUUU Appendix A. [§63.10000(c)(1)(vi)]
      i) The permittee shall use one sorbent trap monitoring system to demonstrate compliance with the mercury emissions limit at all times (including startup periods and shutdown periods) and

to report average mercury concentration. The permittee shall follow the startup or shutdown requirements that follow and as given in Table 3 to MACT UUUUU. [§63.10000(c)(1)(vi)(B)]

4. The permittee shall develop a site-specific monitoring plan. This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS prepared under Appendix B to NSPS, and that meet the requirements of §63.10010. Using the process described in §63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in this paragraph and, if approved, include those in the site-specific monitoring plan. The monitoring plan shall address the provisions in §63.10000(d)(2) through (5). [§63.10000(d)(1)]
5. The site-specific monitoring plan shall include the information specified in §63.10000(d)(5)(i) through (d)(5)(vii). Alternatively, the requirements of §63.10000(d)(5)(i) through (d)(5)(vii) are considered to be met for a particular CMS or sorbent trap monitoring system if: [§63.10000(d)(2)]
   a) The CMS or sorbent trap monitoring system is installed, certified, maintained, operated, and quality-assured according to Appendix A to MACT UUUUU; and [§63.10000(d)(2)(i)]
   b) The recordkeeping and reporting requirements of Appendix A to MACT UUUUU, that pertain to the CMS are met. [§63.10000(d)(2)(ii)]
6. The permittee shall operate and maintain the CMS according to the site-specific monitoring plan. [§63.10000(d)(4)]
7. The provisions of the site-specific monitoring plan must address the following items: [§63.10000(d)(5)]
   a) Installation of the CMS or sorbent trap monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). See §63.10010(a) for further details. [§63.10000(d)(5)(i)]
   b) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. [§63.10000(d)(5)(ii)]
   c) Schedule for conducting initial and periodic performance evaluations. [§63.10000(d)(5)(iii)]
   d) Performance evaluation procedures and acceptance criteria (e.g., calibrations), including the quality control program in accordance with the general requirements of §63.8(d). [§63.10000(d)(5)(iv)]
   e) On-going operation and maintenance procedures, in accordance with the general requirements of §§63.8(c)(1)(ii), (c)(3), and (c)(4)(ii). [§63.10000(d)(5)(v)]
   f) Conditions that define a CMS that is out of control consistent with §63.8(c)(7)(i) and for responding to out of control periods consistent with §§63.8(c)(7)(ii) and (c)(8). [§63.10000(d)(5)(vi)]
   g) On-going recordkeeping and reporting procedures, in accordance with the general requirements of §§63.10(c), (e)(1), and (e)(2)(i), or as specifically required under MACT UUUUU. [§63.10000(d)(5)(vii)]
8. As part of the demonstration of continuous compliance, the permittee shall perform periodic tune-ups of the EGU(s), according to §63.10021(e). [§63.10000(e)]

<u>LEE Requirements:</u>

1. The provisions of this paragraph apply to all pollutants with emissions limits from existing EGUs. The permittee may pursue this compliance option unless prohibited pursuant to §63.10000(c)(1)(i). [§63.10005(h)]

a) An EGU may qualify for LEE status for Hg, HCl, or filterable PM if the permittee collects performance test data that meet the requirements of §63.10005(h), and if those data demonstrate: [§63.10005(h)(1)]
   i) For all pollutants except Hg, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to MACT UUUUU for all required testing for three consecutive years; or [§63.10005(h)(1)(i)]
   ii) For Hg emissions from an existing EGU, either: [§63.10005(h)(1)(ii)]
      (1) Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to MACT UUUUU (expressed either in units of lb/TBtu or lb/GWh); or [§63.10005(h)(1)(ii)(A)]
      (2) Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to MACT UUUUU (expressed either in units of lb/TBtu or lb/GWh). [§63.10005(h)(1)(ii)(B)]

b) For all pollutants except Hg, the permittee shall conduct all required performance tests described in §63.10007 to demonstrate that a unit qualifies for LEE status. [§63.10005(h)(2)]
   i) When conducting emissions testing to demonstrate LEE status, the permittee shall increase the minimum sample volume specified in Table 2 to MACT UUUUU nominally by a factor of two. [§63.10005(h)(2)(i)]
   ii) Follow the instructions in §63.10007(e) and Table 5 to MACT UUUUU to convert the test data to the units of the applicable standard. [§63.10005(h)(2)(ii)]

c) For Hg, the permittee shall conduct a 30- (or 90-) boiler operating day performance test using Method 30B in NSPS Appendix A-8 to determine whether a unit qualifies for LEE status. Locate the Method 30B sampling probe tip at a point within 10 percent of the duct area centered about the duct's centroid at a location that meets Method 1 in NSPS Appendix A-1 and conduct at least three nominally equal length test runs over the 30- (or 90-) boiler operating day test period. The permittee may use a pair of sorbent traps to sample the stack gas for a period consistent with that given in Section 5.2.1 of MACT UUUUU Appendix A. Collect Hg emissions data continuously over the entire test period (except when changing sorbent traps or performing required reference method QA procedures). As an alternative to constant rate sampling per Method 30B, the permittee may use proportional sampling per Section 8.2.2 of Performance Specification 12B in NSPS Appendix B. [§63.10005(h)(3)]
   i) Depending on whether the permittee intends to assess LEE status for Hg in terms of the lb/TBtu or lb/GWh emission limit in Table 2 to MACT UUUUU or in terms of the annual Hg mass emissions limit of 29.0 lb/year, the permittee will have to collect some or all of the following data during the 30-boiler operating day test period (see §63.10005(h)(3)(iii)): [§63.10005(h)(3)(i)]
      (1) Diluent gas (CO_2) data, using either Method 3A in NSPS Appendix A-3 or a diluent gas monitor that has been certified according to 40 CFR Part 75. [§63.10005(h)(3)(i)(A)]
      (2) Stack gas flow rate data, using either Method 2, 2F, or 2G in NSPS Appendices A-1 and A-2, or a flow rate monitor that has been certified according to 40 CFR Part 75. [§63.10005(h)(2)(i)(B)]
      (3) Stack gas moisture content data, using either Method 4 in NSPS Appendix A-1, or a moisture monitoring system that has been certified according to 40 CFR Part 75. Alternatively, an appropriate fuel-specific default moisture value from §75.11(b) may be used in the calculations. [§63.10005(h)(2)(i)(C)]
      (4) Hourly gross output data (megawatts), from facility records. [§63.10005(h)(2)(i)(D)]

ii) If the permittee uses CEMS to measure CO_2 concentration, and/or flow rate, and/or moisture, record hourly average values of each parameter throughout the 30-boiler operating day test period. If the permittee opts to use EPA reference methods rather than CEMS for any parameter, the permittee shall perform at least one representative test run on each operating day of the test period, using the applicable reference method. [§63.10005(h)(2)(ii)]

iii) Calculate the average Hg concentration, in $\mu g/m^3$ (dry basis), for the 30- (or 90-) boiler operating day performance test, as the arithmetic average of all Method 30B sorbent trap results. Also calculate, as applicable, the average values of CO_2 concentration, stack gas flow rate, stack gas moisture content, and gross output for the test period. Then: [§63.10005(h)(2)(iii)]

(1) To express the test results in units of lb/TBtu, follow the procedures in §63.10007(e). Use the average Hg concentration and diluent gas values in the calculations. [§63.10005(h)(2)(iii)(A)]

(2) To express the test results in units of lb/GWh, use Equations A-3 and A-4 in Section 6.2.2 of MACT UUUUU Appendix A, replacing the hourly values "C_h", "Q_h", "B_{ws}" and "$(MW)_h$" with the average values of these parameters from the performance test. [§63.10005(h)(2)(iii)(B)]

(3) To calculate pounds of Hg per year, use one of the following methods: [§63.10005(h)(2)(iii)(C)]

(a) Multiply the average lb/TBtu Hg emission rate (determined according to §63.10005(h)(3)(iii)(A)) by the maximum potential annual heat input to the unit (TBtu), which is equal to the maximum rated unit heat input (TBtu/hr) times 8,760 hours. If the maximum rated heat input value is expressed in units of MMBtu/hr, multiply it by 10^{-6} to convert it to TBtu/hr; or [§63.10005(h)(2)(iii)(C)(1)]

(b) Multiply the average lb/GWh Hg emission rate (determined according to §63.10005(h)(3)(iii)(B)) by the maximum potential annual electricity generation (GWh), which is equal to the maximum rated electrical output of the unit (GW) times 8,760 hours. If the maximum rated electrical output value is expressed in units of MW, multiply it by 10^{-3} to convert it to GW; or [§63.10005(h)(2)(iii)(C)(2)]

<u>Testing Requirements:</u>

1. For affected units meeting the LEE requirements of §63.10005(h), the permittee shall repeat the performance test once every three years (once every year for Hg) according to Table 5 to MACT UUUUU and §63.10007. Should subsequent emissions testing results show the unit does not meet the LEE eligibility requirements, LEE status is lost. If this should occur: [§63.10006(b)]
   a) For all pollutant emission limits except for Hg, the permittee shall conduct emissions testing quarterly, except as otherwise provided in §63.10021(d)(1). [§63.10006(b)(1)]
   b) For Hg, the permittee shall have three calendar years of testing and sorbent trap monitoring system data that satisfy the LEE emissions criteria to reestablish LEE status. [§63.10006(b)(2)]
2. The permittee shall conduct all applicable periodic HCl emissions tests according to Table 5 to MACT UUUUU and §63.10007 at least quarterly, except as otherwise provided in §63.10021(d)(1). [§63.10006(d)]
3. Time between performance tests. [§63.10006(f)]
   a) Notwithstanding the provisions of §63.10021(d)(1), the requirements listed in §63.10006(g) and (h), and the requirements of §63.10006(f)(3), the permittee shall complete performance tests for the EGU as follows: [§63.10006(f)(1)]

i) At least 45 calendar days, measured from the test's end date, shall separate performance tests conducted every quarter; [§63.10006(f)(1)(i)]
ii) For annual testing: [§63.10006(f)(1)(ii)]
(1) At least 320 calendar days, measured from the test's end date, shall separate performance tests; [§63.10006(f)(1)(ii)(A)]
(2) At least 320 calendar days, measured from the test's end date, shall separate annual sorbent trap mercury testing for 30-boiler operating day LEE tests; [§63.10006(f)(1)(ii)(B)]
(3) At least 230 calendar days, measured from the test's end date, shall separate annual sorbent trap mercury testing for 90-boiler operating day LEE tests; and [§63.10006(f)(1)(ii)(C)]
iii) At least 1,050 calendar days, measured from the test's end date, shall separate performance tests conducted every three years. [§63.10006(f)(1)(iii)]

b) For units demonstrating compliance through quarterly emission testing, the permittee shall conduct a performance test in the 4th quarter of a calendar year if the EGU has skipped performance tests in the first three quarters of the calendar year. [§63.10006(f)(2)]
c) If the EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, the permittee shall complete an additional performance test in that period as follows: [§63.10006(f)(3)]
i) At least 15 calendar days shall separate two performance tests conducted in the same quarter. [§63.10006(f)(3)(i)]
ii) At least 107 calendar days shall separate two performance tests conducted in the same calendar year. [§63.10006(f)(3)(ii)]
iii) At least 350 calendar days shall separate two performance tests conducted in the same three year period. [§63.10006(f)(3)(iii)]

4. If the permittee elects to demonstrate compliance using emissions averaging under §63.10009, the permittee shall continue to conduct performance stack tests at the appropriate frequency given in §63.10006(c) through (f). [§63.10006(g)]
5. If a performance test on a non-mercury LEE shows emissions in excess of 50 percent of the emission limit and if the permittee chooses to reapply for LEE status, the permittee shall conduct performance tests at the appropriate frequency given in §63.10006(c) through (e) for that pollutant until all performance tests over a consecutive three-year period show compliance with the LEE criteria. [§63.10006(h)]
6. The permittee shall conduct a performance tune-up according to §63.10021(e). [§63.10006(i)]
a) For EGUs not employing neural network combustion optimization during normal operation, each performance tune-up specified in §63.10021(e) shall be no more than 36 calendar months after the previous performance tune-up. [§63.10006(i)(1)]
b) For EGUs employing neural network combustion optimization systems during normal operation, each performance tune-up specified in §63.10021(e) shall be no more than 48 calendar months after the previous performance tune-up. [§63.10006(i)(2)]
7. Except as otherwise provided in §63.10007, the permittee shall conduct all required performance tests according to §63.7(d), (e), (f), and (h). The permittee shall also develop a site-specific test plan according to the requirements in §63.7(c). [§63.10007(a)]
a) The permittee shall collect quality-assured CEMS data for all unit operating conditions, including startup and shutdown (see §63.10011(g) and Table 3 to MACT UUUUU), except as otherwise provided in §63.10020(b). Emission rates determined during startup periods and shutdown periods (as defined in §63.10042) are not to be included in the compliance

determinations, except as otherwise provided in §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). [§63.10007(a)(1)]

b) Operate the unit at maximum normal operating load conditions during each periodic (e.g., quarterly) performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run. [§63.10007(a)(2)]

8. The permittee shall conduct each performance test (including traditional three-run stack tests, 30-boiler operating day tests based on sorbent trap monitoring system data and 30-boiler operating day Hg emissions tests for LEE qualification) according to the requirements in Table 5 MACT UUUUU. [§63.10007(b)]
9. Except for a 30-boiler operating day performance test based on sorbent trap monitoring system data, where the concept of test runs does not apply, the permittee shall conduct a minimum of three separate test runs for each performance test, as specified in §63.7(e)(3). Each test run shall comply with the minimum applicable sampling time or volume specified in Table 2 to MACT UUUUU. Sections 63.10005(d) and (h), respectively, provide special instructions for conducting performance tests based on sorbent trap monitoring systems, and for conducting emission tests for LEE qualification. [§63.10007(d)]
10. To use the results of performance testing to determine compliance with the applicable emission limits in Table 2 to MACT UUUUU, proceed as follows: [§63.10007(e)]
    a) Except for a 30-boiler operating day performance test based on sorbent trap monitoring system data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), the permittee shall use the method detection level as the measured emissions level for that pollutant in calculating compliance. [§63.10007(e)(1)]
    b) If the limits are expressed in lb/MMBtu or lb/TBtu, the permittee shall use the F-factor methodology and equations in Sections 12.2 and 12.3 of EPA Method 19 in NSPS Appendix A-7. In cases where an appropriate F-factor is not listed in Table 19-2 of Method 19, the permittee may use F-factors from Table 1 in Section 3.3.5 of 40 CFR Part 75 Appendix F, or F-factors derived using the procedures in Section 3.3.6 of 40 CFR Part 75 Appendix F. Use the following factors to convert the pollutant concentrations measured during the initial performance tests to units of lb/scf, for use in the applicable Method 19 equations: [§63.10007(e)(2)]
        i) Multiply HCl ppm by 9.43×10^{-8}; [§63.10007(e)(2)(ii)]
        ii) Multiply Hg concentrations (µg/scm) by 6.24×10^{-11}. [§63.10007(e)(2)(v)]
    c) To determine compliance with emission limits expressed in lb/MWh or lb/GWh, the permittee shall first calculate the pollutant mass emission rate during the performance test, in units of lb/hr. For Hg, if a sorbent trap monitoring system is used, use Equation A-2 or A-3 in MACT UUUUU Appendix A (as applicable). In all other cases, use an equation that has the general form of Equation A-2 or A-3, replacing the value of K with 6.24×10^{-8} lb-scm/mg-scf for HCl (when performance stack testing is used), and defining C_h as the average HCl concentration in ppm. This calculation requires stack gas volumetric flow rate (scfh) and (in some cases) moisture content data (see §§63.10005(h)(3) and 63.10010). Then, if the applicable emission limit is in units of lb/GWh, use Equation A-4 in MACT UUUUU Appendix A to calculate the pollutant emission rate in lb/GWh. In this calculation, define $(M)_h$ as the calculated pollutant mass emission rate for the performance test (lb/h), and define $(MW)_h$ as the average electrical load during the performance test (megawatts). If the applicable emission limit is in lb/MWh rather than lb/GWh, omit the 10^3 term from Equation A-4 to determine the pollutant emission rate in lb/MWh. [§63.10007(e)(3)]

11. If the permittee elects to (or is required to) use CEMS to continuously monitor PM emissions or sorbent trap monitoring systems to continuously collect Hg emissions data, the following default values are available for use in the emission rate calculations during startup periods or shutdown periods (as defined in §63.10042). For the purposes of MACT UUUUU, these default values are not considered to be substitute data. [§63.10007(f)]
    a) Diluent cap values. If the permittee uses CEMS or sorbent trap monitoring systems to comply with a heat input-based emission rate limit, the permittee may use the following diluent cap values for a startup or shutdown hour in which the measured CO_2 concentration is below the cap value: [§63.10007(f)(1)]
        i) The permittee may use 5% for CO_2. [§63.10007(f)(1)(ii)]
    b) Default gross output. If the permittee uses CEMS to continuously monitor PM emissions or sorbent trap monitoring systems to continuously collect Hg emissions data, the following default value is available for use in the emission rate calculations during startup periods or shutdown periods (as defined in §63.10042). For the purposes of MACT UUUUU, this default value is not considered to be substitute data. For a startup or shutdown hour in which there is heat input to an affected EGU but zero gross output, the permittee shall calculate the pollutant emission rate using a value equivalent to 5% of the maximum sustainable gross output, expressed in megawatts, as defined in Section 6.5.2.1(a)(1) of 40 CFR Part 75 Appendix A. This default gross output is either the nameplate capacity of the EGU or the highest gross output observed in at least four representative quarters of EGU operation. For a monitored common stack, the default gross output is used only when all EGUs are operating (i.e., combusting fuel) are in startup or shutdown mode, and have zero electrical generation. Under those conditions, a default gross output equal to 5% of the combined maximum sustainable gross output of the EGUs that are operating but have a total of zero gross output shall be used to calculate the hourly gross output-based pollutant emissions rate. [§63.10007(f)(2)]
12. Upon request, the permittee shall make available to the Director such records as may be necessary to determine whether the performance tests have been done according to the requirements of §63.10007. [§63.10007(g)]

Table 5 to MACT UUUUU – *Performance Testing Requirements*

To conduct a performance test for the following pollutant...	**Using...**	**The permittee shall perform the following activities, as applicable to the input- or output-based emission limit...**	**Using...**[21]
Filterable PM	PM CEMS	a. Install, certify, operate, and maintain the PM CEMS	Performance Specification 11 at NSPS Appendix B and Procedure 2 at NSPS Appendix F.
		b. Install, certify, operate, and maintain the diluent gas, flow rate,	40 CFR Part 75 and §63.10010(a), (b), (c), and (d).

[21] See Table 2 to MACT UUUUU for required sample volumes and/or sampling run times.

To conduct a performance test for the following pollutant...	Using...	The permittee shall perform the following activities, as applicable to the input- or output-based emission limit...	Using...[21]
		and/or moisture monitoring systems	
		c. Convert hourly emissions concentrations to 30 boiler operating day rolling average lb/MMBtu or lb/MWh emissions rates	Method 19 F-factor methodology at NSPS Appendix A-7, or calculate using mass emissions rate and gross output data (see §63.10007(e)).
HCl	Emissions Testing	a. Select sampling ports location and the number of traverse points.	Method 1 at NSPS Appendix A-1.
		b. Determine velocity and volumetric flow-rate of the stack gas	Method 2, 2A, 2C, 2F, 2G or 2H at NSPS Appendix A-1 or A-2.
		c. Determine O_2 and CO_2 concentrations of the stack gas	Method 3A or 3B at NSPS Appendix A-2, or ANSI/ASME PTC 19.10-1981.
		d. Measure the moisture content of the stack gas	Method 4 at NSPS Appendix A-3.
		e. Measure the HCl emissions concentration	Method 26 or Method 26A at NSPS Appendix A-8 or Method 320 at MACT Appendix A or ASTM 6348-03[6] with (1) the following conditions when using ASTM D6348-03: (A) The test plan preparation and implementation in the Annexes to ASTM D6348-03, Sections A1 through A8 are mandatory;
			(B) For ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent (%) R shall be determined for each target analyte (see Equation A5.5);
			(C) For the ASTM D6348-03 test data to be acceptable for a target analyte, %R shall be 70% ≥ R ≤ 130%; and
			(D) The %R value for each compound shall be reported in the test report and all field measurements corrected with the calculated %R value for that compound using the following equation:

To conduct a performance test for the following pollutant...	Using...	The permittee shall perform the following activities, as applicable to the input- or output-based emission limit...	Using...[21]
			$Reported\ Result = \frac{(Measured\ Concentration\ in\ Stack)}{\%R}\ x\ 100$
			(2) spiking levels nominally no greater than two times the level corresponding to the applicable emission limit. Method 26A shallbe used if there are entrained water droplets in the exhaust stream.
		f. Convert emissions concentration to lb/MMBtu or lb/MWh emissions rates	Method 19 F-factor methodology at NSPS Appendix A-7, or calculate using mass emissions rate and gross output data (see §63.10007(e)).
Hg	Hg CEMS	a. Install, certify, operate, and maintain the CEMS	Sections 3.2.1 and 5.1 of MACT UUUUU Appendix A.
		b. Install, certify, operate, and maintain the diluent gas, flow rate, and/or moisture monitoring systems	40 CFR Part 75 and §63.10010(a), (b), (c), and (d).
		c. Convert hourly emissions concentrations to 30 boiler operating day rolling average lb/TBtu or lb/GWh emissions rates	Section 6 of MACT UUUUU Appendix A.

Emissions Averaging[7]:

1. General eligibility. [§63.10009(a)]
   a) The permittee may use emissions averaging as described in §63.10009(a)(2) as an alternative to meeting the requirements of §63.9991 for filterable PM, HCl, or Hg on an EGU-specific basis if: [§63.10009(a)(1)]
      i) The permittee has more than one existing EGU in the same subcategory located at one or more contiguous properties, belonging to a single major industrial grouping, which are under common control of the same person (or persons under common control); and [§63.10009(a)(1)(i)]
      ii) The permittee uses CEMS (or sorbent trap monitoring systems for determining Hg emissions) or quarterly emissions testing for demonstrating compliance. [§63.10009(a)(1)(ii)]

b) The permittee may demonstrate compliance by emissions averaging among the existing EGUs in the same subcategory, if the averaged Hg emissions are equal to or less than 1.2 lb/TBtu or 0.013 lb/GWh on a 30-boiler operating day basis or if the averaged emissions of individual, other pollutants from other subcategories of such EGUs are equal to or less than the applicable emissions limit in Table 2 to MACT UUUUU, according to the procedures in §63.10009. Note that except for the alternate Hg emissions limit from EGUs in the "unit designed for coal ≥8,300 Btu/lb" subcategory, the averaging time for emissions averaging for pollutants is 30 days (rolling daily) using data from CEMS or a combination of data from CEMS and manual performance (LEE) testing. The averaging time for emissions averaging for the alternate Hg limit (equal to or less than 1.0 lb/TBtu or 0.011 lb/GWh) is 90-boiler operating days (rolling daily) using data from sorbent trap monitoring, or a combination of monitoring data and data from manual performance (LEE) testing. For the purposes of this paragraph, 30- (or 90-) group boiler operating days is defined as a period during which at least one unit in the emissions averaging group operates on each of the 30 or 90 days. The permittee shall calculate the weighted average emissions rate for the group in accordance with the procedures in this paragraph using the data from all units in the group including any that operate fewer than 30 (or 90) days during the preceding 30 (or 90) group boiler days. [§63.10009(a)(2)]

i) The permittee may choose to have the EGU emissions averaging group meet either the heat input basis (MMBtu or TBtu, as appropriate for the pollutant) or gross output basis (MWh or GWh, as appropriate for the pollutant). [§63.10009(a)(2)(i)]

ii) The permittee may not mix bases within the EGU emissions averaging group. [§63.10009(a)(2)(ii)]

2. Equations. Use the following equations when performing calculations for the EGU emissions averaging group: [§63.10009(b)]

a) Group eligibility equations.

$$\mathrm{WAER_m} = \frac{\left[\sum_{j=1}^{p} \mathrm{Herm_j} \times \mathrm{Rmm_j}\right] + \sum_{k=1}^{m} \mathrm{Ter_k} \times \mathrm{Rmt_k}}{\left(\sum_{j=1}^{p} \mathrm{Rmm_j}\right) + \sum_{k=1}^{m} \mathrm{Rmt_k}} \quad \text{Equation 1a}$$

Where:
WAERm = Maximum Weighted Average Emission Rate in terms of lb/heat input or lb/gross output,
$\mathrm{Herm_{i,j}}$ = hourly emissions rate (e.g., lb/MMBtu, lb/MWh) from CEMS or sorbent trap monitoring as determined during the initial compliance determination for EGU j,
$\mathrm{Rmm_j}$ = Maximum rated heat input, MMBtu/h, or maximum rated gross output, MWh/h, for EGU j,
p = number of EGUs in emissions averaging group that rely on CEMS,
$\mathrm{Ter_k}$ = Emissions rate (lb/MMBtu or lb/MWh) as determined during the initial compliance determination for EGU k,
$\mathrm{Rmt_k}$ = Maximum rated heat input, MMBtu/h, or maximum rated gross output, MWh/h, for EGU k, and
m = number of EGUs in emissions averaging group that rely on emissions testing.

$$\mathrm{WAER_m} = \frac{\sum\left[\left(\sum_{j=1}^{p} \mathrm{Herm_{i,j}}\right) \times \mathrm{Smm_j} \times \mathrm{Cfm_{j_j}}\right] + \sum_{k=1}^{m} \mathrm{Ter_k} \times \mathrm{Smt_k} \times \mathrm{Cft_k}}{\sum\left[\sum_{j=1}^{p} \mathrm{Smm_j} \times \mathrm{Cfm_j}\right] + \sum_{k=1}^{m} \mathrm{Smt_k} \times \mathrm{Cft_k}} \quad \text{Equation 1b}$$

Where:
Variables with similar names share the descriptions for Equation 1a of §63.10009,
$\mathrm{Smm_j}$ = maximum steam generation, $\mathrm{lb_{steam}}$/h or lb/gross output, for EGU j,

Cfm_j = conversion factor, calculated from the most recent compliance test results, in terms units of heat output or gross output per pound of steam generated ($MMBtu/lb_{steam}$ or MWh/lb_{steam}) from EGU j,
Smt_k = maximum steam generation, lb_{steam}/h or lb/gross output, for EGU k, and
Cft_k = conversion factor, calculated from the most recent compliance test results, in terms units of heat output or gross output per pound of steam generated ($MMBtu/lb_{steam}$ or MWh/lb_{steam}) from EGU k. [§63.10009(b)(1)]

b) Weighted 30-boiler operating day rolling average emissions rate equations for pollutants other than Hg. Use Equation 2a or 2b of §63.10009 to calculate the 30 day rolling average emissions daily.

$$\text{WAER}= \frac{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Her}_i \text{ x } \text{Rm}_i)]_p + \sum_{i=1}^{m}(\text{Ter}_i \text{ x } \text{Rt}_i)}{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Rm}_i)]_p + \sum_{i=1}^{m}\text{Rt}_i} \quad \text{Equation 2a}$$

Where:
Her_i = hourly emission rate (e.g., lb/MMBtu, lb/MWh) from unit i's CEMS for the preceding 30-group boiler operating days,
Rm_i = hourly heat input or gross output from unit i for the preceding 30-group boiler operating days,
p = number of EGUs in emissions averaging group that rely on CEMS or sorbent trap monitoring,
n = number of hours that hourly rates are collected over 30-group boiler operating days,
Ter_i = Emissions rate from most recent emissions test of unit i in terms of lb/heat input or lb/gross output,
Rt_i = Total heat input or gross output of unit i for the preceding 30-boiler operating days, and
m = number of EGUs in emissions averaging group that rely on emissions testing.

$$\text{WAER}= \frac{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Her}_i \text{ x } \text{Sm}_i \text{ x } \text{Cfm}_i)]_p + \sum_{i=1}^{m}(\text{Ter}_i \text{ x } \text{St}_i \text{ x } \text{Cft}_i)}{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Sm}_i \text{ x } \text{Cfm}_i)]_p + \sum_{i=1}^{m}\text{St}_i \text{ x } \text{Cft}_i} \quad \text{Equation 2b}$$

Where:
variables with similar names share the descriptions for Equation 2a of §63.10009,
Sm_i= steam generation in units of pounds from unit i that uses CEMS for the preceding 30-group boiler operating days,
Cfm_i= conversion factor, calculated from the most recent compliance test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that uses CEMS from the preceding 30 group boiler operating days,
St_i= steam generation in units of pounds from unit i that uses emissions testing, and
Cft_i= conversion factor, calculated from the most recent compliance test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that uses emissions testing. [§63.10009(b)(2)]

c) Weighted 90-boiler operating day rolling average emissions rate equations for Hg emissions. Use Equation 3a or 3b of §63.10009 to calculate the 90-day rolling average emissions daily.

$$\text{WAER}= \frac{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Her}_i \text{ x } \text{Rm}_i)]_p + \sum_{i=1}^{m}(\text{Ter}_i \text{ x } \text{Rt}_i)}{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Rm}_i)]_p + \sum_{i=1}^{m}\text{Rt}_i} \quad \text{Equation 3a}$$

Where:
Her_i = hourly emission rate from unit i's Hg sorbent trap monitoring system for the preceding 90-group boiler operating days,

Rm_i = hourly heat input or gross output from unit i for the preceding 90-group boiler operating days,
p = number of EGUs in emissions averaging group that rely on CEMS,
n = number of hours that hourly rates are collected over the 90-group boiler operating days,
Ter_i = Emissions rate from most recent emissions test of unit i in terms of lb/heat input or lb/gross output,
Rt_i = Total heat input or gross output of unit i for the preceding 90-boiler operating days, and
m = number of EGUs in emissions averaging group that rely on emissions testing.

$$\text{WAER}= \frac{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Her}_i \text{ x } \text{Sm}_i \text{ x } \text{Cfm}_i)]_p + \sum_{i=1}^{m}(\text{Ter}_i \text{ x } \text{St}_i \text{ x } \text{Cft}_i)}{\sum_{i=1}^{p}[\sum_{i=1}^{n}(\text{Sm}_i \text{ x } \text{Cfm}_i)]_p + \sum_{i=1}^{m}\text{St}_i \text{ x } \text{Cft}_i} \quad \text{Equation 3b}$$

Where:
variables with similar names share the descriptions for Equation 2a of §63.10009,
Sm_i = steam generation in units of pounds from unit i that uses Hg sorbent trap monitoring for the preceding 90-group boiler operating days,
Cfm_i = conversion factor, calculated from the most recent compliance test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that us
es sorbent trap monitoring from the preceding 90-group boiler operating days,
St_i = steam generation in units of pounds from unit i that uses emissions testing, and

d) Cft_i = conversion factor, calculated from the most recent emissions test results, in units of heat input per pound of steam generated or gross output per pound of steam generated, from unit i that uses emissions testing. [§63.10009(b)(3)]

3. Separate stack requirements. For a group of two or more existing EGUs in the same subcategory that each vent to a separate stack, the permittee may average filterable PM, HCl, or Hg emissions to demonstrate compliance with the limits in Table 2 to MACT UUUUU if the permittee satisfies the requirements in §63.10009(d) through (j). [§63.10009(c)]
4. For each existing EGU in the averaging group: [§63.10009(d)]
   a) The emissions rate achieved during the initial performance test for the HAP being averaged shall not exceed the emissions level that was being achieved 180 days after April 16, 2015, or the date on which emissions testing done to support the emissions averaging plan is complete (if the Director does not require submission and approval of the emissions averaging plan), or the date that the permittee begins emissions averaging, whichever is earlier; or[§63.10009(d)(1)]
   b) The control technology employed during the initial performance test shall not be less than the design efficiency of the emissions control technology employed 180 days after April 16, 2015 or the date that the permittee begins emissions averaging, whichever is earlier. [§63.10009(d)(2)]
5. The weighted-average emissions rate from the existing EGUs participating in the emissions averaging option shall be in compliance with the limits in Table 2 to MACT UUUUU at all times following the date that the permittee begins emissions averaging. [§63.10009(e)]
6. Emissions averaging group eligibility demonstration. The permittee shall demonstrate the ability for the EGUs included in the emissions averaging group to demonstrate initial compliance according to §63.10009(f)(1) or (2) using the maximum rated heat input or gross output over a 30- (or 90-) boiler operating day period of each EGU and the results of the initial performance tests. For this demonstration and prior to preparing the emissions averaging plan, the permittee shall conduct required emissions monitoring for 30- (or 90-) days of boiler operation and any required manual performance testing to calculate maximum weighted average emissions rate in accordance with §63.10009. The Director may require the permittee to submit a proposed emissions averaging plan

and supporting data for approval. If the Director requires approval of the plan, the permittee may not begin using emissions averaging until the Director approves the plan. [§63.10009(f)]

a) The permittee shall use Equation 1a in §63.10009(b) to demonstrate that the maximum weighted average emissions rates of filterable PM, HCl, or Hg emissions from the existing units participating in the emissions averaging option do not exceed the emissions limits in Table 2 to MACT UUUUU. [§63.10009(f)(1)]
b) If the permittee is not capable of monitoring heat input or gross output, and the EGU generates steam for purposes other than generating electricity, the permittee may use Equation 1b of §63.10009(b) as an alternative to using Equation 1a of §63.10009(b) to demonstrate that the maximum weighted average emissions rates of filterable PM, HCl, or Hg emissions from the existing units participating in the emissions averaging group do not exceed the emission limits in Table 2 to MACT UUUUU. [§63.10009(f)(2)]

7. The permittee shall determine the weighted average emissions rate in units of the applicable emissions limit on a 30 group boiler operating day rolling average basis (or, if applicable, on a 90 group boiler operating day rolling average basis for Hg) according to §63.10009(g)(1) and (2). The first averaging period ends on the 30th (or, if applicable, 90th for the alternate Hg emission limit) group boiler operating day after the date that the permittee begins emissions averaging. [§63.10009(g)]
   a) The permittee shall use Equation 2a or 3a of §63.10009(b) to calculate the weighted average emissions rate using the actual heat input or gross output for each existing unit participating in the emissions averaging option. [§63.10009(g)(1)]
   b) If the permittee is not capable of monitoring heat input or gross output, the permittee may use Equation 2b or 3b of §63.10009(b) as an alternative to using Equation 2a of §63.10009(b) to calculate the average weighted emission rate using the actual steam generation from the units participating in the emissions averaging option. [§63.10009(g)(2)]
8. Sorbent trap monitoring use. If an EGU in the emissions averaging group uses a sorbent trap monitor for Hg emissions to demonstrate compliance, the permittee shall use those data to determine the 30 (or 90) group boiler operating day rolling average emissions rate. [§63.10009(h)]
9. Emissions testing. If the permittee uses manual emissions testing to demonstrate compliance for one or more EGUs in the emissions averaging group, the permittee shall use the results from the most recent performance test to determine the 30 (or 90) day rolling average. The permittee may use sorbent trap data in combination with data from the most recent manual performance test in calculating the 30 (or 90) group boiler operating day rolling average emissions rate. [§63.10009(i)]
10. Emissions averaging plan. The permittee shall develop an implementation plan for emissions averaging according to the following procedures and requirements in §63.10009(j)(1) and (2). [§63.10009(j)]
    a) The permittee shall include the information contained in §63.10009(j)(1)(i) through (v) in the implementation plan for all the emissions units included in an emissions averaging: [§63.10009(j)(1)]
       i) The identification of all existing EGUs in the emissions averaging group, including for each either the applicable HAP emission level or the control technology installed as of 180 days after February 16, 2015, or the date on which the permittee completes the emissions measurements used to support the emissions averaging plan (if the Director does not require submission and approval of the emissions averaging plan), or the date that the permittee begins emissions averaging, whichever is earlier; and the date on which the permittee is requesting emissions averaging to commence; [§63.10009(j)(1)(i)]

ii) The process weighting parameter (heat input, gross output, or steam generated) that will be monitored for each averaging group; [§63.10009(j)(1)(ii)]
iii) The specific control technology or pollution prevention measure to be used for each emission EGU in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple EGUs, the permittee shall identify each EGU; [§63.10009(j)(1)(iii)]
iv) The means of measurement (e.g., CEMS, sorbent trap monitoring, manual performance test) of filterable PM, HCl, or Hg emissions in accordance with the requirements in §63.10007 and to be used in the emissions averaging calculations; and[§63.10009(j)(1)(iv)]
v) A demonstration that emissions averaging can produce compliance with each of the applicable emission limit(s) in accordance with §63.10009(b)(1). [§63.10009(j)(1)(v)]

b) If, as described in §63.10009(f), the Director requests the permittee to submit the averaging plan for review and approval, the permittee shall receive approval before initiating emissions averaging. [§63.10009(j)(2)]
i) The Director shall use following criteria in reviewing and approving or disapproving the plan: [§63.10009(j)(2)(i)]
(1) Whether the content of the plan includes all of the information specified in §63.10009(j)(1); and[§63.10009(j)(2)(i)(A)]
(2) Whether the plan presents information sufficient to determine that compliance will be achieved and maintained. [§63.10009(j)(2)(i)(B)]
ii) The Director shall not approve an emissions averaging implementation plan containing any of the following provisions: [§63.10009(j)(2)(ii)]
(1) Any averaging between emissions of different pollutants or between units located at different facilities; or[§63.10009(j)(2)(ii)(A)]
(2) The inclusion of any emissions unit other than an existing unit in the same subcategory. [§63.10009(j)(2)(ii)(B)]

11. The permittee shall demonstrate compliance with MACT UUUUU on a continuous basis by meeting the requirements of §63.10022(a)(1) through (4). [§63.10022(a)]
a) For each 30- (or 90-) day rolling average period, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.10009(f) and (g); [§63.10022(a)(1)]
b) For each existing EGU participating in the emissions averaging option, operate in accordance with the startup or shutdown work practice requirements given in Table 3 to MACT UUUUU. [§63.10022(a)(4)]
12. Any instance where the permittee fails to comply with the continuous monitoring requirements in §63.10022(a)(1) is a deviation. [§63.10022(b)]

<u>Monitoring, Operation, and Maintenance Requirements:</u>

1. For the sorbent trap monitoring systems used to provide data under MACT UUUUU, the continuous monitoring system installation requirements for these exhaust configurations are as follows: [§63.10010(a)]
a) Single unit-single stack configurations. For an affected unit that exhausts to the atmosphere through a single, dedicated stack, the permittee shall either install the required CEMS and sorbent trap monitoring systems in the stack or at a location in the ductwork downstream of all emissions control devices, where the pollutant and diluents concentrations are representative of the emissions that exit to the atmosphere. [§63.10010(a)(1)]

2. If the permittee uses a CO_2 CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the CO_2 concentrations shall be monitored at a location that represents emissions to the atmosphere, i.e., at the outlet of the EGU, downstream of all emission control devices. The permittee shall install, certify, maintain, and operate the CEMS according to 40 CFR Part 75. Use only quality-assured CO_2 data in the emissions calculations; do not use 40 CFR Part 75 substitute data values. [§63.10010(b)]
3. If the permittee is required to use a stack gas flow rate monitor, either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 2 to MACT UUUUU, the permittee shall install, certify, operate, and maintain the monitoring system and conduct on-going quality-assurance testing of the system according to 40 CFR Part 75. Use only unadjusted, quality-assured flow rate data in the emissions calculations. Do not apply bias adjustment factors to the flow rate data and do not use substitute flow rate data in the calculations. [§63.10010(c)]
4. If the permittee is required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 2 to MACT UUUUU, the permittee shall install, certify, operate, and maintain a moisture monitoring system in accordance with 40 CFR Part 75. Alternatively, for coal-fired units, the permittee may use appropriate fuel-specific default moisture values from §75.11(b) to estimate the moisture content of the stack gas. If the permittee installs and operates a moisture monitoring system, do not use substitute moisture data in the emissions calculations. [§63.10010(d)]
5. If the permittee uses a sorbent trap monitoring system, the permittee shall install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with MACT UUUUU Appendix A. The permittee shall calculate and record a 30- (or, if alternate emissions averaging is used, 90-) boiler operating day rolling average Hg emission rate, in units of the standard, updated after each new boiler operating day. Each 30- (or, if alternate emissions averaging is used, 90-) boiler operating day rolling average emission rate, calculated according to Section 6.2 of MACT UUUUU Appendix A, is the average of all of the valid hourly Hg emission rates in the preceding 30- (or, if alternate emissions averaging is used, a 90-) boiler operating days. Section 7.1.4.3 of MACT UUUUU Appendix A explains how to reduce sorbent trap monitoring system data to an hourly basis. [§63.10010(g)]
6. If the permittee chooses to comply with the PM filterable emissions limit in lieu of metal HAP limits, the permittee may choose to install, certify, operate, and maintain a PM CEMS and record the output of the PM CEMS as specified in §63.10010(i)(1) through (5). The compliance limit will be expressed as a 30-boiler operating day rolling average of the numerical emissions limit value applicable for the unit in Table 2 to MACT UUUUU. [§63.10010(i)]
   a) Install and certify the PM CEMS according to the procedures and requirements in Performance Specification 11—Specifications and Test Procedures for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in NSPS Appendix B, using Method 5 at NSPS Appendix A-3 and ensuring that the front half filter temperature shall be 160° ±14 °C (320° ±25 °F). The reportable measurement output from the PM CEMS must be expressed in units of the applicable emissions limit (e.g., lb/MMBtu, lb/MWh). [§63.10010(i)(1)]
   b) Operate and maintain the PM CEMS according to the procedures and requirements in Procedure 2—Quality Assurance Requirements for Particulate Matter Continuous Emission Monitoring Systems at Stationary Sources in NSPS Appendix F. [§63.10010(i)(2)]
      i) The permittee shall conduct the relative response audit (RRA) for the PM CEMS at least once annually. [§63.10010(i)(2)(i)]

ii) The permittee shall conduct the relative correlation audit (RCA) for the PM CEMS at least once every three years. [§63.10010(i)(2)(ii)]

c) Collect PM CEMS hourly average output data for all boiler operating hours except as indicated in §63.10010(i). [§63.10010(i)(3)]

d) Calculate the arithmetic 30-boiler operating day rolling average of all of the hourly average PM CEMS output data collected during all nonexempt boiler operating hours. [§63.10010(i)(4)]

e) The permittee shall collect data using the PM CEMS at all times the process unit is operating and at the intervals specified in §63.10010(a), except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. [§63.10010(i)(5)]

i) The permittee shall use all the data collected during all boiler operating hours in assessing the compliance with the operating limit except: [§63.10010(i)(5)(i)]

(1) Any data collected during periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or quality control activities that temporarily interrupt the measurement of emissions (e.g., calibrations, certain audits). The permittee shall report any monitoring system malfunctions or out of control periods in the annual deviation reports. The permittee shall report any monitoring system quality assurance or quality control activities per the requirements of §63.10031(b); [§63.10010(i)(5)(i)(A)]

(2) Any data collected during periods when the monitoring system is out of control as specified in the site-specific monitoring plan, repairs associated with periods when the monitoring system is out of control, or required monitoring system quality assurance or quality control activities conducted during out-of-control periods. The permittee shall report any such periods in the annual deviation report; [§63.10010(i)(5)(i)(B)]

(3) Any data recorded during periods of startup or shutdown. [§63.10010(i)(5)(i)(C)]

ii) The permittee shall record and make available upon request results of PM CEMS system performance audits, dates and duration of periods when the PM CEMS is out of control to completion of the corrective actions necessary to return the PM CEMS to operation consistent with your site-specific monitoring plan. [§63.10010(i)(5)(ii)]

<u>Continuous Compliance Requirements:</u>

1. The permittee shall monitor and collect data according to §63.10020 and the site-specific monitoring plan required by §63.10000(d). [§63.10020(a)]
2. The permittee shall operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for periods of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7)), and required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments. The permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. [§63.10020(b)]
3. The permittee may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in §§63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. The permittee shall use all of the

quality-assured data collected during all other periods in assessing the operation of the control device and associated control system. [§63.10020(c)]

4. Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments), failure to collect required data is a deviation from the monitoring requirements. [§63.10020(d)]
5. The permittee shall demonstrate continuous compliance with each emissions limit, operating limit, and work practice standard in Tables 2 and 3 to MACT UUUUU that applies, according to the monitoring specified in Table 7 to MACT UUUUU and §63.10021(b) through (g). [§63.10021(a)]
6. Except as otherwise provided in §63.10020(c), if the permittee uses a CEMS to measure PM or a sorbent trap monitoring system to measure Hg emissions, the permittee shall demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS (or sorbent trap monitoring system) and the other required monitoring systems (e.g., flow rate, CO_2, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day (or, if alternate emissions averaging is used for Hg, 90-boiler operating day) rolling average basis, updated at the end of each new boiler operating day. Use Equation 8 to determine the 30- (or, if applicable, 90-) boiler operating day rolling average.

$$Boiler\ operating\ day\ average = \frac{\sum_{i=1}^{n} Her_i}{n} \quad \text{Equation 8}$$

Where:
Her_i is the hourly emissions rate for hour i and n is the number of hourly emissions rate values collected over 30- (or, if applicable, 90-) boiler operating days. [§63.10021(b)]

7. If the permittee uses quarterly performance testing to demonstrate compliance with one or more applicable emissions limits in Table 2 to MACT UUUUU, the permittee: [§63.10021(d)]
   a) May skip performance testing in those quarters during which less than 168 boiler operating hours occur, except that a performance test shall be conducted at least once every calendar year. [§63.10021(d)(1)]
   b) Shall conduct the performance test as defined in Table 5 to MACT UUUUU and calculate the results of the testing in units of the applicable emissions standard. [§63.10021(d)(2)]
8. Conduct periodic performance tune-ups of the EGU(s), as specified in §63.10021(e)(1) through (9). For the first tune-up, the permittee may perform the burner inspection any time prior to the tune-up or the permittee may delay the first burner inspection until the next scheduled EGU outage provided the permittee meets the requirements of §63.10005. Subsequently, the permittee shall perform an inspection of the burner at least once every 36 calendar months unless the EGU employs neural network combustion optimization during normal operations in which case the permittee shall perform an inspection of the burner and combustion controls at least once every 48 calendar months. If the EGU is offline when a deadline to perform the tune-up passes, the permittee shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit. [§63.10021(e)]
   a) As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows: [§63.10021(e)(1)]
      i) Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO shall be installed within three calendar months after the burner inspection, [§63.10021(e)(1)(i)]

ii) Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the permittee; [§63.10021(e)(1)(ii)]

b) As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type; [§63.10021(e)(2)]

c) As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors; [§63.10021(e)(3)]

d) As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors; [§63.10021(e)(4)]

e) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O_2 probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary; [§63.10021(e)(5)]

f) Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles; [§63.10021(e)(6)]

g) While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppmv and oxygen in volume percent, before and after the tune-up 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). The permittee may use portable CO, NO_x and O_2 monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system; [§63.10021(e)(7)]

h) Maintain on-site and submit, if requested by the Director, an annual report containing the information in §63.10021(e)(1) through (e)(9) including: [§63.10021(e)(8)]

i) The concentrations of CO and NO_x in the effluent stream in ppmv, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems; [§63.10021(e)(8)(i)]

ii) A description of any corrective actions taken as a part of the combustion adjustment; and [§63.10021(e)(8)(ii)]

iii) The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period; and [§63.10021(e)(8)(iii)]

i) Report the date of all tune-ups electronically, in accordance with §63.10031(f). The tune-up report date is the date when tune-up requirements in §63.10021(e)(6) and (7) are completed. [§63.10021(e)(9)]

9. The permittee shall submit the reports required under §63.10031 and, if applicable, the reports required under Appendices A and B to MACT UUUUU. The electronic reports required by Appendices A to MACT UUUUU shall be sent to the Administrator electronically in a format prescribed by the Administrator, as provided in §63.10031. Sorbent trap monitoring system data shall be submitted using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool. Other data, including PM CEMS data, sorbent trap monitoring system performance test detail reports, shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool, the Compliance and Emissions Data Reporting Interface, or alternate electronic file format, all as provided for under §63.10031. [§63.10021(f)]
10. The permittee shall report each instance in which the permittee did not meet an applicable emissions limit or operating limit in Tables 2 and 3 to MACT UUUUU or failed to conduct a required tune-up. These instances are deviations from the requirements of MACT UUUUU These deviations shall be reported according to §63.10031. [§63.10021(g)]
11. The permittee shall follow the startup or shutdown requirements as given in Table 3 to MACT UUUUU for each coal-fired EGU. [§63.10021(h)]
    a) The permittee may use the diluent cap and default gross output values, as described in §63.10007(f), during startup periods or shutdown periods. [§63.10021(h)(1)]
    b) The permittee shall operate all CMS, collect data, calculate pollutant emission rates, and record data during startup periods or shutdown periods. [§63.10021(h)(2)]
    c) The permittee shall report the information as required in §63.10031. [§63.10021(h)(3)]
    d) The permittee may choose to submit an alternative non-opacity emission standard, in accordance with the requirements contained in §63.10011(g)(4). Until promulgation in the Federal Register of the final alternative non-opacity emission standard, the permittee shall comply with paragraph (1) of the definition of "startup" in §63.10042. [§63.10021(h)(4)]
12. The permittee shall provide reports as specified in §63.10031 concerning activities and periods of startup and shutdown. [§63.10021(i)]

Table 7 to MACT UUUUU – *Demonstrating Continuous Compliance*

If the permittee uses one of the following to meet applicable emissions limits, operating limits, or work practice standards ...	**The permittee shall demonstrate continuous compliance by ...**
1. CEMS to measure filterable PM or using a sorbent trap monitoring system to measure Hg	Calculating the 30- (or 90-) boiler operating day rolling arithmetic average emissions rate in units of the applicable emissions standard basis at the end of each boiler operating day using all of the quality assured hourly average CEMS or sorbent trap data for the previous 30- (or 90-) boiler operating days, excluding data recorded during periods of startup or shutdown.
4. Quarterly performance testing for coal-fired EGUs to measure compliance with one or more non-PM (or its alternative emission limits) applicable emissions limit in Table 2 to MACT UUUUU, or PM (or its alternative emission limits) applicable emissions limit in Table 2 to MACT UUUUU	Calculating the results of the testing in units of the applicable emissions standard.
5. Conducting periodic performance tune-ups of the EGU(s)	Conducting periodic performance tune-ups of the EGU(s), as specified in §63.10021(e).
6. Work practice standards for coal-fired EGUs during startup	Operating in accordance with Table 3 to MACT UUUUU

If the permittee uses one of the following to meet applicable emissions limits, operating limits, or work practice standards ...	The permittee shall demonstrate continuous compliance by ...
7. Work practice standards for coal-fired EGUs during shutdown	Operating in accordance with Table 3 to MACT UUUUU

General Provisions:

The permittee shall comply with 40 CFR Part 63, Subpart A as indicated by Table 9 to MACT UUUUU.

Notification, Reports, and Records

1. The permittee shall submit all of the notifications in §§63.7(b) and (c), 63.8 (e), (f)(4) and (6), and 63.9 (b) through (h) that apply by the dates specified. [§63.10030(a)]
2. When the permittee is required to conduct a performance test, the permittee shall submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [§63.10030(d)]
3. The permittee shall submit the notifications in §63.10000(h)(2) and (i)(2) that apply by the dates specified. [§63.10030(f)]
4. The permittee shall submit each report in Table 8 to MACT UUUUU that applies. If the permittee is required to (or elects to) continuously monitor Hg emissions, the permittee shall also submit the electronic reports required under Appendix A to MACT UUUUU, at the specified frequency. [§63.10031(a)]
5. Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee shall submit each report by the date in Table 8 to MACT UUUUU and according to the requirements in §63.10031(b)(1) through (5). [§63.10031(b)]
   a) Each subsequent compliance report shall cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [§63.10031(b)(3)]
   b) Each subsequent compliance report shall be postmarked or submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [§63.10031(b)(4)]
   c) For each affected source that is subject to permitting regulations pursuant to 40 CFR Part 70, and if the permitting authority has established dates for submitting semiannual reports pursuant to §70.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in §63.10031(b)(1) through (4). [§63.10031(b)(5)]
6. The compliance report shall contain the information required in §63.10031(c)(1) through (9). [§63.10031(c)]
   a) The information required by the summary report located in 63.10(e)(3)(vi). [§63.10031(c)(1)]
   b) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or the permittee's basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. [§63.10031(c)(2)]
   c) Indicate whether the permittee burned new types of fuel during the reporting period. If the permittee did burn new types of fuel the permittee shall include the date of the performance test where that fuel was in use. [§63.10031(c)(3)]

d) Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in §63.10021(e)(6) and (7) were completed. [§63.10031(c)(4)]
e) The permittee shall report emergency bypass information annually from EGUs with LEE status. [§63.10031(c)(6)]
f) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test, if applicable. If the permittee is conducting stack tests once every three years to maintain LEE status, consistent with §63.10006(b), the date of each stack test conducted during the previous three years, a comparison of emission level the permittee achieved in each stack test conducted during the previous three years to the 50 percent emission limit threshold required in §63.10005(h)(1)(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions. [§63.10031(c)(7)]
g) A certification. [§63.10031(c)(8)]
h) If the permittee has a deviation from any emission limit, work practice standard, or operating limit, the permittee shall also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation. [§63.10031(c)(9)]

7. For each excess emissions occurring at an affected source where the permittee is using a CMS to comply with that emission limit or operating limit, the permittee shall include the information required in §63.10(e)(3)(v) in the compliance report specified in §63.10031(c). [§63.10031(d)]
8. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR Part 70 shall report all deviations as defined in MACT UUUUU in the semiannual monitoring report required by §70.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 8 to MACT UUUUU along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in MACT UUUUU, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [§63.10031(e)]
9. Within 60 days after the date of completing each performance test, the permittee shall submit the performance test reports required by MACT UUUUU to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html). Only data collected using those test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media shall be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted shall be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the Air Pollution Control Program, the permittee shall also submit these reports, including the confidential business information, to the Air Pollution Control Program in the format specified by the Air Pollution Control Program. [§63.10031(f)]

a) Within 60 days after the date of completing each CEMS and sorbent trap monitoring system performance evaluation test, as defined in §63.2 and required by MACT UUUUU, the permittee shall submit the relative accuracy test audit (RATA) data required by MACT UUUUU to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (www.epa.gov/cdx). The RATA data shall be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (http://www.epa.gov/ttn/chief/ert/index.html). Only RATA data compounds listed on the ERT Web site are subject to this requirement. Owners or operators who claim that some of the information being submitted for RATAs is confidential business information (CBI) shall submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) by registered letter to EPA and the same ERT file with the CBI omitted to EPA via CDX as described earlier in this paragraph. The compact disk or other commonly used electronic storage media shall be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. At the discretion of the Air Pollution Control Program, the permittee shall also submit these RATAs to the Air Pollution Control Program in the format specified by the Air Pollution Control Program. The permittee shall submit calibration error testing, drift checks, and other information required in the performance evaluation as described in §63.2 and as required in this chapter. [§63.10031(f)(1)]

b) For a PM CEMS, within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st, the permittee shall submit quarterly reports to the EPA's WebFIRE database by using the CEDRI that is accessed through the EPA's CDX (www.epa.gov/cdx). The permittee shall use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. For each reporting period, the quarterly reports shall include all of the calculated 30-boiler operating day rolling average values derived from the CEMS. [§63.10031(f)(2)]

c) Reports for a Hg sorbent trap monitoring system and any supporting monitors for such systems (such as a diluent or moisture monitor) shall be submitted using the ECMPS Client Tool, as provided for in MACT UUUUU Appendix A and §63.10021(f). [§63.10031(f)(3)]

d) Submit the compliance reports required under §63.10031(c) and (d) and the notification of compliance status required under §63.10030(e) to EPA's WebFIRE database by using the CEDRI that is accessed through EPA's CDX (www.epa.gov/cdx). The permittee shall use the appropriate electronic reporting form in CEDRI or provide an alternate electronic file consistent with EPA's reporting form output format. [§63.10031(f)(4)]

e) All reports required by MACT UUUUU not subject to the requirements in §63.10031(f) and §63.10031(f)(1) through (4) shall be sent to the Administrator at the appropriate address listed in §63.13. If acceptable to both the Administrator and the permittee, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to §63.10031(f) and §63.10031(f)(1) through (4) in paper format. [§63.10031(f)(5)]

10. If the permittee had a malfunction 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 and which caused or may have caused any applicable emission limitation to be exceeded. [§63.10031(g)]

11. The permittee shall keep records according to §63.10032(a)(1) and (2). If the permittee is required to (or elects to) continuously monitor Hg emissions, the permittee shall also keep the records required under MACT UUUUU Appendix A. [§63.10032(a)]

a) A copy of each notification and report that the permittee submitted to comply with MACT UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in §63.10(b)(2)(xiv). [§63.10032(a)(1)]
b) Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in §63.10(b)(2)(viii). [§63.10032(a)(2)]

12. For each CEMS, the permittee shall keep records according to §63.10031(b)(1) through (4). [§63.10032(b)]
    a) Records described in §63.10(b)(2)(vi) through (xi). [§63.10032(b)(1)]
    b) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3). [§63.10032(b)(2)]
    c) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i). [§63.10032(b)(3)]
    d) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. [§63.10032(b)(4)]
13. The permittee shall keep the records required in Table 7 to MACT UUUUU. [§63.10032(c)]
14. For each EGU subject to an emission limit, the permittee shall also keep the records in §63.10032(d)(1) through (3). [§63.10032(d)]
    a) The permittee shall keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used. [§63.10032(d)(1)]
    b) If the permittee combusts non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the permittee shall keep a record which documents how the secondary material meets each of the legitimacy criteria. If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(2), the permittee shall keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the permittee shall keep a record which documents how the fuel satisfies the requirements of the petition process. [§63.10032(d)(2)]
    c) For an EGU that qualifies as an LEE under §63.10005(h), the permittee shall keep annual records that document that the emissions in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year. [§63.10032(d)(3)]
15. If the permittee elects to average emissions consistent with §63.10009, the permittee shall additionally keep a copy of the emissions averaging implementation plan required in §63.10009(g), all calculations required under §63.10009, including daily records of heat input or steam generation, as applicable, and monitoring records consistent with §63.10022. [§63.10032(e)]
16. Regarding startup periods or shutdown periods: [§63.10032(f)]
    a) The permittee shall keep records of the occurrence and duration of each startup or shutdown. [§63.10032(f)(1)]
17. The permittee shall keep records of the occurrence and duration of each malfunction of an operation (i.e., process equipment) or the air pollution control and monitoring equipment. [§63.10032(g)]
18. The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.10000(b), including corrective actions to restore malfunctioning

process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.10032(h)]

19. The permittee shall keep records of the type(s) and amount(s) of fuel used during each startup or shutdown. [§63.10032(i)]
20. Records shall be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§63.10033(a)]
21. As specified in §63.10(b)(1), the permittee shall keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.10033(b)]
22. The permittee shall keep each record on site for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The permittee may keep the records off site for the remaining three years. [§63.10033(c)]
23. Records shall be retained in either hard copy or electronic form.
24. These records shall be made available for inspection to the Department of Natural Resources' personnel upon request. [§70.6(a)(3)(ii)]

Table 8 to MACT UUUUU – *Reporting Requirements*

The permittee shall submit a ...	The report shall contain ...	The permittee shall submit the report ...
1. Compliance report	a. Information required in §63.10031(c)(1) through (9); and	Semiannually according to the requirements in §63.10031(b).
	b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies and there are no deviations from the requirements for work practice standards in Table 3 to MACT UUUUU that apply, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and	
	c. If the permittee has a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report shall contain the information in §63.10031(d). If there were periods during which the CMSs, including continuous emissions monitoring systems and continuous parameter monitoring systems, were out-of-control, as specified in §63.8(c)(7), the report shall contain the information in §63.10031(e).	

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

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

c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.

3. All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
   a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
   b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
4. The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
   a) The identification of each term or condition of the permit that is the basis of the certification;
   b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
   c) Whether compliance was continuous or intermittent;
   d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
   e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

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

1. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
   a) The 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 EPA and the Air Pollution Control Program 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

1. 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, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, 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.
2. §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), record keeping, 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, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, 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 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

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 permit, 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 contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. 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)34 Responsible Official

The application utilized in the preparation of this permit was signed by Roger Neumeyer, Plant Manager. 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.

Persons occupying the following positions at AECI are also authorized to act in the capacity of Responsible Official, as defined by §70.2, for New Madrid Power Plant:

- New Madrid Plant Manager
- New Madrid Assistant Plant Manager
- Title IV Designated Representative
- Title IV Alternate Designated Representative

Persons occupying the stated AECI positions are delegated to bind the installation in environmental permitting affairs, the permittee shall notify the Director of the Air Pollution Control Program to request changes to the positions listed. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include title of the positions assigned by the permittee to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by former responsible persons 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.

Persons occupying the stated AECI positions are delegated for the purposes of Title V only. All Title IV submissions shall be signed by either the Title IV Designated Representative or the Title IV Alternate Designated Representative.

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

1. This permit shall be reopened for cause if:
   a) 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,
   b) 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,
   c) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
      i) The permit has a remaining term of less than three years;
      ii) The effective date of the requirement is later than the date on which the permit is due to expire; or
      iii) 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,
   d) 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
   e) 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 J contains a list of abbreviations and acronyms used throughout this permit.

Attachment A
Fugitive Emission Observations

Date (Month/Year)	Time	Visible Emissions Beyond Boundary		Initial
		No	Yes	

Attachment B

Method 22 Visible Emissions Observations	
Installation Name	Observer Name
Location	Date
Sky Conditions	Wind Direction
Precipitation	Wind Speed
Time	Emission unit
Sketch emission unit: indicate observer position relative to emission unit; indicate potential emission points and/or actual emission points.	

Minute	Seconds				Comments
	0	15	30	45	
	Visible Emissions Yes (Y) or No (N)				
0					
1					
2					
3					
4					
5					
6					

If visible emissions are observed, the installation is not required to complete the entire six-minute observation. The installation shall note when the visible emissions were observed and shall conduct a Method 9 opacity observation.

Attachment C

Method 9 Opacity Observations		
Installation Name:	Sketch of the observer's position relative to the emission unit	
Emission Point:		
Emission Unit:		
Observer Name and Affiliation:		
Observer Certification Date:		
Method 9 Observation Date:		
Height of Emission Point:		
Time:	Start of observations	End of observations
Distance of Observer from Emission Point:		
Observer Direction from Emission Point:		
Approximate Wind Direction:		
Estimated Wind Speed:		
Ambient Temperature:		
Description of Sky Conditions (Presence and color of clouds):		
Plume Color:		
Approximate Distance Plume is Visible from Emission Point:		

Minute	Seconds				1-minute Avg. % Opacity[22]	6-minute Avg. % Opacity[23]	Steam Plume (check if applicable)		Comments
	0	15	30	45					
	Opacity Readings (% Opacity)[24]						Attached	Detached	
0						N/A			
1						N/A			
2						N/A			
3						N/A			
4						N/A			
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

[22] 1-minute avg. % opacity is the average of the four 15 second opacity readings during the minute.
[23] 6-minute avg. % opacity is the average of the six most recent 1-minute avg. % opacities.
[24] Each 15 second opacity reading shall be recorded to the nearest 5% opacity as stated within Method 9.

15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

EP-04, EP-05C, EP-05D, and EP-06 are in compliance if each six-minute average opacity is less than or equal to 20%.

EP-05A, EP-05B, and IA-20 are in compliance if each six-minute average opacity is less than or equal to 40%. Exception: These emission units are in compliance if only one six-minute average opacity from each emission unit is greater than 40%, but less than 60%.

EP-07, EP-11, EP-12, EP-14, EP-15, EU0290, EU0300, FE-03, and EP-16 are in compliance if each six-minute average opacity is less than or equal to 20%. Exception: These emission units are in compliance if only one six-minute average opacity from each emission unit is greater than 20%, but less than 60%.

Was the emission unit in compliance at the time of evaluation (yes or no)? _____

_____
Signature of Observer

Attachment D
Inspection/Maintenance/Repair/Malfunction Log

Emission Source _____

Date/Time	Inspection/ Maintenance Activities	Malfunction Activities					
		Malfunction	Impact	Duration	Cause	Action	Initials

Attachment E
Acid Rain Permit

TITLE IV:
ACID RAIN PERMIT

In accordance with Titles IV and V of the Federal Clean Air Act and Missouri State Regulation 10 CSR 10-6.270 *Acid Rain Source Permits Required*, the State of Missouri issues this Acid Rain Permit.

Installation Name: **New Madrid Power Plant**
ORIS Code: **2167**
Unit ID: **1 and 2**

The permit application submitted for this source, as corrected by the Missouri Department of Natural Resources' Air Pollution Control Program is attached. The permittee shall comply with the requirements set forth in this application.

The number of allowances actually held by the permittee in each unit's Allowance Tracking System account may differ from the number allocated by the U.S. EPA. Pursuant to §72.9(c) and §72.84 these differences do not necessitate a revision to any unit SO_2 allowance allocations identified in this permit.

Pursuant to 40 CFR Part 76, the Missouri Department of Natural Resources' Air Pollution Control Program approves the Phase II NO_x Compliance Plan and Phase II NO_x Averaging Plan submitted for these units, effective for calendar years 2018 through 2022. These units qualify as Phase I, Group 2 cyclone boilers per §73.10(a) and §76.2. In addition to complying with these NO_x limits, the permittee shall comply with all other applicable requirements of 40 CFR Part 76, including the requirement to reapply for a NO_x compliance plan and requirements covering excess emissions.

This acid rain permit is being issued in conjunction with this operating permit and is effective for the same period as stated on the cover page of the operating permit. The permittee shall submit an application for renewal of this permit in conjunction with the operating permit renewal application.

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ New ☐ Revised X for ARP permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Facility (Source) Name	State	Plant Code
New Madrid Power Plant	MO	02167

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

a	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
1	Yes
2	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

EPA Form 7610-16 (Revised 7-2014)

Facility (Source) Name (from STEP 1)

Permit Requirements

STEP 3

Read the standard requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name (from STEP 1)

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the

Facility (Source) Name (from STEP 1)

submission of a new certificate of representation changing the designated representative;

STEP 3, Cont'd.

Recordkeeping and Reporting Requirements, Cont'd.

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

Page 5

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements
under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the certification statement, sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name **Brent Ross – Designated Representative**	
Signature	Date 4/27/2015

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258
Approval expires 11/30/2012

Acid Rain NO_X Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

Page 1

This submission is: ☐ New ☒ Revised

Page 1 of 2

STEP 1
Indicate plant name, State, and Plant code from the current Certificate of Representation covering the facility.

Plant Name	State	Plant Code
New Madrid Power Plant	MO	02167

STEP 2

Identify each affected Group 1 and Group 2 boiler using the unit IDs from the current Certificate of Representation covering the facility. Also indicate the boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom, and select the compliance option for each unit by making an 'X' in the appropriate row and column.

	ID# 1	ID# 2	ID#	ID#	ID#	ID#
	Type CY	Type CY	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)						
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)						
(c) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)						
(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)						
(e) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(f) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	X	X				
(g) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(h) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						

NOx Compliance – Page 2

STEP 2, cont'd

New Madrid Power Plant
Plant Name (From Step 1)

	ID#	ID#	ID#	ID#	ID#	ID#
	Type	Type	Type	Type	Type	Type
(i) NO_x Averaging Plan (include NO_x Averaging form)	X	X				
(j) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)						
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO_x Averaging (check the NO_x Averaging Plan box and include NO_x Averaging Form))						
(l) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						

STEP 3: Identify the first calendar year in which this plan will apply.

January 1, 2018

STEP 4: Read the special provisions and certification, enter the name of the designated representative, sign and date.

Special Provisions

General. This source is subject to the standard requirements in 40 CFR 72.9. These requirements are listed in this source's Acid Rain Permit.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Brent Ross	
Signature	Date 8-15-2018

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is: ☐ New ☒ Revised

Page 1 of 2

STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
New Madrid Power Plant	MO	1	0.86	0.93	45,000,000
New Madrid Power Plant	MO	2	0.86	0.93	45,000,000
Thomas Hill Energy Center	MO	MB1	0.86	0.93	17,000,000
Thomas Hill Energy Center	MO	MB2	0.86	0.93	25,000,000
Thomas Hill Energy Center	MO	MB3	0.50	0.30	50,000,000

STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan		Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7
0.76	≤	0.76

$$\frac{\sum_{i=1}^{n} (R_{Li} \times HI_i)}{\sum_{i=1}^{n} HI_i} \leq \frac{\sum_{i=1}^{n} [R_{1i} \times HI_i]}{\sum_{i=1}^{n} HI_i}$$

Where,

R_{Li} = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;

R_{1i} = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;

HI_i = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;

n = Number of units in the averaging plan

New Madrid Power Plant
Plant Name (from Step 1)

NO_x Averaging - Page 2

STEP 3

Mark one of the two options and enter dates.

[X] This plan is effective for calendar year 2018 through calendar year 2022 unless notification to terminate the plan is given.

[ ] Treat this plan as [ ] identical plans, each effective for one calendar year for the following calendar years: _____, _____, _____, _____ and _____ unless notification to terminate one or more of these plans is given.

STEP 4

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

Special Provisions

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO_x under the plan only if the following requirements are met:

(i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
(a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,
(b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
(ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
(iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Brent Ross	
Signature	Date 8-15-2018

Attachment F
CAIR Permit

CAIR Permit Application

Page 1

(for sources covered under a CAIR SIP)

For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

This submission is: New ☐ Revised X Renewal

STEP 1
Identify the source by plant name, State, and ORIS or facility code

New Madrid Power Plant Plant Name	**MO** State	**0002167** ORIS/Facility Code

STEP 2
Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO_X Annual	SO_2	NO_X Ozone Season
1	X	X	X
2	X	X	X

STEP 3
Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) that is not otherwise required to have a title V operating permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and such CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable).

New Madrid Power Plant
Plant Name (from Step 1)

STEP 3, continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) with the CAIR NO_X emissions limitation, CAIR SO_2 emissions limitation, and CAIR NO_X Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO_X unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO_X allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.

(4) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Annual Trading Program. No provision of the CAIR NO_X Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO_X unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO_2 allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.

(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO_2 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO_2 unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_X Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.

(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO_X allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season

STEP 3, continued

Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_X allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Excess emissions requirements.

If a CAIR NO_X source emits nitrogen oxides during any control period in excess of the CAIR NO_X emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_X unit at the source shall surrender the CAIR NO_X allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR SO_2 source emits sulfur dioxide during any control period in excess of the CAIR SO_2 emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

If a CAIR NO_X Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_X Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required
under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

New Madrid Power Plant
Plant Name (from Step 1)

CAIR Permit Application
Page 4

STEP 3, continued

(f) Liability.

(1) Each CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) and each NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) that applies to a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_X units, CAIR SO_2 units, and CAIR NO_X Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable) that applies to a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

(g) Effect on Other Authorities.

No provision of the CAIR NO_X Annual Trading Program, CAIR SO_2 Trading Program, and CAIR NO_X Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source, CAIR SO_2 source, and CAIR NO_X Ozone Season source (as applicable) or CAIR NO_X unit, CAIR SO_2 unit, and CAIR NO_X Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name **Brent Ross**	
Signature	Date 8-15-2019

Attachment G
EP-09 NO_x Tracking Sheet

Date (Month/Year)	Monthly EP-09 Diesel Usage (1000 gal)	Monthly NO_x Emissions[25] (tons)	12-Month Rolling Total NO_x Emissions[26] (tons)

Attachment H

Construction Permit 082006-011 PM_{10} Tracking Sheet

Date (Month/Year)	Monthly Fly Ash Landfilled (tons)	Monthly Bottom Ash Landfilled (tons)	Monthly PM_{10} Emissions[27] (tons)	12-Month Rolling Total PM_{10} Emissions[28] (tons)

[27] Monthly PM_{10} Emissions (tons) = [Monthly Fly Ash Landfilled (tons) x 0.0871 lb/ton + Monthly Bottom Ash Landfilled (tons) x 0.084 lb/ton] x 0.0005 ton/lb. Where the fly ash and bottom ash emission factors are composite emission factors. The composite fly ash emission factor includes emissions from FE-04 a 802.56 feet long paved haul road, with an unloaded truck weight of 35 tons, a loaded truck weight of 75 tons, an MHDR of 40 tph, a silt loading of 7.4 g/m^2, and 50% control for undocumented watering. Emissions from the paved haul road were determined according to AP-42 Section 13.2.1 "Paved Roads" (January 2011). The composite emission factors for both fly ash and bottom ash include emissions from FE-05 a 5,148 feet long unpaved haul road, with an unloaded truck weight of 35 tons, a loaded truck weight of 75 tons, an MHDR of 40 tph for each type of ash, a silt content of 6.4, and 50% control for undocumented watering. The composite emission factors for both fly ash and bottom ash include emissions from FE-06 a 528 feet long unpaved haul road, with an unloaded truck weight of 35 tons, a loaded truck weight of 75 tons, an MHDR of 0.5 tph combined, a silt content of 6.4%, and 50% control for undocumented watering. Emissions from the unpaved haul roads were determined according to AP-42 Section 13.2.2 "Unpaved Roads" (November 2006). The composite emission factor for fly ash includes emissions from EP-11 and EP-12 and the composite emission factor for bottom ash includes emissions from EP-14 and EP-15. Emissions from EP-11, EP-12, EP-14, and EP-15 were determined according to AP-42 Section 13.2.4 "Aggregate Handling and Storage Piles" (November 2006) based on a maximum moisture content of 4.8% (actual moisture contents of the ashes are higher; however, 4.8% is the highest moisture content for which the equation retains an A rating), an average wind speed of 10 mph, and an MHDR of 40 tph for each type of ash. The composite emission factors for both fly ash and bottom ash include emissions from FE-07 a 25 acre landfill (only 0.1 acres of which is active at any given time), a moisture content of 27%, a silt content of 80%, 260 dry days per year, and wind speeds above 12 mph 32% of the time.

[28] 12-Month Rolling Total PM_{10} Emissions (tons) = the sum of the 12 most recent Monthly PM_{10} Emissions (tons). **12-Month Rolling Total PM_{10} Emissions of less than 15 tons indicates compliance with Permit Condition 018.**

Attachment I
EP-13 NO_x Tracking Sheet

Date (Month/Year)	Monthly EP-13 Diesel Usage (1000 gal)	Monthly NO_x Emissions[29] (tons)	12-Month Rolling Total NO_x Emissions[30] (tons)

Attachment J

Abbreviations and Acronyms

ºC.....degrees Celsius
ºF..... degrees Fahrenheit
AAQIA ..... ambient air quality impact analysis
acfm ..... actual cubic feet per minute
BACT ..... best available control technology
BMPs ..... best management practices
Btu ..... British thermal unit
CAIR ..... clean air interstate rule
CAM ..... compliance assurance monitoring
CAS..... chemical abstracts service
CEMS ..... continuous emission monitor system
CFR ..... code of federal regulations
CMS..... continuous monitoring system
CO ..... carbon monoxide
CO_2 ..... carbon dioxide
CO_2e ..... carbon dioxide equivalent
COMS..... continuous opacity monitoring system
CSAPR ..... cross state air pollution rule
CSR..... code of state regulations
dscf..... dry standard cubic feet
dscm.....dry standard cubic meter
EGU..... electric generating unit
EIQ ..... emission inventory questionnaire
EP ..... emission point
EPA..... Environmental Protection Agency
ESP ..... electrostatic precipitator
EU ..... emission unit
FGD ..... flue gas desulfurization
FIRE..... EPA's Factor Information Retrieval System
fps ..... feet per second
ft..... feet
GACT ..... generally available control technology
GHG ..... greenhouse gas
gpm ..... gallons per minute
gr..... grains
GWh ..... gigawatt hours
GWP..... global warming potential
HAP ..... hazardous air pollutant
HCl ..... hydrogen chloride
Hg ..... mercury
HP ..... horsepower
hr ..... hour
lb..... pound
lb/hr..... pounds per hour
LEE ..... low emitting EGU
LPG..... liquid propane gas
MACT ..... maximum achievable control technology
$\mu g/m^3$ ..... micrograms per cubic meter
m/s ..... meters per second
mg..... milligrams
Mgal ..... 1,000 gallons
MHDR..... maximum hourly design rate
MMBtu .... million Btu
mmHg..... millimeters mercury
MMscf..... million standard cubic feet
MW ..... megawatt
MWh ..... megawatt hours
NAAQS .... national ambient air quality standards
NESHAPs national emissions standards for HAP
NO_x..... nitrogen oxides
NSPS ..... new source performance standards
NSR ..... new source review
PAC ..... powdered activated carbon
PM ..... particulate matter
$PM_{2.5}$..... PM less than 2.5 microns in aerodynamic diameter
PM_{10} ..... PM less than 10 microns in aerodynamic diameter
ppm ..... parts per million
PSD..... prevention of significant deterioration
psi..... pounds per square inch
PTE ..... potential to emit
QA ..... quality assurance
RACT ..... reasonable available control technology
RAL..... risk assessment level
SCC ..... source classification code
scfm ..... standard cubic feet per minute
SCR ..... selective catalytic reduction
SDS..... safety data sheet
SIC ..... standard industrial classification
SIP ..... state implementation plan
SMAL..... screening model action level

SO_x..... sulfur oxides
SO_2..... sulfur dioxide
SSM ..... startup, shutdown, and malfunction
TBtu..... thousand Btu
tph..... tons per hour
tpy..... tons per year
VMT ..... vehicle miles traveled
VOC..... volatile organic compounds

STATEMENT OF BASIS

Installation Description

New Madrid Power Plant was originally designed and initially constructed prior to 1971, to operate two coal-fired steam generating boilers for the generation of electric power. The main sources of air pollutants from this installation include two coal-fired steam generating boilers, and coal and ash handling systems. Other insignificant activities are located at the facility including, but not limited to: fuel oil and gasoline tanks, waste oil storage tank(s), ethylene glycol storage tank(s), sulfuric acid tank(s), various parts washers, and fuel powered maintenance equipment. The installation is a major source of NO_x, SO_x, CO, PM_{10}, $PM_{2.5}$, VOC, Combined HAP, Hydrogen Fluoride, Hydrogen Chloride, and Formaldehyde.

The installation is a named source; therefore, fugitive emissions count towards major source applicability.

Pollutants	PTE[31] (tpy)	EIQ Reported Actual Emissions (tpy)				
		2017	2016	2015	2014	2013
PM_{10}	2,066.41	942.97	787.24	733.37	914.25	893.01
$PM_{2.5}$	1,586.94	547.57	471.10	437.43	554.04	539.31

[31] Based on 8,760 hours of uncontrolled annual operation unless otherwise noted:

- Emissions from EP-01 and EP-02 are based on the worst-case fuel and include the use of ESPs and SCR.
- EP-03 was based on 500 hours of annual operation per EPA guidance document "Calculating Potential to Emit (PTE) for Emergency Generators" (September 1995).
- EP-04, EP-05A, EP-05C, EP-05D, and EP-06 were given 99% control of PM_{10} and $PM_{2.5}$ due to the use of fabric filters required by Permit Condition 014.
- Emissions from EP-07 were calculated using a fabric filter controlled emission factor due to the use of a fabric filter required by Permit Condition 014.
- EP-05B was given 90% control of PM_{10} and $PM_{2.5}$ due to the use of water spray required by Permit Condition 014.
- EP-09 was evaluated at 40 tpy of NO_x emissions as limited by Permit Condition 017.
- EP-11, EP-12, EP-14, EP-15, FE-04, FE-05, FE-06, and FE-07 were evaluated at 15 tpy PM_{10} as limited by Permit Condition 018.
- FE-02, FE-04, FE-05, and FE-06 were given 50% control of PM_{10} and 22.22% control of $PM_{2.5}$ due to undocumented watering.
- EP-13 was evaluated at 40 tpy of NO_x emissions as limited by Permit Condition 019.
- PTE currently includes Cyclean points… Not sure if these are in operation and haven't included applicable requirements in permit yet…
- Potential emissions from working losses associated with IA-03, IA-04, IA-05, IA-06, IA-07, IA-08, IA-12, IA-20, IA-25, IA-26, and IA-27 were not included in the PTE as no maximum annual usage rates were available.
- Potential emissions from IA-10, IA-11, IA-13, IA-14, IA-15, IA-18, IA-19, IA-21, IA-22, IA-23, and IA-24 were not included in the PTE as insufficient information was available to determine the PTE of these emission sources.
- Potential emissions from IA-29 were not included in the PTE as IA-29 is not a stationary emission source.
- Potential emissions from EP-16 include the use of an inherent bin vent filter.
- Sulfur emissions are based on emission limits in Permit Conditions 004, 008, 009, 011, 012, 020, and 021.

Pollutants	PTE[31] (tpy)	EIQ Reported Actual Emissions (tpy)				
		2017	2016	2015	2014	2013
SO_x	26,259.56	13,548.39	12,467.21	12,375.27	16,671.96	16,822.82
NO_x	47,860.26	12,238.78	16,107.02	4,200.82	20,566.97	22,154.93
VOC	403.46	235.40	209.37	207.18	262.86	254.90
CO	34,472.10	2,487.44	3,462.95	4,821.14	4,863.59	6,099.85
HAP	655.21	127.49	111.18	112.28	146.84	150.81
Hydrogen Fluoride (7664-39-3)	501.85	118.82	103.51	105.88	136.59	136.48
Hydrogen Chloride (7647-01-0)	111.08	7.40	6.55	5.32	8.90	12.97
Formaldehyde (50-00-0)	24.58	Not reported				
Acetaldehyde (75-07-0)	1.92	0.12	0.11	0.10	0.13	0.13
Arsenic Compounds (20-01-9)	1.37	0.03	0.03	0.02	0.02	0.03
Benzene (71-43-2)	4.37	0.14	0.13	0.13	0.16	0.16
Chromium Compounds (20-06-4)	0.87	0.12	0.11	0.10	0.14	0.14
Dichloromethane (75-09-2)	1.77	0.13	0.12	0.12	0.15	0.14
Dioctyl Phthalate (117-81-7)	0.24	0.13	0.12	0.12	0.15	0.14
Manganese Compounds (20-12-2)	1.64	0.20	0.16	0.16	0.20	0.19
Mercury Compounds (20-13-3)	0.07	0.02	0.01	0.03	0.03	0.03
Nickel Compounds (20-14-4)	0.94	0.15	0.12	0.12	0.15	0.16
Phenol (108-95-2)	1.30	0.12	0.11	0.11	0.14	0.13
Vinyl Chloride (75-01-4)	0.17	0.03	0.02	0.02	0.03	0.03
Lead Compounds (20-11-1)	1.41	0.07	0.07	0.05	0.07	0.06
Other Individual HAPs	<10 each	Not reported				

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 April 30, 2015
2. 2013, 2014, 2015, 2016, and 2017 EIQs
3. U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition
4. EPA's WebFIRE: https://cfpub.epa.gov/webfire/index.cfm?action=fire.SearchEmissionFactors

5. No Construction Permit Required Determinations issued January 13, 2016; October 16, 2016; July 27, 2012; November 30, 2011; October 4, 2011; and October 24, 2005
6. Temporary Construction Permits 022012-015, 082007-018, and 2004-09-067
7. PSD Permits 122010-012 and 092006-004
8. Minor NSR Permits 122009-001, 052006-001, 082006-011, 122002-013, and 1292-014

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*
This rule is not applicable because the installation is in an ozone attainment area.

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 in this permit. Per 10 CSR 10-6.390, this regulation applies to stationary internal combustion engines greater than 1,300 HP.

- EP-03 Emergency Generator meets the definition of emergency standby engine at 10 CSR 10-6.020(2)(E)14 as is exempt from this regulation per 10 CSR 10-6.390(1)(C).
- EP-09 Barge River Pumps are each 800 HP; therefore, they are not subject to this regulation.
- EP-13 Barge River Pumps are each 345 HP; therefore, they are not subject to this regulation.

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Process* is not applicable to the installation and has not been applied in this permit.

- The burning of fuel for indirect heating is exempt per 10 CSR 10-6.400(1)(B)6; therefore, EP-01, EP-02, EU0290, EU0300, and IA-28 are not subject to this regulation.
- The grinding crushing, and conveying operations at a power plant are exempt per 10 CSR 10-6.400(1)(B)13; therefore, EP-04, EP-05A, EP-05B, EP-05C, EP-05D, EP-06, EP-07, EP-11, EP-12, EP-14, EP-15, and FE-03 are not subject to this regulation.
- The definition of process weight at 10 CSR 10-6.020(2)(P)60 excludes liquids and gases used solely as fuels; therefore, EP-03, EP-09, and EP-13 are not subject to this regulation.
- Fugitive emissions are exempt per 10 CSR 10-6.400(1)(B)7; therefore, FE-01, FE-02, FE-04, FE-05, FE-06, and FE-07 are not subject to this regulation.

Construction Permit History

No Construction Permit Required Determination, Issued January 13, 2016:

- This determination is for the use of two 2.4 MMBtu/hr fuel oil heaters. The heaters are rented and used every winter for the purpose of preventing the lower areas of Boilers 1 and 2 from freezing. The heaters are skid mounted (i.e. portable). As the heaters are not stationary emission sources they are not required to be included in this permit.

Construction Permit Applicability Determination, Issued October 16, 2015:

- This determination is for the use powdered activated carbon (PAC) injection and associated handling equipment.

No Construction Permit Required Determination, Issued July 27, 2012:

- This determination is for the use of 14 275 HP diesel-fired barge pumps. According to the supplied documentation, the barge pumps are moved to the plant by truck and unloaded into the river prior to placement in the river current for pumping cooling water into the plant intake structures. The barge pumps operate only during low river conditions and are returned to the lessor as soon as river conditions support cooling water needs of the plant. The units are portable and transportable and will not be operated in one location for longer than 12 months; therefore, they meet the definition of nonroad at §89.2. These engines were never installed.

Temporary Construction Permit 022012-015, Issued February 24, 2012:
- This temporary construction permit was for trial testing of dry sorbent injection.
- This permit expired July 1, 2012.

No Construction Permit Required Determination, Issued November 30, 2011:
- This no construction permit required determination is for replacement of portions of the steam turbine for Boiler 2. The project, commonly referred to as "Dense Pack", was designed to improve the efficiency of the steam turbine and reduce the ratio of fuel burned to electrical generation.

No Construction Permit Required Determination, Issued October 4, 2011:
- This no construction permit required determination is for replacement of portions of the steam turbine for Boiler 1. The project, commonly referred to as "Dense Pack", was designed to improve the efficiency of the steam turbine and reduce the ratio of fuel burned to electrical generation.

PSD Permit 122010-012, Issued December 17, 2010:
- This PSD permit revises the CO limits established in Construction Permit 122009-001.
- Special Condition 1 states that the conditions of this permit supersede Special Conditions 1.A, 1.B, and 1.C of Construction Permit 122009-001.
- Special Conditions 2 – 5 have been applied in Permit Condition 001.

Construction Permit 122009-001, Issued December 2, 2009:
- This minor construction permit is for the installation of the CyClean Process to lower mercury emissions from Boilers 1 and 2.
- Special Conditions 1.A, 1.B, and 1.C were superseded by PSD Permit 122010-012.
- Special Conditions 1.D, 1.E, and 1.F are no longer applicable as Special Conditions 1.A, 1.B, and 1.C have been superseded.
- Special Condition 2 required a study be submitted on the effects of the use of the CyClean coal additives. This study has already been submitted.
- Special Condition 3 has been applied in Permit Condition 002.

Temporary Construction Permit 082007-018, Issued August 23, 2007:
- This temporary construction permit was for the temporary operation of 20 Caterpillar C-9 diesel-engine-driven pumps.
- This permit expired September 22, 2007.

PSD Permit 092006-004, Issued September 18, 2006:
- This PSD permit is for the installation of over-fire air (OFA) combustion controls on Boilers 1 and 2.
- Special Conditions 1 - 4 are redundant with the requirements of PSD Permit 122010-012 Special Conditions 2 – 5 (see Permit Condition 001).

Construction Permit 052006-001, Issued May 1, 2006:
- This minor construction permit is for the addition of EP-13 Two 345 HP Diesel Barge River Pumps.
- Special Condition 1 has been applied in Permit Condition 019.

Construction Permit 082006-011, Issued August 29, 2006:
- This minor construction permit is for the installation of a fly ash disposal process consisting of a paddle mixer, haul roads, and a utility waste landfill.
- Special Conditions 1 – 4 have been applied in Permit Condition 018.

No Construction Permit Required Determination, Issued October 24, 2005:
- This no construction permit required determination is for power washing of the boilers while they are shutdown.

Temporary Construction Project 2004-09-067, Issued September 29, 2004:
- This temporary construction project was for the temporary use of four 500 HP diesel-fired air compressors.
- This permit expired October 31, 2004.

Construction Permit 122002-013, Issued December 16, 2002:
- This minor construction permit is for the installation of EP-09 eight 300 HP Diesel Barge River Pumps.
- Special Condition 1 has been applied in Permit Condition 017.

Construction Permit 1292-014, Issued December 16, 1992:
- This minor construction permit is for modifications to the coal delivery process, coal storage process, and coal crushers to accommodate a low sulfur Wyoming coal.
- Special Conditions 1 – 4 have been applied in Permit Condition 014. Although EP-05A and EP-05B were constructed in 1970 and EP-05C was constructed in 1980, these emission sources are subject to the special conditions of this permit as they were modified by the project (increased from 3,000,000 tons per year throughput to 4,200,000 tons per year throughput).

NSPS Applicability

40 CFR Part 60, Subpart D – *Standards of Performance for Fossil-Fuel-Fired Steam Generators* is not applicable to the installation. This regulation applies to each fossil-fuel-fired steam generating unit of more than 250 MMBtu/hr that commenced construction or modification after August 17, 1971 per §60.40. §60.2 states *commenced* "means, with respect to the definition of *new source* in §111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification. EP-01 Boiler #1 commenced construction in 1967 when AECI entered into a contract for its construction. EP-02 Boiler #2 commenced construction in 1970 when AECI entered into a contract for its construction.

40 CFR Part 60, Subpart Da – *Standards of Performance for Electric Utility Steam Generating Units* is not applicable to the installation. This regulation applies to each electric utility steam generating unit capable of combusting more than 250 MMBtu/hr heat input of fossil fuel for which construction,

modification, or reconstruction commenced after September 18, 1978 per §60.40a(a). EP-01 Boiler #1 and EP-02 Boiler #2 commenced construction in 1967 and 1970, respectively.

40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* is not applicable to the installation. This regulation is applicable to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984 and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 MMBtu/hr per §60.40b(a). EP-01 Boiler #1 and EP-02 Boiler #2 commenced construction in 1967 and 1970, respectively.

40 CFR Part 60, Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* is not applicable to the installation. This regulation applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr. EP-01 Boiler #1 and EP-02 Boiler #2 have maximum hourly design rates of 6,340 MMBtu/hr each.

40 CFR Part 60, Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978* is not applicable to the installation and has not been applied in this permit. Per §60.110(a) this regulation applies to storage tanks with capacities greater than 40,000 gallons. EP-08, IA-01, IA-03, IA-04, IA-05, IA-06, IA-07, IA-08, IA-11, IA-12, IA-14, IA-17, IA-20, IA-25, IA-26, and IA-27 all have capacities of less than 40,000 gallons.

40 CFR Part 60, Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984* is not applicable to the installation and has not been applied in this permit. Per §60.110a(a) this regulation applies to storage tanks with capacities greater than 40,000 gallons. EP-08, IA-01, IA-03, IA-04, IA-05, IA-06, IA-07, IA-08, IA-11, IA-12, IA-14, IA-17, IA-20, IA-25, IA-26, and IA-27 all have capacities of less than 40,000 gallons.

40 CFR Part 60, Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984* is not applicable to the installation and has not been applied in this permit. Per §60.110b(a) this regulation applies to storage tanks with capacities greater than 75 m^3.

- EP-08, IA-03, IA-04, IA-05, IA-06, IA-07, IA-08, IA-11, IA-12, IA-14, IA-17, IA-20, IA-25, IA-26, and IA-27 all have capacities of less than 75 m^3 (19,812.9 gallons).
- Two of the storage tanks associated with IA-01 Fuel Oil #2/Diesel Storage Tanks are 25,000 gallons (94.6 m^3); however, fuel oil #2/diesel has a maximum true vapor pressure of 0.012 psi (0.08 kPa) according to AP-42 Section 7.1 "Organic Liquid Storage Tanks" (November 2006) which is less than 15.0 kPa. As long as these two 25,000 gallons tanks contain fuel oil #2/diesel, they are exempt from NSPS Kb per §60.110b(b). If the contents of the tanks should change, NSPS Kb applicability must be re-evaluated.

40 CFR Part 60, Subpart Y – *Standards of Performance for Coal Preparation and Processing Plants* is applicable to the installation and has been applied in Permit Condition 013. This regulation applies to coal preparation and processing plants that process more than 200 tons of coal per day and commenced

construction, reconstruction or modification after October 27, 1974. This regulation does not apply to EP-05A Railcar Unloading Coal Conveyors #A1, A2, B1, & B2, EP-05B Coal Conveyors #C1, C2, D1, & D2, or FE-01 Coal Pile as they were constructed in 1970. The increased annual throughput to these emission sources authorized under Construction Permit 1292-014 does not meet the definition of modification at §60.2 as there was no increase in the hourly emissions from these sources (i.e. the emission sources achieved the increased annual throughput by increasing their annual hours of operation rather than increasing their hourly throughput).

40 CFR Part 60, Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* is not applicable to the installation. This regulation applies to owners and operators of stationary CI ICE that commence construction after July 11, 2005.

- EP-03 Emergency Generator commenced construction in 1983.
- EP-09 (8) Barge River Pumps commenced construction in 2002.
- EP-13 Barge River Pumps are non-road engines as defined at §1068.30; therefore, they are not stationary RICE and are not subject to this regulation. These barge river pumps are used to pump cooling water during periods of low river flow. According to Associated Electric Cooperative, Inc., these engines sit in storage for months, even years before they are put in service to pump cooling water from the river. When in service, they are located at the cooling water inlet - they sit on a sort of skid mounted boat hull. Once the river water comes back up, the plant moves them back to storage until the river water drops off again. They may be in storage for months or years depending on river levels - and Associated Electric Cooperative, Inc. only uses them when it is absolutely necessary.

40 CFR Part 60, Subpart TTTT – *Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units* is not applicable to the installation. This regulation applies to each steam generating unit, IGCC, or stationary combustion turbine that commences construction after January 8, 2014 or commences modification or reconstruction after June 18, 2014. EP-01 Boiler #1 and EP-02 Boiler #2 commenced construction in 1967 and 1970, respectively.

MACT Applicability

40 CFR Part 63, Subpart T – *National Emission Standards for Halogenated Solvent Cleaning* is not applicable to the installation and has not been applied in this permit. This regulation applies to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent per §63.460(a). IA-17 Parts Washers do not use solvents containing any of the regulated halogenated HAP solvents.

40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* applies to stationary RICE per §63.6585.

- EP-03 Emergency Generator is exempt from this regulation per §63.6590(b)(3)(iii) provided it complies with the definition of emergency stationary RICE in §63.6675, the requirements of this conditional exemption appear in Permit Condition 010.

- EP-09 and EP-13 Barge River Pumps are non-road engines as defined at §1068.30; therefore, they are not stationary RICE and are not subject to this regulation. These barge river pumps are used to pump cooling water during periods of low river flow. According to Associated Electric Cooperative, Inc., these engines sit in storage for months, even years before they are put in service to pump cooling water from the river. When in service, they are located at the cooling water inlet - they sit on a sort of skid mounted boat hull. Once the river water comes back up, the plant moves them back to storage until the river water drops off again. They may be in storage for months or years depending on river levels - and Associated Electric Cooperative, Inc. only use them when it is absolutely necessary.

40 CFR Part 63, Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters* is not applicable to the installation and has not been applied in this permit. This regulation applies to industrial, commercial, and institutional boilers or process heaters as defined in §63.7575 that are located at, or are part of, a major source of HAP, except as specified in §63.7491 per §63.7485.

- EP-01 Boiler #1 and EP-02 Boiler #2 are EGUs covered by MACT UUUUU; therefore, they are exempt from MACT DDDDD per §63.7491(a).
- EU0290 and EU0300 Tioga Heaters and IA-28 LPG Heaters are used to provide comfort/space heat; therefore, they do not meet the definition of a process heater at §63.7575: "*Process heater* means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. A device combusting solid waste, as defined in §241.3 of this chapter, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves. Waste heat process heaters are excluded from this definition."
- IA-18 Ethylene Glycol Heater is electric; therefore, it is not subject to this regulation.

40 CFR Part 63, Subpart UUUUU - *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units* is applicable to the installation and has been applied in Permit Condition 003. This regulation applies to coal-fired and oil-fired EGUs per §63.9982(a).

40 CFR Part 63, Subpart CCCCCC – *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities* is not applicable to the installation and has not been applied in this permit. Per §63.11111(a) this regulation applies to gasoline dispensing facilities located at an area source. The installation is a major source of HAP; therefore, this regulation does not apply to EP-08 Gasoline Storage Tank.

40 CFR Part 63, Subpart JJJJJJ – *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* is not applicable to the installation. This regulation applies to industrial, commercial, or institutional boilers that are located at, or are part of, an area source of HAP per §63.11193. The installation is a major source of HAP.

NESHAP Applicability

40 CFR Part 61, Subpart M – *National Emission Standards for Asbestos* and 10 CSR 10-6.250 *Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements* apply to the installation, specifically IA-10 Asbestos Abatement Activities. These regulations appear in 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 to the installation and has not been applied in this permit. In previous operating permits, CAM has been applied to Boilers 1 and 2 to demonstrate compliance with the PM limit in 10 CSR 10-3.060 (which was rescinded and replaced by 10 CSR 10-6.405). The PM limit in MACT UUUUU is more stringent than the PM limit in 10 CSR 10-6.405; therefore, only the PM limit in MACT UUUUU has been applied in this permit. CAM does not apply to MACT UUUUU as §64.2(b)(1)(i) exempts limitations or standards proposed by the Administrator after November 15, 1990 pursuant to §111 or §112 of the Act.

Greenhouse Gas Emissions

Note that this source is subject to the Greenhouse Gas Reporting Rule. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at this time. In addition, Missouri regulations do not require the installation to report CO_2 emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO_2 emissions were not included within this permit. The applicant is required to report the data directly to EPA. The public may obtain CO_2 emissions data for this installation by visiting http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html.

Other Regulatory Determinations

The following emission sources have permanently ceased operation since the last operating permit:

Emission Source	Description
EU0500	Barge Unloader and Conveyors #1 - #5
EP-10	Internal Combustion Engines Industrial – Large Bore Engine Diesel Fuel Fired
IA-09	Two 55 gallon Hydrazine Tanks
IA-14	One 500 gallon Propane Tank and three 1,000 gallon Propane Tanks
IA-17	One 27 gallon Parts Washer

IA-22, IA-23, IA-24 and IA-29 are not stationary sources subject to Title V permitting requirements. This equipment has been included in the permit for informational purposes only. IA-29 Tioga Heaters are rented by the installation during extreme cold weather conditions to provide space heating to the lower areas of Boiler Units #1 and #2.

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants* is applicable to the installation and has been applied in Permit Conditions 007, 015, and 016.

- EP-03 Emergency Generator, as an internal combustion engine, is exempt from this regulation per 10 CSR 10-6.220(1)(A).
- EP-04 Rotary Car Dumper Coal Unloading System, EP-05C Railcar Unloading Coal Conveyor #A3, EP-05D Coal Conveyors #6 (1A), 7 (1B), 8 (2A), & 9 (3), and EP-06 (4) Coal Crushers are subject to NSPS Y and are exempt from this regulation per 10 CSR 10-6.220(1)(H).
- FE-01 Coal Pile, FE-02 Unpaved Slag Haul Road, FE-04 Paved Fly Ash Haul Road, FE-05 Unpaved Ash Haul Road, FE-06 Landfill Maintenance, and FE-07 Landfill Wind Erosion are fugitive emission sources subject to 10 CSR 10-6.170 and are exempt from this regulation per 10 CSR 10-6.220(1)(K).
- IA-28 LPG Heaters burn only liquefied petroleum gas and are exempt from this regulation per 10 CSR 10-6.220(1)(L).

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is applicable to the installation and has been applied in Permit Conditions 008, 011, and 020. IA-28 LPG Heaters are exempt from this regulation per 10 CSR 10-6.260(1)(A)2 as they exclusively combust liquefied petroleum gas.

10 CSR 10-6.261 *Control of Sulfur Dioxide Emissions* is applicable to the installation and has been applied in Permit Conditions 009, 012, and 021. IA-28 LPG Heaters are exempt from this regulation per 10 CSR 10-6.261(1)(A) as they exclusively combust liquefied petroleum gas.

10 CSR 10-6.405 *Restriction of PM Emissions From Fuel Burning Equipment Used For Indirect Heating* is applicable to the installation, but has not been applied within this permit.

- This regulation would apply a 0.18 lb/MMBtu filterable PM standard to EP-01 Boiler #1 and EP-02 Boiler #2. The 0.18 lb/MMBtu filterable PM limit is less stringent than the 0.03 lb/MMBtu filterable PM limit for EP-01 Boiler #1 and EP-02 Boiler #2 in MACT UUUUU; therefore, only the more stringent standard has been applied in this permit (see Permit Condition 003).
- EU0290 and EU0300 Tioga Heaters are fueled by fuel oil #2 (with less than 1.2% sulfur); therefore, they are deemed in compliance with this regulation per 10 CSR 10-6.405(1)(C).
- IA-28 LPG Heaters are fueled by propane; therefore, they are deemed in compliance with this regulation per 10 CSR 10-6.405(1)(C).

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).

Response to Public Comments

Description of Quantity of Comments Received, whom by, date received, etc. The comments are addressed in the order in which they appear within the letter(s).

Comment #: XXXX
Response to Comment:

Public Notice Email to Applicant

Use the following text for the body of the public notice email. Include a pdf of the draft permit. The subject line should read –

Draft Part 70 Operating Permit for New Madrid Power Plant, Project No. 2015-04-093

The Air Pollution Control Program (APCP) has completed the preliminary review of your Part 70 operating permit. We are placing a public notice draft permit on the Department's web page at: http://dnr.mo.gov/env/apcp/permit-public-notices.htm. The public notice period will start on <insert date>, and will last for 30 calendar days.

We will accept comments regarding the draft permit postmarked on or before the closing date. It is very important that you read and understand this legal document. It is your responsibility to comply with this document. Please address comments or recommendations for changes to Michael Stansfield, P.E., Operating Permits Unit, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

A copy of this draft has also been sent to the U.S. EPA's Region VII office in Lenexa, Kansas, for their review. The Region VII office is afforded, by law, oversight authority on any Title V permit which Missouri (or any of the other states in the region) may propose to issue. A public hearing may be held if interest is expressed by the public.

Should you have any questions, or wish clarification on any items in this draft permit, please contact Michael Stansfield 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.

Public Notice Email to Affected States and Indian Tribes

Use the following text for the body of the public notice email. The subject line should read –

Affected States Review for New Madrid Power Plant

In accordance with Missouri State Rule 10 CSR 10-6.065(6)(F)2. and the Clean Air Act this email is to notify you of public notice of the preliminary draft and request for comments for:

New Madrid Power Plant, located in Marston, MO 63866

Project Number – 2015-04-093

The public notice period will start on November 25, 2014, and will last for 30 calendar days. A copy of the draft permit will be available on the Department's web page at: http://dnr.mo.gov/env/apcp/permit-public-notices.htm.

You are invited to submit any relevant information, materials, and views in support of or in opposition to the draft operating permit to the attention of Michael J. Stansfield, Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Comments may be emailed to apcppermitspn@dnr.mo.gov

Should you require further information or documentation on this matter, please contact the Operating Permits Unit at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and attention.

Mr./Ms. FNAME LNAME
TITLE
INSTALL
ADDRESS
CITYSTZIP

RE: Part 70 Operating Permit, Project: PAMS
Response to Comments

Dear Mr./Ms.LNAME

If no changes were made to the draft, remove the third to last sentence in the next paragraph and remove the word "revised" from the last sentence in this paragraph.

The Missouri Air Pollution Control Program (APCP) has received comments submitted during the public comment period on the draft Part 70 Operating Permit for INSTALL. The APCP has revised your draft operating permit in response to all comments received. Enclosed is the APCP's response to these comments and a copy of the revised operating permit which is being submitted to the Environmental Protection Agency (EPA) for their review.

The EPA has 45 days from the receipt of this operating permit to notify the Missouri APCP of any objections. If the EPA has no objections, your operating permit will be issued shortly after this period. If the EPA does have objections, additional changes or revisions may be required to the operating permit to respond to the EPA's comments.

If you have any questions or additional comments, please contact engineer name at the departments' 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.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield
Environmental Engineer

MJS/ct initials

Enclosure: Proposed Final Title V Operating Permit
Response to Public Comments

c: PAMS File PAMS
Regional Office

Mr./Ms. Roger Neumeyer
New Madrid Power Plant
P.O. Box 156
New Madrid, MO 63866

Re: New Madrid Power Plant, 143-0004
Permit Number: MMYYYY-###

Dear Mr./Ms. {Last Name}:

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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at http://dnr.mo.gov/regions/. The online CAV request can be found at http://dnr.mo.gov/cav/compliance.htm.

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 thirty 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 contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:HAJ

Enclosures

c: PAMS File: 2015-04-093

MISSOURI DEPARTMENT OF NATURAL RESOURCES FOLDER TRANSMITTAL ROUTING SHEET	Operating Permits

New Madrid Power Plant 2015-04-093

Originator: Alana L. Hess Telephone: (573) 526-0189 Date: November 3, 2022

Typist: Joann Husong File Name: P:\APCP\Permits\Users\Alana Hess\2015-04-093 AECI - New Madrid\2015-04-093 New Madrid Power Plant.docx

SIGNATURE APPROVAL OF:

☐ Program Director ☐ Section Chief ☐ Unit Chief

ROUTE TO:

			Submitted	Returned
☐	Unit Chief – Initial Review	Date:		
☐	Unit Chief – Response to Comments	Date:		
☐	Section Chief	Date:		
☐	Program Director	Date:		

Comments:

Revised 8-8-2016