



Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

JAN 19 2016

Mr. Kyle D. Gibbs
Marshall Municipal Utilities
765 West North Street
Marshall, MO 65340

Re: Marshall Municipal Utilities, 195-0010
Permit Number: OP2016-001

Dear Mr. Gibbs:

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

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 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:db

Enclosures

c: PAMS File: 2014-08-049



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: OP2016-001
Expiration Date: JAN 19 2021
Installation ID: 195-0010
Project Number: 2014-08-049

Installation Name and Address

Marshall Municipal Utilities Power Plant
765 West North Street
Marshall, MO 65340
Saline County

Parent Company's Name and Address

Marshall Municipal Utilities
75 East Morgan
Marshall, MO 65340

Installation Description:

Marshall Municipal Utilities is a power plant with two electric generating boilers and one space heating boiler (one coal/natural gas, one coal/natural gas/RDF, and one natural gas/RDF/#2 fuel oil fired), two reciprocating dual fueled internal combustion generating units, and a gas turbine generating unit. Two internal combustion peaking generators are located at the water treatment plant and one is located at the wastewater treatment plant. The installation is a major source of Carbon Monoxide (CO), Greenhouse Gases (CO₂e), Nitrogen Oxides (NO_x), Particulate Matter ≤ Ten Microns (PM₁₀), Particulate Matter ≤ 2.5 Microns (PM_{2.5}), Sulfur Oxides (SO_x), Volatile Organic Compounds (VOCs), and Hazardous Air Pollutants (HAP). The facility has taken a voluntary limit for HAP to become a synthetic minor source. However, the existing RICE units are still subject to the major source provisions of 40 CFR 63 Subpart ZZZZ.

Prepared by
David Buttig
Operating Permit Unit

Director or Designee
Department of Natural Resources

JAN 19 2016

Effective Date

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Marshall Municipal Utilities is a power plant with two electric generating boilers and one space heating boiler (one coal/natural gas, one coal/natural gas/RDF, and one natural gas/RDF/#2 fuel oil fired), two reciprocating dual fueled internal combustion generating units, and a gas turbine generating unit. Two internal combustion peaking generators are located at the water treatment plant and one is located at the wastewater treatment plant. The city makes its own paper pellets using recycled paper. The pellets are burned with coal in one of the coal fired boiler generating units and in the boiler that heats the power plant. The installation is a major source of Carbon Monoxide (CO), Greenhouse Gases (CO_{2e}), Nitrogen Oxides (NO_x), Particulate Matter ≤ Ten Microns (PM₁₀), Particulate Matter ≤ 2.5 Microns (PM_{2.5}), Sulfur Oxides (SO_x), Volatile Organic Compounds (VOCs), and Hazardous Air Pollutants (HAPs). The facility has taken a voluntary limit for HAPs to become a synthetic minor source. However, the existing RICE units are still subject to the major source provisions of 40 CFR 63 Subpart ZZZZ.

Reported Air Pollutant Emissions, tons per year					
Pollutants	2013	2012	2011	2010	2009
Particulate Matter ≤ Ten Microns (PM ₁₀)	10.69	0.60	38.47	47.42	77.96
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	10.30	0.58	36.76	45.32	74.63
Sulfur Oxides (SO _x)	196.98	5.06	771.74	905.92	1400.38
Nitrogen Oxides (NO _x)	41.03	15.18	151.36	184.59	295.43
Volatile Organic Compounds(VOC)	0.37	1.09	1.44	1.14	1.45
Carbon Monoxide (CO)	2.38	5.73	13.02	11.03	10.35
Lead (Pb)	0.00	0.00	0.01	0.04	0.02
Hazardous Air Pollutants (HAPs)	2.36	0.06	9.08	11.20	17.52
Ammonia (NH ₃)	0.04	0.06	0.06	0.05	0.06

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.

EQ Reference	Description	Fuel	MHDR (MMBtu/hr)	Construction Date
EP-04	Boiler Unit 4	Bituminous Coal, RDF ¹ , Natural Gas	108	1957
EP-05	Boiler Unit 5	Bituminous Coal, Natural Gas	235	1967
EP-06	Combustion Turbine Unit 6	Fuel Oil #2, Natural Gas	274	1973
EP-07	RICE Peaking Unit 7	Fuel Oil #2	12	1989
EP-08	RICE Peaking Unit 8			
EP-09	RICE Peaking Unit 9			
EP-10	RICE Peaking Unit 10	Fuel Oil #2, Natural Gas	54	1989
EP-11	RICE Peaking Unit 11		54	1993
EP-18	Boiler 18	RDF ¹ , Fuel Oil #2, Natural Gas	5.15	2003

¹RDF (refuse derived fuel) = Paper Pellet fuel

EMISSION UNITS WITHOUT LIMITATIONS

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

Emission Unit	Description
EP-13	Vent from North Storage Tank (200,000 gallons #2 Oil)
EP-14	Vent from South Storage Tank (200,000 gallons #2 Oil)
EP-15	Vent from Water Plant Storage Tank, Malta Bend (4,000 gallons #2 Oil)
EP-16	Vent from Wastewater Plant Storage Tank, Watermill Road (2,000 gallons #2 Oil)
EP-17	WTP Space Heater 0.628 MMBtu/hr
-	Cooling Tower Chemicals
-	Used oil storage tank (1,000 gallons)
-	Two diesel oil storage day tanks (750 gallons each)
-	Phosphoric Acid-liquid storage (2000 gallons)
-	Parts washer (30 gallons)
-	Paper Pellet Activities
	Receive waste paper/cardboard into pelletizing building
	Transfer to shredder hopper (inside pelletizing building)
	Transfer from shredder to pellet mill (inside pelletizing building)
	Transfer conveyor from mill to pellet storage building
	Transfer from pellet hopper in pellet storage building to bucket elevator
	Conveyor from bucket elevator to fuel feed system inside power plant
-	Coal Activities
	Receive coal trucks to outside storage: Clean Coal Storage (EP-12)
	Transfer to ground level grate that feeds coal conveyors
	Conveyor to fuel feed system inside power plant
	Enclosed coal pulverizer just before EP-05

II. Plant Wide Emission Limitations

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

PERMIT CONDITION PW001

10 CSR 10-6.020(2)(I)23. and 10 CSR 10-6.065(5)(C)2. Voluntary Limitation(s)

Emission Limitation:

- 1) The permittee shall emit less than 10.0 tons of any single hazardous air pollutant (HAP) in any consecutive 12-month period.
- 2) The permittee shall emit less than 25.0 tons of combined HAPs in any consecutive 12-month period.

Monitoring:

- 1) The permittee shall monitor the monthly amount of each type of fuel combusted.
- 2) Using the monthly amount and types of fuel combusted, the permittee shall calculate the total amount of HAP emitted to demonstrate compliance with the individual HAP limit of 10.0 tons and the combined HAP limit of 25.0 tons on a rolling 12 month basis.
 - a) The calculation method is as follows:
$$[Fuel\ Usage] \times \left[Emission\ Factor \left(\frac{lbs\ of\ pollutant}{fuel\ unit} \right) \right] \times 0.005 = Pollutant\ Emitted\ (tons)$$
 - b) Emission factors shall be taken from the appropriate section of AP-42, or if the unit was required to perform stack testing, the most recent stack testing results.

Recordkeeping:

- 1) The permittee shall keep records using Attachments B1 and B2 or equivalent forms to demonstrate compliance with the annual 10.0 ton individual HAP and 25.0 ton combined HAP limitations. The forms shall contain at a minimum the following information,
 - a) Current month,
 - b) Current year,
 - c) Type of fuel,
 - d) Amount of fuel used in the month for each fuel,
 - e) Emission factor used in calculation, including source of emission factor,
 - f) 12-month rolling total individual HAP emissions,
 - g) 12-month rolling total combined HAP emissions, and
 - h) Indication of compliance status with the individual HAP limit of 10.0 tons and the combined HAP limit of 25.0 tons.
- 2) These records shall be made immediately available for inspection to the Missouri Department of Natural Resources personnel upon request.
- 3) These records shall be kept on-site for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records indicate that the source exceeded the emission limitation.
- 2) The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

III. Emission Unit Specific Emission Limitations

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

PERMIT CONDITION - 1			
10 CSR 10-6.405 <i>Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating</i>			
40 CFR Part 64 <i>Compliance Assurance Monitoring (CAM)</i>			
Boiler Units 4 and 5			
EIQ Reference	Description	Manufacturer/ Model #	Control Device
EP-04	1957, Bituminous Coal/Refuse-Derived Fuel/Natural Gas Fired, 108 MMBtu/hr, 6.0 MWe	Murry Iron Works 9363	Baghouse
EP-05	1967, Bituminous Coal/Natural Gas Fired, 235 MMBtu/hr, 16.5 MWe	Wicks Boiler, Co. Order 65045	Baghouse
<ul style="list-style-type: none"> • <i>The following requirements apply when EP-04 is combusting bituminous coal, refused derived fuel, or either of these fuels in combination with natural gas.</i> • <i>The following requirements apply when EP-05 is combusting exclusively bituminous coal or bituminous coal in combination with natural gas:</i> 			

Emission Limitations:

The permittee shall not emit particulate matter in excess of 0.33 lb/MMBtu of heat input from each individual boiler. [10 CSR 10-6.405(3)(D)]

Operational Limitations:

- 1) The permittee shall control particulate emissions from Boiler Unit 4 (EP-04) and Boiler Unit 5 (EP-05) using baghouses. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the baghouse. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them. Replacement bags shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
- 2) The permittee shall maintain and operate the baghouses according to the CAM Requirements.

Monitoring:

1) The performance requirements for the baghouses shall be as specified in the following table:

Marshall Municipal Utilities - CAM Monitoring Approach for Boiler Units 4 and 5		
Particulate Matter (PM) Compliance Indicator		
	Indicator #1	Indicator #2
Indicator	Visible Emissions	Pressure Drop
Measurement Approach	Visible emissions from the baghouse exhaust shall be monitored daily using EPA Method 22 – like procedures.	Pressure drop across the baghouse shall be measured with a differential pressure gauge.
Indicator Range	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a pressure drop less than 2 in H ₂ O. Excursions trigger an inspection, corrective action, and a reporting requirement.
Quality Improvement Plan (QIP) Threshold	The QIP threshold for baghouse visible emissions is 3 releases in a 6-month reporting period.	None selected.
Performance Criteria		
Data Representativeness	Measurements shall be conducted at the stack exhaust.	Pressure taps are located at the baghouse inlet and outlet. The gauge has a minimum accuracy of 0.25 in H ₂ O.
Verification of Operational Status	Not Applicable.	
QA/QC Practices and Criteria	The visible emissions observer shall be familiar with Method 22 and follow Method 22 – like procedures.	The pressure gauge shall be calibrated every 3 months. Pressure taps shall be checked for plugging daily when in operation.
Monitoring Frequency	A 6-minute Method 22 – like observation shall be performed daily while the unit is in operation.	The pressure drop shall be monitored continuously when in operation
Data Collection Procedure	The visible emissions observation shall be documented by the observer.	The pressure drop shall be manually recorded daily.
Averaging Period	Not Applicable.	

- 2) Proper maintenance. At all times, the permittee shall maintain the monitoring equipment, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [§64.7(b)]
- 3) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions units are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§64.7(c)]

- 4) Response to excursions: [§64.7(d)]
 - a) Upon detecting an excursion, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. [§64.7(d)(1)]
 - b) Determination of whether the permittee has used acceptable procedures in response to an excursion will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. [§64.7(d)(2)]
- 5) Documentation of need for improved monitoring. After approval of monitoring under this part, if the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [§64.7(e)]

Quality improvement plan (QIP):

- 1) The permittee shall develop and implement a QIP if either boiler has accumulated three excursions within a single six month reporting period.
- 2) Elements of a QIP: [§64.8(b)]
 - a) The permittee shall maintain a written QIP, if required, and have it available for inspection. [§64.8(b)(1)]
 - b) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate: [§64.8(b)(2)]
 - i) Improved preventive maintenance practices. [§64.8(b)(2)(i)]
 - ii) Process operation changes. [§64.8(b)(2)(ii)]
 - iii) Appropriate improvements to control methods. [§64.8(b)(2)(iii)]
 - iv) Other steps appropriate to correct control performance. [§64.8(b)(2)(iv)]
 - v) More frequent or improved monitoring (only in conjunction with one or more steps under §64.8(b)(2)(i) through (iv)). [§64.8(b)(2)(v)]
- 3) If a QIP is required, the permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined. [§64.8(c)]

- 4) Following implementation of a QIP, upon any subsequent determination pursuant to §64.7(d)(2), the MDNR may require that the permittee make reasonable changes to the QIP if the QIP is found to have: [§64.8(d)]
 - a) Failed to address the cause of the control device performance problems; or [§64.8(d)(1)]
 - b) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [§64.8(d)(2)]
- 5) Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. [§64.8(e)]

Recordkeeping:

- 1) The permittee shall maintain records of all Method 22 observation results using Attachment C, or an equivalent form generated by the permittee, noting whether any air emissions (except for water vapor) were visible from the emission sources.
- 2) The permittee shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [§64.9(b)(1)]
- 3) Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [§64.9(b)(2)]
- 4) All records shall be kept for five years and be made available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

- 1) The permittee shall submit monitoring reports to the permitting authority in accordance with §70.6(a)(3)(iii). [§64.9(a)(1)]
- 2) A report for monitoring under this part shall include, at a minimum, the information required under §70.6(a)(3)(iii) and the following information, as applicable: [§64.9(a)(2)]
 - a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions, as applicable, and the corrective actions taken; [§64.9(a)(2)(i)]
 - b) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [§64.9(a)(2)(ii)]
 - c) A description of the actions taken to implement a QIP, if a QIP is required, during the reporting period as specified in §64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions occurring. [§64.9(a)(2)(iii)]
- 3) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction, which could possibly cause an exceedance of this regulation.

- 4) The permittee shall report any deviations from the emission limitations, monitoring, quality improvement plan, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION - 2			
<i>10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds</i>			
Boiler Units 4 and 5			
EIQ Reference	Description	Manufacturer/ Model #	Control Device
EP-04	1957, Bituminous Coal/Refuse-Derived Fuel/Natural Gas Fired, 108 MMBtu/hr, 6.0 MWe	Murry Iron Works 9363	Baghouse
EP-05	1967, Bituminous Coal/Natural Gas Fired, 235 MMBtu/hr, 16.5 MWe	Wicks Boiler, Co. Order 65045	Baghouse
The permittee is exempt from the requirements of this permit condition while combusting exclusively pipeline grade natural gas per 10 CSR 10-6.260(1)(A)2.			

Emission Limitations:

The permittee shall not cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period. [10 CSR 10-6.260(3)(B)2.A]

Monitoring:

- 1) The permittee shall monitor the sulfur content and heating value of the coal combusted. The permittee may perform their own coal analysis or use data obtained from their coal supplier.
- 2) The permittee shall demonstrate compliance by calculating the sulfur emission rate in lb/MMBtu using Attachment J (or equivalent form).

Recordkeeping:

- 1) The permittee shall retain Attachment J which contains calculations demonstrating the permittee is in compliance with this regulation.
- 2) Records may be kept in either written or electronic form.
- 3) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 4) All records shall be maintained for five years.

Reporting:

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

PERMIT CONDITION – 3			
10 CSR 10-6.075 <i>Maximum Achievable Control Technology Regulations</i> 40 CFR 63 Subpart JJJJJ— <i>National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources</i>			
Boiler Units 4 and 5			
EIQ Reference	Description	Manufacturer/ Model #	Control Device
EP-04	1957, Bituminous Coal/Refuse-Derived Fuel/Natural Gas Fired, 108 MMBtu/hr, 6.0 MWe	Murry Iron Works 9363	Baghouse
EP-05	1967, Bituminous Coal/Natural Gas Fired, 235 MMBtu/hr, 16.5 MWe	Wicks Boiler, Co. Order 65045	Baghouse

Compliance Status:

- 1) If the permittee chooses to only combust natural gas, EP-04 and EP-05 are exempt from this Permit Condition.
- 2) If the permittee chooses to do a fuel switch to either coal or refuse derived fuel, the permittee shall demonstrate compliance with the provisions of MACT JJJJJ contained in this permit condition within 180 days of the fuel switch to a fuel other than natural gas. [§63.11210(i)(1)]
- 3) To again qualify under the gas-fired boiler exemption, the permittee shall meet the definition of a gas-fired boiler beginning on January 01 of the year after not meeting the exemption. The permittee shall notify the department within 30 days (by January 30) as specified in §63.11225(g).

Emission Limitations/Work Practice Standards:

- 1) The permittee must achieve less than or equal to the following emission limits, except during periods of startup and shutdown: [§63.11201(a), Table 1 of MACT JJJJJ]
 - a) Mercury: 2.2×10^{-5} lb/MMBtu Heat input
 - b) Carbon Monoxide: 420 ppm by volume on a dry basis corrected to 3 percent oxygen.
- 2) The permittee must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 of MACT JJJJJ that applies to boiler units 4 (EP-04) and 5 (EP-05) (*See Attachment K*). An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to MACT JJJJJ satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement. [§63.11201(b)]
- 3) The permittee must comply with each operating limit specified in Table 3 of MACT JJJJJ that applies to boiler units 4 (EP-04) and 5 (EP-05) (*See Attachment K*). [§63.11201(c)]
 - a) These standards apply at all times EP-04 and EP-05 are operating, except during periods of startup and shutdown as defined in §63.11237, during which time the permittee must comply only with Table 2 to MACT JJJJJ. [§63.11201(d)]

General Compliance Requirements:

- 1) At all times, the permittee must 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. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may

- include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.11205(a)]
- 2) The permittee must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or a continuous monitoring system (CMS), including a continuous emission monitoring system (CEMS), a continuous opacity monitoring system (COMS), or a continuous parameter monitoring system (CPMS), where applicable. The permittee may demonstrate compliance with the applicable mercury emission limit using fuel analysis if the emission rate calculated according to §63.11211(c) is less than the applicable emission limit. Otherwise, the permittee must demonstrate compliance using stack testing. [§63.11205(b)]
 - 3) If the permittee demonstrates compliance with any applicable emission limit through performance stack testing and subsequent compliance with operating limits (including the use of CPMS), with a CEMS, or with a COMS, the permittee must develop a site-specific monitoring plan according to the requirements in paragraphs §63.11205(c)(1) through (3) for the use of any CEMS, COMS, or CPMS. This requirement also applies to the permittee if the permittee petitions the EPA Administrator for alternative monitoring parameters under §63.8(f). [§63.11205(c)]
 - 4) For each CMS required in this permit condition (including CEMS, COMS, or CPMS), the permittee must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs §63.11205(c)(1)(i) through (vi). The permittee must submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation of the CMS. This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under appendix B to part 60 and that meet the requirements of §63.11224. [§63.11205(c)(1)]
 - a) Installation of the CMS 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);
 - b) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
 - c) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
 - d) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);
 - e) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
 - f) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 8 to MACT JJJJJ), (e)(1), and (e)(2)(i). [§63.11205(c)(1)(i)-(vi)]
 - 5) The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan. [§63.11205(c)(2)]
 - 6) The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. [§63.11205(c)(3)]

Initial Compliance Requirements:

- 1) The permittee must demonstrate initial compliance with each applicable emission limit specified in Table 1 of MACT JJJJJ by either conducting performance (stack) tests, as applicable, according to §63.11212 and Table 4 to MACT JJJJJ or, for mercury, conducting fuel analyses, as applicable, according to §63.11213 and Table 5 to MACT JJJJJ (see Attachment K). [§63.11210(a)]
- 2) For affected boilers that demonstrate compliance with any of the emission limits of MACT JJJJJ through performance (stack) testing, the initial compliance requirements include conducting

performance tests according to §63.11212 and Table 4 to MACT JJJJJ, conducting a fuel analysis for each type of fuel burned in the boiler according to §63.11213 and Table 5 to MACT JJJJJ, establishing operating limits according to §63.11222, Table 6 to MACT JJJJJ and paragraph §63.11211(b), as applicable, and conducting CMS performance evaluations according to §63.11224. For affected boilers that burn a single type of fuel, the permittee is exempted from the compliance requirements of conducting a fuel analysis for each type of fuel burned in the boiler. For purposes of MACT JJJJJ, boilers that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as affected boilers that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under §63.11213 and Table 5 to MACT JJJJJ. [§63.11211(a)]

- 3) The permittee must establish parameter operating limits according to paragraphs §63.11211(b)(1) through (4). [§63.11211(b)]
- 4) The permittee must conduct all performance tests according to §63.7(c), (d), (f), and (h). The permittee must also develop a site-specific test plan according to the requirements in §63.7(c). [§63.11212(a)]
- 5) The permittee must conduct each stack test according to the requirements in Table 4 to MACT JJJJJ. Boilers that use a CEMS for carbon monoxide (CO) are exempt from the initial CO performance testing in Table 4 to MACT JJJJJ and the oxygen concentration operating limit requirement specified in Table 3 to MACT JJJJJ. [§63.11212(b)]
- 6) The permittee must conduct performance stack tests at the representative operating load conditions while burning the type of fuel or mixture of fuels that have the highest emissions potential for each regulated pollutant, and must demonstrate initial compliance and establish the operating limits based on these performance stack tests. For subcategories with more than one emission limit, these requirements could result in the need to conduct more than one performance stack test. Following each performance stack test and until the next performance stack test, the permittee must comply with the operating limit for operating load conditions specified in Table 3 to MACT JJJJJ. [§63.11212(c)]
- 7) The permittee must conduct a minimum of three separate test runs for each performance stack test required in §63.11212, as specified in §63.7(e)(3) and in accordance with the provisions in Table 4 to MACT JJJJJ. [§63.11212(d)]
- 8) To determine compliance with the emission limits, the permittee must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A-7 to part 60 to convert the measured PM concentrations and the measured mercury concentrations that result from the performance test to pounds per million Btu heat input emission rates. [§63.11212(e)]
- 9) The permittee must conduct fuel analyses according to the procedures in paragraphs §63.11213(b) and (c) and Table 5 to MACT JJJJJ, as applicable. The permittee is not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. The permittee is required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury in Table 1 of MACT JJJJJ. [§63.11213(a)]
- 10) At a minimum, the permittee must obtain three composite fuel samples for each fuel type according to the procedures in Table 5 to MACT JJJJJ. Each composite sample must consist of a minimum of three samples collected at approximately equal intervals during a test run period. [§63.11213(b)]
- 11) The permittee shall determine the concentration of mercury in the fuel in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 5 to MACT JJJJJ. [§63.11213(c)]

- 12) The permittee must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to MACT JJJJJ and is an accurate depiction of the facility. [§63.11214(c)]
- 13) The permittee must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, the permittee must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. The permittee must submit a signed statement in the Notification of Compliance Status report that indicates that startups and shutdowns were conducted according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available. [§63.11214(d)]
- 14) If the permittee elects to demonstrate compliance with an applicable mercury emission limit through fuel analysis, the permittee must conduct fuel analyses according to §63.11213 and Table 5 to MACT JJJJJ and follow the procedures in paragraphs §63.11213(c)(1) through (3). [§63.11211(c)]
- 15) If the permittee burns more than one fuel type, the permittee must determine the fuel type, or mixture, the permittee could burn in the boiler that would result in the maximum emission rates of mercury. [§63.11211(c)(1)]
- 16) The permittee must determine the 90th percentile confidence level fuel mercury concentration of the composite samples analyzed for each fuel type using Equation 1 of below. [§63.11211(c)(2)]

$$P_{90} = \text{mean} + (SD \times t) \text{ (Eq. 1)}$$

Where:

P_{90} = 90th percentile confidence level mercury concentration, in pounds per million Btu.

mean = Arithmetic average of the fuel mercury concentration in the fuel samples analyzed according to §63.11213, in units of pounds per million Btu.

SD = Standard deviation of the mercury concentration in the fuel samples analyzed according to §63.11213, in units of pounds per million Btu.

t = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

- 17) To demonstrate compliance with the applicable mercury emission limit, the emission rate that is calculated for the boiler using Equation 1 must be less than the applicable mercury emission limit. [§63.11211(c)(3)]

Continuous Compliance Requirements:

- 1) The permittee must conduct all applicable performance (stack) tests according to §63.11212 on a triennial basis, except as specified in paragraphs §63.11220(b) through (d). Triennial performance tests must be completed no more than 37 months after the previous performance test. [§63.11220(a)]
- 2) If the permittee demonstrates compliance with the mercury emission limit based on fuel analysis, the permittee must conduct a fuel analysis according to §63.11213 for each type of fuel burned as specified in paragraphs §63.11220(c)(1) and (2). If the permittee plans to burn a new type of fuel or fuel mixture, the permittee must conduct a fuel analysis before burning the new type of fuel or mixture in the boiler. The permittee must recalculate the mercury emission rate using Equation 1 of §63.11211. The recalculated mercury emission rate must be less than the applicable emission limit. [§63.11220(c)]
- 3) When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are measured to be equal to or less than half of the mercury emission limit,

- the permittee does not need to conduct further fuel analysis sampling but must continue to comply with all applicable operating limits and monitoring requirements. [§63.11220(c)(1)]
- 4) When demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel or fuel mixture are greater than half of the mercury emission limit, the permittee must conduct quarterly sampling. [§63.11220(c)(2)]
 - 5) For existing affected boilers that have not operated since the previous compliance demonstration and more than 3 years have passed since the previous compliance demonstration, the permittee must complete the subsequent compliance demonstration no later than 180 days after the re-start of the affected boiler. [§63.11220(d)]
 - 6) The permittee must demonstrate continuous compliance with each applicable emission and operating limit in Tables 1 and 3 to MACT JJJJJJ according to the methods specified in Table 7 to MACT JJJJJJ and to paragraphs §63.11222(a)(1) through (4). [§63.11222(a)]
 - 7) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.11196, whichever date comes first, the permittee must continuously monitor the operating parameters. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in paragraph §63.11222(a) constitutes a deviation from the operating limits established under MACT JJJJJJ, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. [§63.11222(a)(1)]
 - 8) The permittee must keep records of the type and amount of all fuels burned in each boiler during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would result in lower emissions of mercury than the applicable emission limit (if the permittee demonstrates compliance through fuel analysis), or result in lower fuel input of mercury than the maximum values calculated during the last performance stack test (if the permittee demonstrates compliance through performance stack testing). [§63.11222(a)(2)]
 - 9) If the permittee plans to burn a new type of fuel, the permittee must determine the mercury concentration for any new fuel type in units of pounds per million Btu, using the procedures in Equation 1 of §63.11211 based on supplier data or the permittee's own fuel analysis, and meet the requirements in paragraphs §63.11222(a)(3)(i) or (ii).
 - a) The recalculated mercury emission rate must be less than the applicable emission limit.
 - b) If the mercury concentration is higher than mercury fuel input during the previous performance test, then the permittee must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.11212 to demonstrate that the mercury emissions do not exceed the emission limit. [§63.11222(3)(a)(i) and (ii)]
 - 10) The permittee must report each instance in which each applicable emission limit and operating limit in Tables 1 and 3 to MACT JJJJJJ were not met. These instances are deviations from the emission limits in MACT JJJJJJ. These deviations must be reported according to the requirements in §63.11225. [§63.11222(b)]
 - 11) The permittee must minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, the permittee must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. The permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available. [§63.11223(g)]

Monitoring Requirements:

- 1) The permittee must monitor and collect data according to §63.11221 and the site-specific monitoring plan required by §63.11205(c). [§63.11221(a)]
- 2) The permittee must operate the monitoring system and collect data at all required intervals at all times the affected source is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods (see §63.8(c)(7) of this part), repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee is required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. [§63.11221(b)]
- 3) The permittee may not use data collected during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or quality control activities in calculations used to report emissions or operating levels. Any such periods must be reported according to the requirements in §63.11225. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system. [§63.11221(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, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan), failure to collect required data is a deviation of the monitoring requirements. [§63.11221(d)]
- 5) For Boiler units 4 and 5, the permittee must either install, operate, and maintain a CEMS for CO and oxygen according to the procedures in paragraphs §63.11224(a)(1) through (6), or install, calibrate, operate, and maintain an oxygen analyzer system, as defined in §63.11237, according to the manufacturer's recommendations and paragraphs §63.11224(a)(7) and (d), as applicable, by the compliance date specified in §63.11196. Where a certified CO CEMS is used, the CO level shall be monitored at the outlet of the boiler, after any add-on controls or flue gas recirculation system and before release to the atmosphere. Boilers that use a CO CEMS are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in §63.11211(a). Oxygen monitors and oxygen trim systems must be installed to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location. [§63.11224(a)]
- 6) The permittee must operate the oxygen analyzer system at or above the minimum oxygen level that is established as the operating limit according to Table 6 to MACT JJJJJ when firing the fuel or fuel mixture utilized during the most recent CO performance stack test. Operation of oxygen trim systems to meet these requirements shall not be done in a manner which compromises furnace safety. [§63.11224(a)(7)]
- 7) The permittee must develop a site-specific monitoring plan according to the requirements in paragraphs §63.11224(c)(1) through (4). This requirement also applies if the permittee petitions the EPA Administrator for alternative monitoring parameters under §63.8(f). [§63.11224(c)]
- 8) For each CMS required in this permit condition, the permittee must develop, and submit to the EPA Administrator for approval upon request, a site-specific monitoring plan that addresses paragraphs

§63.11224(c)(1)(i) through (iii). The permittee must submit this site-specific monitoring plan (if requested) at least 60 days before the initial performance evaluation of the CMS.

- a) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device).
 - b) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.
 - c) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).
[§63.11224(c)(1)(i) through (iii)]
- 9) In the site-specific monitoring plan, the permittee must also address paragraphs §63.11224(c)(2)(i) through (iii).
- a) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (3), and (4)(ii).
 - b) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d).
 - c) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i). [§63.11224(c)(2)(i) through (iii)]
- 10) The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan. [§63.11224(c)(3)]
- 11) The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. [§63.11224(c)(4)]
- 12) The permittee must install, operate, and maintain each CPMS according to the procedures in paragraphs §63.11224(d)(1) through (4). [§63.11224(d)]
- a) The CPMS must complete a minimum of one cycle of operation every 15 minutes. The permittee must have data values from a minimum of four successive cycles of operation representing each of the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed, to have a valid hour of data. [§63.11224(d)(1)]
 - b) The permittee must calculate hourly arithmetic averages from each hour of CPMS data in units of the operating limit and determine the 30-day rolling average of all recorded readings, except as provided in §63.11221(c). Calculate a 30-day rolling average from all of the hourly averages collected for the 30-day operating period using Equation 3 of MACT JJJJJ. [§63.11224(d)(2)]

$$30 - \text{day average} = \frac{\sum_{i=1}^n Hpvi}{n} \quad (\text{Eq. 3})$$

Where:

Hpvi = the hourly parameter value for hour i

n = the number of valid hourly parameter values collected over 30 boiler operating days

- c) For purposes of collecting data, the permittee must operate the CPMS as specified in §63.11221(b). For purposes of calculating data averages, the permittee must use all the data collected during all periods in assessing compliance, except that the permittee must exclude certain data as specified in §63.11221(c). Periods when CPMS data are unavailable may constitute monitoring deviations as specified in §63.11221(d). [§63.11224(d)(3)]
- d) Record the results of each inspection, calibration, and validation check. [§63.11224(d)(4)]

Notification, Reporting, & Recordkeeping Requirements:

- 1) The permittee must submit the notifications specified in §63.11225(a)(1) through (5) to the administrator. [§63.11225(a)]
- 2) The permittee must submit all of the applicable notifications in §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) by the dates specified in those sections except as specified in paragraphs §63.11225(a)(2) and (4). [§63.11225(a)(1)]
- 3) An Initial Notification must be submitted no later than 120 days after the source becomes subject to the standard. [§63.11225(a)(2)]
- 4) The permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance stack test is scheduled to begin. [§63.11225(a)(3)]
- 5) The permittee must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in §63.11196 unless the permittee must conduct a performance stack test.
- 6) The permittee must submit the Notification of Compliance Status within 60 days of completing the performance stack test. The permittee must submit the Notification of Compliance Status in accordance with §63.11225(a)(4)(i) and (vi). The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs §63.11225(a)(4)(i) through (v), as applicable, and signed by a responsible official. [§63.11225(a)(4)]
 - a) The permittee must submit the information required in §63.9(h)(2), except the information listed in 63.9(h)(2)(i)(B), (D), (E), and (F). If the permittee conducts any performance tests or CMS performance evaluations, the permittee must submit that data as specified in paragraph (e). If the permittee conducts any opacity or visible emission observations, or other monitoring procedures or methods, the permittee must submit that data to the Administrator at the appropriate address listed in §63.13.
 - b) “This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler.”
 - c) “This facility has had an energy assessment performed according to §63.11214(c).”
 - d) For units that install bag leak detection systems: “This facility complies with the requirements in §63.11224(f).”
 - e) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: “No secondary materials that are solid waste were combusted in any affected unit.”
 - f) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to MACT JJJJJ is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in §63.13. [§63.11225(a)(4)(i) through (vi)]
- 7) If the permittee is using data from a previously conducted emission test to serve as documentation of conformance with the emission standards and operating limits of MACT JJJJJ, the permittee must include in the Notification of Compliance Status the date of the test and a summary of the results, not a complete test report, relative to MACT JJJJJ. [§63.11225(a)(5)]
- 8) The permittee must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs §63.11225(b)(1) through (4). The permittee must submit the report by March 15 if the permittee had any instance described by paragraph §63.11225(b)(3). For boilers that are subject only to a requirement to conduct a biennial or 5-year tune-up according to

§63.11223(a) and not subject to emission limits or operating limits, the permittee may prepare only a biennial or 5-year compliance report as specified in paragraphs §63.11225(b)(1) and (2).

[§63.11225(b)]

- 9) Company name and address. [§63.11225(b)(1)]
- 10) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of MACT JJJJJ. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - a) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."
 - b) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."
 - c) "This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."
[§63.11225(b)(2)(i) through (iii)]
- 11) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken. [§63.11225(b)(3)]
- 12) The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the permittee or EPA through a petition process to be a non-waste under §241.3(c), whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, and the total fuel usage amount with units of measure. [§63.11225(b)(4)]
- 13) The permittee must maintain the records specified in paragraphs §63.11225(c)(1) through (7). [§63.11225(c)]
- 14) As required in §63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that is submitted to comply with MACT JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted. [§63.11225(c)(1)]
- 15) The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified in paragraphs §63.11225(c)(2)(i) through (vi). [§63.11225(c)(2)]
 - a) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
 - b) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1), the permittee must keep a record which documents how the secondary material meets each of the legitimacy criteria under §241.3(d)(1). If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4), the permittee must keep records as to how the operations that produced the fuel satisfies the definition of processing in §241.2 and each of the legitimacy criteria in §241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c), the permittee must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust

- non-hazardous secondary materials as fuel per §241.4, the permittee must keep records documenting that the material is a listed non-waste under §241.4(a).
- c) For each boiler required to conduct an energy assessment, the permittee must keep a copy of the energy assessment report.
 - d) For each boiler subject to an emission limit in Table 1 to MACT JJJJJ, the permittee must also keep records of monthly fuel use by each boiler, including the type(s) of fuel and amount(s) used.
 - e) For each boiler that meets the definition of seasonal boiler, the permittee must keep records of days of operation per year.
 - f) For each boiler that meets the definition of limited-use boiler, the permittee must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and records of fuel use for the days the boiler is operating. [§63.11225(c)(2)(i) through (vi)]
- 16) For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation that were done to demonstrate compliance with the mercury emission limits. Supporting documentation should include results of any fuel analyses. The permittee can use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type. [§63.11225(c)(3)]
- 17) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. [§63.11225(c)(4)]
- 18) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. [§63.11225(c)(5)]
- 19) The permittee must keep the records of all inspection and monitoring data required by §§63.11221 and 63.11222, and the information identified in paragraphs §63.11225(c)(6)(i) through (vi) for each required inspection or monitoring.
- a) The date, place, and time of the monitoring event.
 - b) Person conducting the monitoring.
 - c) Technique or method used.
 - d) Operating conditions during the activity.
 - e) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.
 - f) Maintenance or corrective action taken (if applicable). [§63.11225(c)(6)(i) through (6)(vi)]
- 20) The permittee's records must be in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years. [§63.11225(d)]
- 21) Within 60 days after the date of completing each performance test (defined in §63.2) as required by MACT JJJJJ, the permittee must submit the results of the performance tests, including any associated fuel analyses, required by MACT JJJJJ to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX (www.epa.gov/cdx). Performance test data must 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 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) must 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 must 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 must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the permittee must also submit these reports, including CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test in paper submissions to the Administrator at the appropriate address listed in §63.13.

[§63.11225(e)(1)]

22) If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within subpart JJJJJ, in the boiler becoming subject to subpart JJJJJ, or in the boiler switching out of subpart JJJJJ due to a change to 100 percent natural gas, or have taken a permit limit that resulted in being subject to subpart JJJJJ, the permittee must provide notice of the date upon which the permittee switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:

[§63.11225(g)]

- a) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice. [§63.11225(g)(1)]
- b) The date upon which the fuel switch, physical change, or permit limit occurred.

[§63.11225(g)(2)]

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

PERMIT CONDITION - 4			
10 CSR 10-6.060 <i>Construction Permits Required</i>			
Air Pollution Control Program Construction Permit 0695-024, Issued June 20, 1995			
Boiler Unit 4			
EIQ Reference	Description	Manufacturer/ Model #	Control Device
EP-04	1957, Bituminous Coal/Refuse-Derived Fuel/Natural Gas Fired, 108 MMBtu/hr, 6.0 MWe	Murry Iron Works 9363	Baghouse

Operational Limitations:

- 1) The permittee shall not fire a coal/pelletized paper mixture which exceeds 30 weight percent pelletized paper in Boiler Unit 4 (EP-04). The maximum amount of pelletized paper that may be combusted in Boiler Unit 4 is 6,000 tons in any consecutive 12-month period. [Special Condition 1]
- 2) The maximum amount of solid fuel that may be used in Boiler Unit 4 is 20,000 tons in any consecutive 12-month period. Solid fuel includes coal, pelletized paper, or a mixture thereof. [Special Condition 2]
- 3) The maximum amount of pelletized paper that may be combusted in Boiler Unit 4 is 35 tons per day.

Monitoring/Recordkeeping:

- 1) The permittee shall keep records which track the amount of coal, pelletized paper, and total solid fuel fired each month in Boiler Unit 4, using Attachment E or an equivalent form generated by the permittee. The records shall also indicate the mixture ratio (as-fired) of coal and pelletized paper, expressed as a split (e.g. 70/30 coal/pelletized paper would indicate that of the total amount of fuel fired to the boiler, 70 percent by weight was coal and 30 percent by weight was pelletized paper). The records shall also indicate the total amount of pelletized paper and the total amount of solid fuel combusted in Boiler Unit 4 for the previous 12-month period. The previous five years of records shall be kept on-site and be made immediately available to Department of Natural Resources' personnel upon verbal request. [Special Condition 3]
- 2) Records may be kept in either written or electronic form.

Reporting:

- 1) The permittee shall notify the Air Pollution Control Program's Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance. [Special Condition 4]
- 2) The permittee shall report any deviations from the operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION - 5		
10 CSR 10-6.060 <i>Construction Permits Required</i>		
Air Pollution Control Program Construction Permit 092002-007, Issued August 5, 2002		
Boiler 18		
EIQ Reference	Description	Manufacturer/Model #
EP-18	RDF/Fuel Oil #2/Natural Gas Fired, 5.15 MMBtu/hr (2003)	Hurst Boiler & Welding Co., 0200624

Operational Limitation:

- 1) All paper pellet fuel combusted in Boiler (EP-18) shall have a sulfur content of 0.15 percent by weight or less. [Special Condition 2.A]
- 2) The permittee shall not combust more than 42 gallons of distillate fuel oil #2 in Boiler (EP-18) in any consecutive 12 month period. [Special Condition 3.A]

Monitoring/Recordkeeping

- 1) At least once every year, after commencement of operation, the permittee shall obtain from the fuel vendor or conduct their own fuel analysis to evaluate the typical sulfur content weight percent for paper pellets. The fuel consumption records and statement shall be kept on-site for five years and shall be made immediately available to the Missouri Department of Natural Resources' personnel upon request. [Special Condition 2.B]
- 2) Attachment H or an equivalent form generated by the permittee shall be used to document the amount of distillate fuel oil #2 combusted during each consecutive 12 month period. The permittee shall retain all records for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 3.B]
- 3) Records may be kept in either written or electronic form.

Reporting:

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

PERMIT CONDITION - 6		
<i>10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants</i>		
Boiler 18		
EIQ Reference	Description	Manufacturer/Model #
EP-18	RDF/Fuel Oil #2/Natural Gas Fired, 5.15 MMBtu/hr (2003)	Hurst Boiler & Welding Co., 0200624

Emission Limitation:

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

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission source using the procedures contained in U.S. EPA Test Method 22. Readings are only required when the emission source is operating and when the weather conditions allow. If no visible emissions are observed using these procedures, then no further observations are required. If visible emissions are observed, then the source representative shall conduct a Method 9 observation.
- 2) The following monitoring schedule shall be maintained:
 - a) Eight weekly observations shall be conducted after permit issuance. Should no violation of this regulation be observed during this period then
 - b) Four observations shall be conducted once every two weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
 - c) Observations shall be conducted once per month. If a violation is noted, monitoring reverts to weekly.
 - d) If, at the issuance of this permit, the permittee has progressed in the monitoring schedule listed above, the permittee may continue to advance accordingly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:

- 1) The permittee shall maintain records of all Method 22 observation results using Attachment C, or an equivalent form generated by the permittee, noting whether any air emissions (except for water vapor) were visible from the emission sources.

- 2) The permittee shall maintain records of all Method 9 observation results using Attachment D, or an equivalent form generated by the permittee, noting whether the visible emissions (except for water vapor) exceeded the opacity limit.
- 3) The permittee shall maintain records of any equipment malfunctions using Attachment A or an equivalent form generated by the permittee.
- 4) Records may be kept in either written or electronic form.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 6) All records shall be maintained for five years.

Reporting:

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

PERMIT CONDITION - 7		
<i>10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds</i>		
Boiler 18		
EIQ Reference	Description	Manufacturer/Model #
EP-18	RDF/Fuel Oil #2/Natural Gas Fired, 5.15 MMBtu/hr (2003)	Hurst Boiler & Welding Co., 0200624
The permittee is exempt from the requirements of this permit condition while combusting exclusively pipeline grade natural gas per 10 CSR 10-6.260(1)(A)2.		

Emission Limitations:

The permittee shall not cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period. [10 CSR 10-6.260(3)(B)2.A]

Recordkeeping:

- 1) The permittee shall retain Attachment J which contains calculations demonstrating that the permittee is in compliance with this regulation while combusting the specified fuel.
- 2) Records may be kept in either written or electronic form.
- 3) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 4) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

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

PERMIT CONDITION - 8		
Boiler 18		
EIQ Reference	Description	Manufacturer/Model #
EP-18	RDF/Fuel Oil #2/Natural Gas Fired, 5.15 MMBtu/hr (2003)	Hurst Boiler & Welding Co., 0200624
The permittee is exempt from the requirements of this permit condition while combusting exclusively pipeline grade natural gas.		

Emission Limitation:

The permittee shall not emit particulate matter in excess of 0.18 pounds per million BTU of heat input. [10 CSR 10-6.405(3)(E)]

Operational Limitation:

- 1) The permittee shall control emissions from EP-18 using a multiclone. The multiclone shall be operated and maintained in accordance with manufacturer’s specifications. The multiclone shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. The gauge or meter shall be located such that the Department of Natural Resources’ employees may easily observe them.
- 2) The multiclone shall be operated such that the pressure drop across the control device is greater than or equal to 0.75 inches of water column.

Compliance Demonstration:

- 1) The permittee shall conduct stack performance testing on the boiler (EP-18) sufficient to quantify the emission rate of particulate matter (PM) from this source when burning refuse derived fuel (RDF).
- 2) Within 180 days of the first combustion of RDF after the issuance of this operating permit, the emission tests shall be conducted on EP-18 and its associated multiclone according to the following:
 - a) A completed Proposed Test Plan Form (<http://dnr.mo.gov/forms/780-2184-f.pdf>) must be submitted to the Air Pollution Control Program thirty (30) days prior to the proposed test date so that this program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan must be approved by the Director of the Missouri Air Pollution Control Program prior to conducting the required emission testing.
 - b) Two (2) copies of a written report of the performance test results shall be submitted to the Director of the Air Pollution Control Program within sixty (60) days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Method for at least one (1) sample run.
 - c) Performance testing shall be conducted under the condition of maximum process/production rate for the boiler, or within ten percent (10%) of this rated capacity. The permittee shall operate at no more than 10% above the production rate established during the performance testing.

Monitoring/Recordkeeping:

- 1) The permittee shall monitor and record the operating pressure drop across the multiclone at least once each operating day while the unit is operating. The operating pressure drop range will be specified based on normal operation and manufacturer’s recommendations.
- 2) The permittee shall maintain an operating and maintenance log for the control device using Attachment A or an equivalent form generated by the permittee. The record shall be maintained in hard copy or electronic form. The log(s) shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions; and
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
- 3) The permittee shall retain a copy of the manufacturer’s specifications.
- 4) Records may be kept in either written or electronic form.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources’ personnel upon request.
- 6) All records shall be maintained for five years.

Reporting:

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

PERMIT CONDITION – 9a		
<i>10 CSR 10-6.075 Maximum Achievable Control Technology Regulations</i>		
<i>40 CFR 63 Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources</i>		
Boiler 18		
EIQ Reference	Description	Manufacturer/Model #
EP-18	RDF/Fuel Oil #2/Natural Gas Fired, 5.15 MMBtu/hr (2003)	Hurst Boiler & Welding Co., 0200624

Permit Condition 9a applies to EP-18 as long as it meets the definition of a gas-fired boiler until the time that a fuel switch is made by the facility. After the fuel switch is made the permittee will be subject to Permit Condition 9b.

Operational Limitations:

1. If fuel oil usage exceeds the 48 hour per calendar year usage limitation for the definition of a gas-fired boiler, the permittee shall comply with Permit Condition 9b.
2. If fuel oil usage does not exceed the 48 hour per calendar year usage limitation for the definition of a gas-fired boiler, the permittee shall comply with the following Recordkeeping and Reporting Requirements.

Recordkeeping:

The Permittee must keep records of the total hours per calendar year that fuel oil is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies.

Reporting Requirements

- 1.) If records indicate that the annual 48 hour fuel oil usage limitation has been exceeded, the permittee must provide notice of the date upon which the unit switched fuels, within 30 days of the change. The notification must identify:
 - a.) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels and the date of the notice. [§63.11225(g)(1)]
 - b.) The date upon which the fuel switch occurred. [§63.11225(g)(2)]

PERMIT CONDITION – 9b		
10 CSR 10-6.075 <i>Maximum Achievable Control Technology Regulations</i> 40 CFR 63 Subpart JJJJJ— <i>National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources</i>		
Boiler 18		
EIQ Reference	Description	Manufacturer/Model #
EP-18	RDF/Fuel Oil #2/Natural Gas Fired, 5.15 MMBtu/hr (2003)	Hurst Boiler & Welding Co., 0200624

Permit Condition 9b applies to EP-18 after a fuel switch is made by the permittee or the permittee chooses to combust fuel oil (for more than 48 hours during the calendar year) or solid fuel after issuance of this operating permit. The permittee may return to the exemption status of gas-fired boiler under Permit Condition 9a if the boiler has not combusted fuel oil for more than 48 hours in the current calendar year and has not combusted solid fuel during the current calendar year. Returning to gas-fired boiler exemption status will require a fuel switch to be made.

Initial and Continuous Compliance Requirements

- 1) After issuance of this operating permit, the permittee must demonstrate compliance with the provisions of MACT JJJJJ within 180 days of the fuel switch or having chosen to combust fuel oil for more than 48 hours during the calendar year or solid fuel. [§63.11210(i)(1)]
- 2) Notification of such changes must be submitted according to §63.11225(g). [§63.11210(i)(3)]

General Compliance Requirements:

- 1) The permittee must conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223. [§63.11201(b) & Table 2 of MACT JJJJJ, Item 14]
- 2) At all times the permittee must 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. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [63.11205(a)]

Continuous Compliance Requirements:

- 1) The permittee must conduct a performance tune-up according to paragraph §63.11223(b) and keep records as required in §63.11225(c) to demonstrate continuous compliance. The permittee must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn

two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. [§63.11223(a)]

- 2) The permittee must conduct a tune-up of the boiler every 5 years as specified in paragraphs §63.11223(b)(1) through (7). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler with an oxygen trim system, the first 5-year tune-up must be no later than 61 months after the initial startup. The permittee may delay the burner inspection specified in paragraph §63.11223(b)(1) and inspection of the system controlling the air-to-fuel ratio specified in paragraph §63.11223(b)(3) until the next scheduled unit shutdown, but the permittee must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. [§63.11223(c)]

Notification, Reporting, & Recordkeeping Requirements:

- 1) The permittee must submit a signed statement in the Notification of Compliance Status report that indicates that they conducted a tune-up of the boiler according to §63.11223(b). [§63.11214(b)]
- 2) The permittee must submit the notifications specified in paragraphs §63.11225(a)(1) through (4) to the administrator. [§63.11225(a)]
- 3) The permittee must submit all of the notifications in §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply by the dates specified in those sections except as specified in paragraphs §63.11225(a)(2) and (4). [§63.11225(a)(1)]
- 4) An Initial Notification must be submitted within 120 days after the source becomes subject to the standard. [§63.11225(a)(2)]
- 5) The permittee must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in §63.11196. The permittee must submit the Notification of Compliance Status in accordance with paragraphs (a)(4)(i) and (vi). The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v), as applicable, and signed by a responsible official. [§63.11225(a)(4)]
 - a) The permittee must submit the information required in §63.9(h)(2), except the information listed in §63.9(h)(2)(i)(B), (D), (E), and (F).
 - b) “This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler.”
 - c) “This facility has had an energy assessment performed according to §63.11214(c).”
 - d) For units that install bag leak detection systems: “This facility complies with the requirements in §63.11224(f).”
 - e) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: “No secondary materials that are solid waste were combusted in any affected unit.”
 - f) The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to MACT JJJJJ is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in §63.13. [§63.11225(a)(4)(i) through (vi)]
- 6) The permittee must prepare, and submit to the delegated authority upon request an annual compliance certification report for the previous calendar year containing the information specified in paragraphs §63.11225(b)(1) and (2). The annual compliance report is due by March 01. For boiler 18, the permittee may prepare only a biennial or 5-year compliance report as specified in paragraphs §63.11225(b)(1) and (2). [§63.11225(b)]

- a) Company name and address. [§63.11225(b)(1)]
- b) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of MACT JJJJJ. The notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - i) “This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler.”
 - ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: “No secondary materials that are solid waste were combusted in any affected unit.”
 - iii) “This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.” [§63.11225(b)(2)(i) through (iii)]
- 7) The permittee must maintain the records specified in paragraphs §63.11225(c)(1) through (7). [§63.11225(c)]
 - a) As required in §63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that the permittee submitted to comply with MACT JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted. [§63.11225(c)(1)]
 - b) The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified in paragraphs §63.11225(c)(2)(i) through (vi).
 - i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.
 - ii) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1), the permittee must keep a record which documents how the secondary material meets each of the legitimacy criteria under §241.3(d)(1). If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4), the permittee must keep records as to how the operations that produced the fuel satisfies the definition of processing in §241.2 and each of the legitimacy criteria in §241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c), the permittee must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per §241.4, the permittee must keep records documenting that the material is a listed non-waste under §241.4(a).
 - iii) For each boiler required to conduct an energy assessment, the permittee must keep a copy of the energy assessment report.
 - iv) For each boiler subject to an emission limit in Table 1 to MACT JJJJJ, the permittee must also keep records of monthly fuel use by each boiler, including the type(s) of fuel and amount(s) used.
 - v) For each boiler that meets the definition of seasonal boiler, the permittee must keep records of days of operation per year.

- vi) For each boiler that meets the definition of limited-use boiler, the permittee must keep a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and records of fuel use for the days the boiler is operating.
[§63.11225(c)(6)(i) through (vi)]
- c) For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation that were done to demonstrate compliance with the mercury emission limits. Supporting documentation should include results of any fuel analyses. The permittee can use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type. [§63.11225(c)(3)]
- d) Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment. [§63.11225(c)(4)]
- e) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation. [§63.11225(c)(5)]
- f) The permittee must keep the records of all inspection and monitoring data required by §§63.11221 and 63.11222, and the information identified in paragraphs §63.11225(c)(6)(i) through (vi) for each required inspection or monitoring.
 - i) The date, place, and time of the monitoring event.
 - ii) Person conducting the monitoring.
 - iii) Technique or method used.
 - iv) Operating conditions during the activity.
 - v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.
 - vi) Maintenance or corrective action taken (if applicable). [§63.11225(c)(vi)]
- 8) The records must be in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years. [§63.11225(d)]
- 9) If the permittee has switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within subpart JJJJJ, in the boiler becoming subject to subpart JJJJJ, or in the boiler switching out of subpart JJJJJ due to a change to 100 percent natural gas, the permittee must provide notice of the date upon which the permittee switched fuels, or made the physical change, within 30 days of the change. The notification must identify:
 - a) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.
 - b) The date upon which the fuel switch, physical change, or permit limit occurred. [§63.11225(g)]
- 10) The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.
- 11) Required reports shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.

PERMIT CONDITION CT-1		
10 CSR 10-6.060 <i>Construction Permits Required</i>		
Air Pollution Control Program Construction Permit 042001-012, Issued April 5, 2001		
Combustion Turbine Unit 6		
EIQ Reference	Description	Manufacturer/Model #
EP-06	Fuel Oil #2/Natural Gas Fired, 274 MMBtu/hr, 15.2 MWe (1973)	Westinghouse 191G

Emission Limitation:

The permittee shall not increase emissions of SO₂ more than 40 tons during any consecutive 12-month period as a result of operating the fogger at this installation. SO₂ emission increases from use of fogging will be determined as follows:

- 1) When the fuel rate is allowed to increase with fogging equipment in use:
 SO₂ increase = (Fuel used with fogging) x (percent fuel rate increase) x (SO₂ emission factor)
- 2) When the fuel rate is fixed and the output of the generator increases with fogging:
 SO₂ increase = (Fuel used with fogging) x (percent MW output increase) x (SO₂ emission factor)
 [Special Condition 2.A]

Monitoring/Recordkeeping:

- 1) The permittee shall maintain an accurate record of the monthly emissions increase of SO₂ emitted into the atmosphere from operating the fogger equipment. Marshall Municipal Utilities, shall use Attachment F, Monthly fogger SO₂ Emissions Tracking Record, or equivalent form for this purpose.
- 2) The permittee shall maintain all records required by this permit on-site for not less than five years for the monthly SO₂ emissions and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request [Special Condition 2.B]
- 3) Records may be kept in either written or electronic form.

Reporting:

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

PERMIT CONDITION CT-2		
10 CSR 10-6.260 <i>Restriction of Emissions of Sulfur Compounds</i>		
Combustion Turbine Unit 6		
EIQ Reference	Description	Manufacturer/Model#
EP-06	Fuel Oil #2/Natural Gas Fired, 274 MMBtu/hr, 15.2 MWe (1973)	Westinghouse 191G

¹The permittee is exempt from the requirements of this permit condition while combusting exclusively pipeline grade natural gas per 10 CSR 10-6.260(1)(A)2.

Emission Limitations:

The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period. [10 CSR 10-6.260(3)(A)2]

Monitoring/Recordkeeping:

- 1) The permittee shall monitor the sulfur content of each delivery of fuel documenting that the sulfur content is equal to or less than 0.259 percent by weight.
- 2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 3) Records may be kept in either written or electronic form.
- 4) All records shall be maintained for five years.

Reporting:

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

PERMIT CONDITION RICE-1		
10 CSR 10-6.060 <i>Construction Permits Required</i>		
Air Pollution Control Program Construction Permit 022009-012, Issued February 27, 2009		
IC Peaking Generators Units 7, 8, and 9		
EIQ Reference	Description	Manufacturer/Model #
EP-07, EP-08, and EP-09	(3) Fuel Oil #2 Fired RICE, 12 MMBtu/hr each, 1 MWe each (1989), 1490 BHp each	Onan Model 1000 DMLA

Emission Limitation:

The permittee shall emit less than 40 tons of NO_x in any consecutive 12-month period from the three diesel generators EP-07, EP-08, and EP-09. [Special Condition 1.A]

Monitoring/Recordkeeping:

- 1) The permittee shall maintain an accurate record of NO_x emitted into the atmosphere from the three diesel generators EP-07, EP-08, and EP-09. Attachment G or an equivalent form shall be used for this purpose. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to Missouri Department of Natural Resources' personnel upon request. [Special Condition 1.B]
- 2) Records may be kept in either written or electronic form.

Reporting:

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

PERMIT CONDITION RICE -2

10 CSR 10-6.060 *Construction Permits Required*

Air Pollution Control Program Construction Permit 1191-010A, Issued April 29, 1992

Air Pollution Control Program Determination Project 2002-01-006, Issued June 25, 2002

IC Peaking Generator 10

EQ Reference	Description	Manufacturer/Model #
EP-10	Fuel Oil #2/Natural Gas Fired, 54 MMBtu/hr, 8710 BHp	Cooper Bessemer, LSVB-20-G.D.C.

Emission Limitation:

- 1) Best Available Control Technology (BACT) for the emissions of NO_x from the operation of the operation of the Cooper Bessemer reciprocating dual-fueled internal combustion engine (EP-10) is set at 1150 ppmv, based on a three-hour rolling average, corrected to 15 percent oxygen, dry basis, 96 pounds per hour one-hour average. [Special Condition 1]
- 2) BACT for the emissions of CO shall be considered to be the optimization of engine efficiency by manufacturer redesign. This is to result in an emission rate of CO of no more than 2.0 grams per brake horsepower hour at 100 percent load, three-hour average. [Special Condition 2]
- 3) BACT for the emissions of VOCs shall be considered to be the optimization of engine efficiency by manufacturer redesign. This is to result in an emission rate of VOCs of no more than 0.7 grams per brake horsepower hour at 100 percent load, three-hour average. [Special Condition 3]
- 4) The emissions from the operation of the Cooper Bessemer engine (EP-10) shall not exceed the de minimis emissions limits of 15 tons per year for PM₁₀ or 40 tons per year for SO_x. [Special Condition 4]
- 5) SO_x shall be measured by fuel analysis rather than by Method 6 or 6C. There being no SO_x reduction in this engine, this method shall provide acceptable accuracy. The emission rate of SO_x shall not exceed the de minimis emission rate for SO_x of 40 tons per year. [Special Condition 10]

Operational Limitations:

- 1) The permittee shall adhere to the requirements of 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions* at all times that this engine is operated. [Special Condition 12]
- 2) No fuels other than natural gas or fuel oil #2 shall be combusted in the generator (EP-10) at any time. [Special Condition 13]
- 3) In the situation of a natural gas curtailment, the permittee may burn strictly fuel oil #2.

Continuous Compliance with the BACT limits:

The permittee will ensure that the engine is maintained to the original manufacturer's specifications. All maintenance performed on the engine shall not alter the engine in a way that deviates from the design measures taken to reduce NO_x, CO and VOC emissions as explained in Air Pollution Control Program Construction Permit 1191-010A.

Monitoring/Recordkeeping:

The permittee shall monitor the sulfur content of the fuel being fired in the Cooper Bessemer engine (EP-10). The frequency of determination of these values shall be as follows:

- 1) If the engine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
- 2) If the engines supplied fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators, or fuel vendors may develop custom schedules for determination

of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by both the Director of the Department of Natural resources, and by the Administrator of the US Environmental Protection Agency, before they can be used to comply with this condition.
[Special Condition 11]

Reporting:

- 1) The permittee shall ensure that the emissions of PM₁₀ and SO_x from the operation of this engine not exceed the de minimis emission limits for either PM₁₀ (15 tons per year) or SO_x (40 tons per year). To that end, the permittee shall record the amounts of both natural gas and fuel oil #2 combusted in the engine on a monthly basis. Calculations shall be performed which shall indicate the theoretical emission rates of both PM₁₀ and SO_x for that month, expressed in tons. Records shall be kept on-site which indicate:
 - a) Month of record,
 - b) Calculated emissions of PM₁₀ and SO_x for that month,
 - c) A summary of the calculated emissions of PM₁₀ and SO_x for the previous twelve month period, and
 - d) A statement that the annual emissions of PM₁₀ and SO_x may not exceed the de minimis emissions levels in any twelve month period. [Special Condition 14]
- 2) These records shall be kept on-site, and shall be made available to Department personnel upon request.
- 3) Records may be kept in either written or electronic form.
- 4) All records shall be maintained for five years.

Reporting:

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

PERMIT CONDITION RICE - 3

10 CSR 10-6.060 *Construction Permits Required*

Air Pollution Control Program Construction Permit 0493-002, Issued April 6, 1993

Air Pollution Control Program Determination Project 2002-01-006, Issued June 25, 2002

IC Peaking Generator 11

EQ Reference	Description	Manufacturer/Model #
EP-11	Fuel Oil #2/Natural Gas Fired RICE, 54 MMBtu/hr, 8,630 BHp	Cooper Bessemer, LSVB-20-G.D.C.

Emission Limitation:

- 1) Best Available Control Technology (BACT) for the emissions of NO_x from the operation of Cooper-Bessemer engine (EP-11) is set at 2.0 grams per brake horsepower hour at 100 percent load, three-hour average. [Special Condition 1]
- 2) BACT for the emissions of CO shall be considered to be the optimization of engine efficiency by manufacturer redesign. This is to result in an emission rate of CO of no more than 2.0 grams per brake horsepower hour at 100 percent load, three-hour average. [Special Condition 2]
- 3) BACT for the emissions of VOCs shall be considered to be the optimization of engine efficiency by manufacturer redesign. This is to result in an emission rate of VOCs of no more than 0.7 grams per brake horsepower hour at 100 percent load, three-hour average. [Special Condition 3]
- 4) The emissions from the operation of the Cooper-Bessemer engine (EP-11) shall not exceed 15 tons of PM₁₀ during any rolling 12-month period. [Special Condition 4]
- 5) The emissions from the operation of the Cooper-Bessemer engine (EP-11) shall not exceed 25 tons of total suspended particulate matter during any rolling 12-month period. [Special Condition 5]
- 6) The emissions from the operation of the Cooper-Bessemer engine (EP-11) shall not exceed 40 tons of SO_x during any rolling 12-month period. [Special Condition 6]
- 7) The sulfur content of the fuel oil as fired shall not exceed 0.259 percent by weight. [Special Condition 7]

Operational Limitations:

- 1) The permittee shall adhere to the requirements of 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions* at all times that this engine is operated. [Special Condition 16]
- 2) No fuels other than natural gas or fuel oil #2 shall be combusted in Cooper-Bessemer engine (EP-11) at any time. The as-fired fuel mix shall consist of 99 percent natural gas and one percent fuel oil #2, except during periods of startup or shutdown. [Special Condition 17]
- 3) In the situation of a natural gas curtailment, the permittee may burn strictly fuel oil #2.

Continuous Compliance with the BACT limits:

The permittee will ensure that the engine is maintained to the original manufacturer's specifications. All maintenance performed on the engine shall not alter the engine in a way that deviates from the design measures taken to reduce NO_x, CO and VOC emissions as explained in Air Pollution Control Program Construction Permit 0493-002.

Monitoring/Recordkeeping:

- 1) SO_x shall be measured by fuel analysis rather than by Method 6 or 6C. There being no SO_x reduction in this engine, this method shall provide acceptable accuracy. [Special Condition 13]
- 2) The permittee shall monitor the sulfur content of the fuel oil fired in Cooper-Bessemer engine (EP-11). The frequency of determination of these values shall be as follows:
 - a) If the engine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.
 - b) If the engine is supplied fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators, or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by both the Director of the Department of Natural Resources, and by the Administrator of the U.S. Environmental Protection Agency, before they can be used to comply with this condition. [Special Condition 15]

Reporting:

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

PERMIT CONDITION RICE-4		
<i>10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds</i>		
IC Peaking Generators		
EIQ Reference	Description	Manufacturer/Model #
EP-07, EP-08, and EP-09	3 - Fuel Oil #2 Fired RICE, 12 MMBtu/hr each (1989)	Onan Model 1000 DMLA
EP-10	Fuel Oil #2/Natural Gas Fired, 54 MMBtu/hr (1989)	Cooper Bessemer, LSVB-20-G.D.C.

Emission Limitations:

The permittee shall not cause or permit the emission into the atmosphere of gases containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period. [10 CSR 10-6.260(3)(A)2]

Monitoring/Recordkeeping:

- 1) The permittee shall monitor the sulfur content of each delivery of fuel documenting the sulfur content.
 - a) For EP-10, the sulfur content must never exceed 0.259 percent.
 - b) For Rice units EP-07, EP-08, and EP-09, the permittee must use diesel fuel that meets the requirements in 40 CFR 80.510 for nonroad diesel fuel. [§63.6604(a)]
- 2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

- 3) Records may be kept in either written or electronic form.
- 4) All records shall be maintained for five years.

Reporting:

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

PERMIT CONDITION – RICE-05		
<i>40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>		
IC Peaking Generators		
EIQ Reference	Description	Manufacturer/Model #
EP-07, EP-08, and EP-09	(3) 1989 Fuel Oil #2 Fired RICE, 12 MMBtu/hr each	Onan Model 1000 DMLA
EP-10	1989 Fuel Oil #2/Natural Gas Fired, 54 MMBtu/hr	Cooper Bessemer, LSVB-20-G.D.C.
EP-11	1993 Fuel Oil #2/Natural Gas Fired RICE, 54 MMBtu/hr	
<ul style="list-style-type: none"> • MACT ZZZZ Classification: Existing, non-emergency, non-black start stationary CI RICE >500 HP • The facility was a major source at the effective date of this standard. 		

Emission Limitations:

- 1) For each of the engines the permittee must;
 - a) Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O₂; or
 - b) Reduce CO emissions by 70 percent or more. [Table 2c to Subpart ZZZZ, Item #5]

Operational Requirements:

- 1) The permittee must be in compliance with the applicable requirements of MACT ZZZZ at all times. [§63.6605(a)]
- 2) At all times, the permittee must 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. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.6605(b)]
- 3) *For RICE units EP-07, EP-08, and EP-09 only;* The permittee must use diesel fuel that meets the requirements in 40 CFR 80.510 for nonroad diesel fuel. [§63.6604(a)]
- 4) The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [§63.6625(h)]
- 5) The permittee must meet the following operating limitation, except during periods of startup;

- a) maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
 - b) maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. (The permittee can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.) [Table 2b to MACT ZZZZ. Item #2]
- 6) If the permittee changes the catalyst, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the applicable emission limit is met for the stationary RICE. [§63.6640(b)]

Continuous Compliance Requirements:

- 1) The permittee must demonstrate continuous compliance with each emission limitation, operating limitation and other applicable requirements in Tables 2b and Table 2c to MACT ZZZZ, according to methods specified in Table 6 to MACT ZZZZ. [§63.6640(a)]
- 2) The permittee shall demonstrate continuous compliance by:
 - a) Conducting performance tests every 8,760 hrs or 3 yrs, whichever comes 1st, for CO to demonstrate that the required CO % reduction is achieved or that the emissions remain at or below the CO concentration. limit; and
 - b) Collecting the catalyst inlet temp. data according to §63.6625(b); and
 - c) Reducing these data to 4-hr rolling averages; and
 - d) Maintaining the 4-hr rolling averages within the operating limits for the catalyst inlet temperature.; and
 - e) Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limit established during the performance test. [Table 6 to Subpart ZZZZ of Part 63, Item #10, and §63.6615]
- 3) Compliance with the numerical emission limitations established in MACT ZZZZ is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to MACT ZZZZ. [§63.6600]
- 4) The permittee must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. [§63.6625(g)]
- 5) The permittee must install, operate, and maintain each CPMS according to the requirements in paragraphs §63.6625(b)(1) through (6). [§63.6625(b)]
- 6) The permittee must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs §63.6625(b)(1)(i) through (v) and in §63.8(d). As specified in §63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs §63.6625(b)(1) through (5) in the facilities site-specific monitoring plan.
 - a) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
 - b) Sampling interface (*e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;
 - c) Equipment performance evaluations, system accuracy audits, or other audit procedures;

- d) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and
- e) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i). [§63.6625(b)(1)(i) through (v)]
- 7) The permittee must install, operate, and maintain each CPMS in continuous operation according to the procedures in the facilities site-specific monitoring plan. [§63.6625(b)(2)]
- 8) The CPMS must collect data at least once every 15 minutes (see also §63.6635). [§63.6625(b)(3)]
- 9) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. [§63.6625(b)(4)]
- 10) The permittee must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually. [§63.6625(b)(5)]
- 11) The permittee must conduct a performance evaluation of each CPMS in accordance with the facilities site-specific monitoring plan. [§63.6625(b)(6)]

Monitoring:

- 1) The permittee shall monitor and collect data as follows: [§63.6635(a)]
 - a) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee shall monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§63.6635(b)]
 - b) The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee shall, however, use all the valid data collected during all other periods. [§63.6635(c)]

Subsequent Performance Test Requirements:

The permittee must conduct subsequent performance tests as specified in Table 3 of 40 CFR Part 63 Subpart ZZZZ. [§63.6615]

Notifications:

- 1) The permittee shall submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply by the dates specified. [§63.6645(a)]
- 2) The permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1). [§63.6645(g)]
- 3) The permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.6645(h)]

Recordkeeping:

- 1) The permittee shall retain the records described in §63.6655(a)(1) through (a)(5), and §63.6655(b)(1) through (b)(3). [§63.6655(a)]
 - a) A copy of each notification and report that the permittee submitted to comply with MACT ZZZZ, including all documentation supporting any Initial Notification or Notification of

- Compliance Status that the permittee submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
- b) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
 - c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). [§63.6655(a)(3)]
 - d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
 - e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.6655(a)(5)]
- 2) For each CEMS or CPMS, the permittee must keep the following records. [§63.6655(b)]
 - a) Records described in §63.10(b)(2)(vi) through (xi). [§63.6655(b)(1)]
 - b) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3). [§63.6655(b)(2)]
 - c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable. [§63.6655(b)(3)]
 - 3) The permittee shall retain the records required in Table 6 of MACT ZZZZ to show continuous compliance with each emission or operating limit that applies. [§63.6655(d)]
 - 4) All records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
 - 5) As specified in §63.10(b)(1), the permittee shall keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]
 - 6) The permittee shall retain each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]
 - 7) These records shall be kept on-site, and shall be made available to Department personnel upon request.

Reporting:

- 1) The permittee must report each instance in which each applicable emission limitation or operating limitation in Tables 2b and 2c to MACT ZZZZ were not met. These instances are deviations from the emission and operating limitations of MACT ZZZZ, and must be reported according to the requirements in §63.6650. [§63.6640(b)]
- 2) The permittee shall submit each report in Table 7 of MACT ZZZZ that applies. [§63.6650(a)]
- 3) 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 7 of MACT ZZZZ and according to the requirements in paragraphs §63.6650(b)(1) through (b)(9): [§63.6650(b)]
 - a) The permittee may submit the first and subsequent Compliance Reports as part of their 40 CFR Part 70 semi-annual Compliance Reports instead of according to the dates in paragraphs §63.6650(b)(1) through (b)(4). [§63.6650(b)(5)]
- 4) The permittee must submit the compliance report semiannually, according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations;
 - a) If there are no deviations from any applicable emission limitations or operating limitations, a statement that there were no deviations from the emission limitations or operating limitations

- during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or
- 5) The permittee must submit the compliance report semiannually, according to the requirements in §63.6650(b):
 - a) If the permittee had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or
 - b) If the permittee had a malfunction during the reporting period, the information in §63.6650(c)(4) [Table 7 to MACT ZZZZ, Item #1]
 - 6) The Compliance report must contain the information in paragraphs §63.6650 (c)(1) through (6):
 - a) Company name and address. [63.6650(c)(1)]
 - b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [63.6650(c)(2)]
 - c) Date of report and beginning and ending dates of the reporting period. [63.6650(c)(3)]
 - d) If the permittee had a malfunction during the reporting period, the compliance report must 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. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [63.6650(c)(4)]
 - e) If there are no deviations from any applicable emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period. [63.6650(c)(5)]
 - f) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period. [§63.6650(c)(6)]
 - 7) For each deviation from an emission or operating limitation that occurs for a stationary RICE where the permittee is using a CMS to comply with the emission or operating limitations in MACT ZZZZ, the Compliance report must contain the information in paragraphs §63.6650(c)(1) through (4) and the information in paragraphs §63.6650(d)(1) and (2).
 - a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
 - b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [63.6650(d)(1) and (2)]
 - 8) For each deviation from an emission or operating limit, the permittee shall include the information in §63.6650(c)(1) through (4) and §63.6650(e)(1) through (12):
 - a) The date and time that each malfunction started and stopped.
 - b) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - c) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
 - d) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - e) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

- f) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - g) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
 - h) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
 - i) A brief description of the stationary RICE.
 - j) A brief description of the CMS.
 - k) The date of the latest CMS certification or audit.
 - l) A description of any changes in CMS, processes, or controls since the last reporting period. [63.6650(e)(1) through (12)]
- 9) The permittee shall report all deviations as defined in MACT ZZZZ in the semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A). If the permittee submits a Compliance Report pursuant to Table 7 of MACT ZZZZ along with, or as part of, the semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance Report includes all required information concerning deviations from any emission or operating limit in MACT ZZZZ, submission of the Compliance Report shall be deemed to satisfy any obligation to report the same deviations in the semi-annual monitoring report. However, submission of a Compliance Report shall not otherwise affect any obligation the permittee may have to report deviations from permit requirements to the Air Pollution Control Program. [§63.6650(f)]
- 10) The permittee shall report condition to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

IV. Core Permit Requirements

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

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) 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 owner or operator 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) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other

pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

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

10 CSR 10-6.065 Operating Permits

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

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

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

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

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) The permittee may be required by the director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.

- 6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

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

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

10 CSR 10-6.150 Circumvention

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

10 CSR 10-6.170

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

Emission Limitation:

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

Monitoring:

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

The permittee shall maintain the following monitoring schedule:

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

Recordkeeping:

The permittee shall document all readings on Attachment I, or its equivalent, noting the following:

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

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

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

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

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

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

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control

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

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

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

refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

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

10 CSR 10-6.280 Compliance Monitoring Usage

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

V. General Permit Requirements

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

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

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

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

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, 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. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
 - 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, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

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

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

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

10 CSR 10-6.065(6)(C)1.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

None.

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, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
 - c) Whether compliance was continuous or intermittent;

- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

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

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The 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 section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

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

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

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

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously

emitted. The permittee shall notify the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), 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, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

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

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, 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 of this rule. 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)39 Responsible Official

The application utilized in the preparation of this permit was signed by Mr. Kyle Gibbs, General 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 owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

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

This permit may be reopened for cause if:

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

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

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

VI. Attachments

Attachments follow.

Attachment B1: Monthly Combined HAPs Tracking Record

Month: _____ Year: _____

Column 1	Column 2 (a)	Column 3	Column 4 (b)
Fuel Type	Amount	Emission Factor	HAP Emissions (tons)
Pulverized Coal	Ton	1.36 lbs HAP/ton	
Stoker Coal	Ton	1.4 lbs HAP/ton	
Paper Pellets	Ton	0.83 lbs HAP/ton	
Natural Gas (Boiler)	MMft ³	1.89 lbs HAP/MMft ³	
Natural Gas (Turbine)	MMft ³	1.02 lbs HAP/MMft ³	
Diesel (Turbine)	Mgal	0.17 lbs HAP/Mgal	
Diesel (Engine)	Mgal	0.10 lbs HAP/Mgal	
Dual Fuel	MMBtu	0.018 lbs HAP/MMBtu	
Other Sources of HAP Emissions			
Emission Source	Monthly Usage	HAP Emission Factor	
(c) Total HAP Emissions for this Month			
(d) 12-Month Total HAP Emissions total from Previous Month's Attachment B1			
(e) Monthly Total HAP Emissions from Previous Year's Attachment B1			
(f) Current 12-month Total HAP Emissions			

*Emission Factors have been taken from AP-42 and EPA's WebFire.

- (a) Insert the total amount of fuel used during corresponding month.
- (b) [Column 4] = [Column 2] x [Column 3] x [0.0005]
- (c) Summation of [Column 4]
- (d) 12-month total HAP emissions (f) from previous month's Attachment B1, in tons
- (e) Monthly total HAP emissions (c) from previous year's Attachment B1, in tons
- (f) Plantwide 12-Month Rolling Total HAP Emissions (tons) = The sum of the 12 most recent Plantwide Monthly HAP Emissions (tons) + the sum of all start-up, shutdown, and malfunction HAP emissions as reported to the Air Pollution Control Program's Compliance/Enforcement Section during the most recent 12 month period.

A 12-Month HAP emissions total (e) of less than 25 tons indicates compliance.

Attachment D - Method 9 Opacity Observations

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

Readings ranged from _____ to _____ percent opacity.

Was the emission unit in compliance at the time of evaluation? _____
 YES NO

 Signature of Observer

Attachment J - 10 CSR 10-6.260 Compliance Demonstration Worksheet

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*.

10 CSR 10-6.260(3)(C)2.A prohibits the emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of 8 lb/MMBtu.

Date (Month/Day/Year):

EQ Reference	Fuel	Emission Factor ²	Heat Content (MMBtu/ton)	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)	Is the Emission Unit in compliance?
EP-04	Bituminous Coal	38S lb/ton S = %			8	
	Refuse-Derived Fuel ¹	1.7 lb/ton	17	0.1		
EP-05	Bituminous Coal	38S lb/ton S = %				
EP-18	Refuse-Derived Fuel ¹	1.7 lb/ton	17	0.1		Yes.

¹Refuse-derived fuel was assumed to have an average heating value of 8,500 Btu/lb.

²The bituminous coal emission factor was taken from AP-42 Table 1.1-3 for Process SCCs 10100204 (EP-04) and 10100202 (EP-05). The refuse-derived fuel emission factor was taken from FIRE for Process SCC 10301202.

The calculations demonstrate that Boiler Unit 4 (EP-04) and Boiler Unit 18 (EP-18) are always in compliance with this regulation while combusting Refuse-Derived Fuel.

The permittee shall calculate their bituminous coal SO₂ emissions at least once each week to demonstrate compliance. The calculations shall be performed as follows:

$$\text{Emission Factor (lbs/MMBtu)} = \frac{38 \text{ (lb/ton)} \times \% \text{ Sulfur}}{\text{Heat Content (MMBtu/ton)}}$$

The percent sulfur and the heat content of the bituminous coal combusted shall be obtained by coal analysis or coal supplier data.

By calculating the weekly emission factors based on the sulfur content of the fuel and its heat content, the emission units can show compliance with the 8 lb/MMBtu limitation.

Attachment K – Abbreviated Reference Tables to MACT JJJJJJ
 For full table text, please refer to the published rule found in 40 CFR 63 Subpart JJJJJJ.

Table 2 to Subpart JJJJJJ of Part 63—Work Practice Standards, Emission Reduction Measures, and Management Practices

As stated in §63.11201, the permittee must comply with the following applicable work practice standards, emission reduction measures, and management practices:

If the boiler is in this subcategory	The permittee must meet the following . . .
Existing coal-fired units with heat input capacity ≥ 10 MMBtu/hr. [Item 1 of Table 2]	Minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.
Existing coal-fired, biomass-fired, or oil-fired boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio. [Item 14 of Table 2]	Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler every 5 years as specified in §63.11223.
Existing coal-fired or oil-fired boilers units with heat input capacity ≥ 10 MMBtu/hr. [Item 16 of Table 2]	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. Energy assessor approval and qualification requirements are waived in instances where past or amended energy assessments are used to meet the energy assessment requirements. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (1) to (4) appropriate for the on-site technical hours listed in §63.11237:
	(1) A visual inspection of the boiler system,
	(2) An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,
	(3) An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,
	(4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
	(5) A list of major energy conservation measures that are within the facility's control, (6) A list of the energy savings potential of the energy conservation measures identified, and
	(7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

Table 3 to Subpart JJJJJ of Part 63—Operating Limits for Boilers With Emission Limits

As stated in §63.11201, the permittee must comply with the applicable operating limits:

If the permittee demonstrates compliance with applicable emission limits using . . .	The permittee must meet these operating limits except during periods of startup and shutdown . . .
Fuel analysis [Item #6 of Table 3]	Maintain the fuel type or fuel mixture (annual average) such that the mercury emission rate calculated according to §63.11211(c) are less than the applicable emission limit for mercury.
Performance stack testing [Item #7 of Table 3]	For boilers that demonstrate compliance with a performance stack test, maintain the operating load of each unit such that it does not exceed 110 percent of the average operating load recorded during the most recent performance stack test.
Oxygen analyzer system [Item #8 of Table 3]	For boilers subject to a CO emission limit that demonstrate compliance with an oxygen analyzer system as specified in §63.11224(a), maintain the 30-day rolling average oxygen level at or above the minimum oxygen level as defined in §63.11237. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.11224(a)(7).

Table 4 to Subpart JJJJJ of Part 63—Performance (Stack) Testing Requirements

As stated in §63.11212, the permittee must comply with the following requirements for performance (stack) test for affected sources:

To conduct a performance test for the following pollutant. . . ^a	The permittee must. . .	Using. . .
Carbon Monoxide [Item #3 of Table 4]	a. Select the sampling ports location and the number of traverse points	Method 1 in appendix A-1 to part 60 of this chapter.
	b. Determine oxygen and carbon dioxide concentrations of the stack gas	Method 3A or 3B in appendix A-2 to part 60 of this chapter, or ASTM D6522-00 (Reapproved 2005), ^b or ANSI/ASME PTC 19.10-1981. ^b
	c. Measure the moisture content of the stack gas	Method 4 in appendix A-3 to part 60 of this chapter.
	d. Measure the carbon monoxide emission concentration	Method 10, 10A, or 10B in appendix A-4 to part 60 of this chapter or ASTM D6522-00 (Reapproved 2005) ^b and a minimum 1 hour sampling time per run.

^aMercury performance testing referenced in Item #2 of Table 4 is not required if compliance with the emission limit is demonstrated from fuel analysis as allowed by 63.11211(c).

^bIncorporated by reference, see §63.14.

Table 5 to Subpart JJJJJ of Part 63—Fuel Analysis Requirements

As stated in §63.11213, you must comply with the following requirements for fuel analysis testing for affected sources:

To conduct a fuel analysis for the following pollutant . . .	The permittee must. . .	Using . . .
Mercury [Item #1 of Table 5]	a. Collect fuel samples	Procedure in §63.11213(b) or ASTM D2234/D2234M ^a (for coal) or ASTM D6323 ^a (for biomass) or equivalent.
	b. Compose fuel samples	Procedure in §63.11213(b) or equivalent.
	c. Prepare composited fuel samples	EPA SW-846-3050B ^a (for solid samples) or EPA SW-846-3020A ^a (for liquid samples) or ASTM D2013/D2013M ^a (for coal) or ASTM D5198 ^a (for biomass) or equivalent.
	d. Determine heat content of the fuel type	ASTM D5865 ^a (for coal) or ASTM E711 ^a (for biomass) or equivalent.
	e. Determine moisture content of the fuel type	ASTM D3173 ^a or ASTM E871 ^a or equivalent.
	f. Measure mercury concentration in fuel sample	ASTM D6722 ^a (for coal) or EPA SW-846-7471B ^a (for solid samples) or EPA SW-846-7470A ^a (for liquid samples) or equivalent.
	g. Convert concentrations into units of lb/MMBtu of heat content	

^aIncorporated by reference, see §63.14.

Table 6 to Subpart JJJJJ of Part 63—Establishing Operating Limits

As stated in §63.11211, the permittee must comply with the following requirements for establishing operating limits:

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	The permittee must	Using . . .	According to the following requirements
CO [Item #3 of Table 6]	Oxygen	Establish a unit-specific limit for minimum oxygen level	Data from the oxygen analyzer system specified in §63.11224(a)	(a) You must collect oxygen data every 15 minutes during the entire period of the performance stack tests;
				(b) Determine the average hourly oxygen concentration for each individual test run in the three-run performance stack test by computing the average of all the 15-minute readings taken during each test run.
Any pollutant for which compliance is	Boiler operating	Establish a unit-specific limit for	Data from the operating load monitors (fuel feed	(a) You must collect operating load data (fuel feed rate or steam

demonstrated by a performance stack test. [Item #4 of Table 6]	load	maximum operating load according to §63.11212(c)	monitors or steam generation monitors or wattmeter)	generation data or electrical output) every 15 minutes during the entire period of the performance test.
				(b) Determine the average operating load by computing the hourly averages using all of the 15-minute readings taken during each performance test.
				(c) Determine the average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as your operating limit.

Table 7 to Subpart JJJJJ of Part 63—Demonstrating Continuous Compliance

As stated in §63.11222, the permittee must show continuous compliance with the emission limitations for affected sources according to the following:

If you must meet the following operating limits . . .	The permittee must demonstrate continuous compliance by . . .
Fuel Pollutant Content [Item #6 of Table 7]	<p>a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to §63.11213 as applicable; and</p> <p>b. Keeping monthly records of fuel use according to §§63.11222(a)(2) and 63.11225(b)(4).</p>
Oxygen content [Item #7 of Table 7]	<p>a. Continuously monitoring the oxygen content of flue gas according to §63.11224 (This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in §63.11224(a)(7)); and</p> <p>b. Reducing the data to 30-day rolling averages; and</p> <p>c. Maintaining the 30-day rolling average oxygen content at or above the minimum oxygen level established during the most recent CO performance test.</p>
Boiler operating load [Item #9 of Table 7]	<p>a. Collecting operating load data (fuel feed rate or steam generation data or electrical output) every 15 minutes; and</p> <p>b. Reducing the data to 30-day rolling averages; and</p> <p>c. Maintaining the 30-day rolling average at or below the operating limit established during the performance test according to §63.11212(c) and Table 6 to MACT JJJJJ</p>

STATEMENT OF BASIS

Permit Reference Documents

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

- 1) Part 70 Operating Permit Application, received August 21, 2014;
- 2) 2013 Emissions Inventory Questionnaire;
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 4) Air Pollution Control Program Construction Permit 1189-012, Issued November 15, 1989;
- 5) Air Pollution Control Program Construction Permit 1191-010, Issued November 20, 1991
- 6) Air Pollution Control Program Construction Permit 1191-010A, Issued April 29, 1992;
- 7) Air Pollution Control Program Construction Permit 0493-002, Issued April 6, 1993;
- 8) Air Pollution Control Program Construction Permit 0695-024, Issued June 20, 1995;;
- 9) Air Pollution Control Program Construction Permit 042001-012, Issued April 5, 2001;
- 10) Air Pollution Control Program Determination Letter Project 2002-01-006;
- 11) Air Pollution Control Program Construction Permit 092002-007, Issued August 5, 2002; and
- 12) Air Pollution Control Program Construction Permit 022009-012, Issued February 27, 2009

Construction Permit History/Revisions

Permit Number	Description	Notes
0493-002	PSD permit for the construction of a Cooper-Bessemer IC engine (EP-11)	1
1189-012	Deminimis permit for the construction of a Cooper-Bessemer IC engine (EP-10)	2
1191-010	PSD permit for the modification to increase the usage of Peaking Generator 10 (EP-10) from 800 hr/yr to 8,760 hr/yr.	3
1191-010A	Amendment 1191-010A removed the requirement to analyze the nitrogen content of the fuel oil for Peaking Generator 10 (EP-10).	3
0493-002A	Amendment of Permit 0493-002	1
0695-024	Section (5) permit for the production, processing, and combusting of pelletized paper fuel within Boiler Unit 4 (EP-04).	4
042001-012	Section (5) permit for the addition of water fogging on Combustion Turbine Unit 6 (EP-06)	5
092002-007	Section (5) permit for the construction of a new boiler (EP-18).	6
022009-012	Construction of three (3) diesel generators (EP-7, 8 & 9) and associated fuel storage tanks.	7

Notes:

- 1 – Requirements found in Permit Condition RICE - 3
- 2 - This construction permit was superseded by Construction Permit 1191-010.
- 3 - Requirements found in Permit Condition RICE -2
- 4 - Requirements found in Permit Condition – 4
- 5 - Requirements found in Permit Condition CT-1
- 6 - Requirements found in Permit Condition – 5
- 7 - Requirements found in Permit Condition RICE-1

Construction Permit 0493-002, Issued April 6, 1993:

- Special Condition 7 limited the installation to firing fuel containing 0.28 percent sulfur or less; however, the calculated limitation under 10 CSR 10-6.260 of 0.259 percent is more restrictive and

was used. (See discussion under the rule heading in the Other Regulatory Determinations section below)

- Special Conditions #8 – 12 and 14 were one time requirements and not placed into this permit. These special conditions required initial stack testing that has already been completed.

Construction Permit 1191-010, Issued November 15, 1991:

Construction Permit 1191-010A, Issued April 29, 1992:

- This PSD construction permit is to increase the usage of Generator (EP-10) from 800 hr/yr to 8,760 hr/yr.
- Amendment 1191-010A removed the requirement to analyze the nitrogen content of the fuel oil from Special Condition 11.
- Special Conditions 5 – 9 have not been applied within this operating permit. These special conditions required stack testing. The initial stack testing has already been completed.

Construction Permit 0695-024, Issued June 20, 1995:

- This de minimis construction permit allows the combustion of refuse-derived fuel (RDF) within Boiler Unit 4 (EP-04).

Construction Permit 042001-012, Issued April 5, 2001:

- This de minimis construction permit is for a water fogging system on Combustion Turbine Unit 6 (EP-06).
- Special Conditions 1 and 3 were not incorporated into this operating permit. Special Condition 1 limits the increase in NO_x emissions due to use of the water fogging system to 40 tons/yr; however, stack testing conducted on August 1, 2002 to fulfill the requirements of Special Condition 3 documented that using the water fogging system actually decreases NO_x emissions.

Construction Permit 092002-007, Issued August 5, 2002:

- Special Condition 1 was not incorporated into this operating permit. This special condition requires stack testing to determine NO_x and CO emissions. This stack testing has been completed.
- Special Condition 4 was not incorporated into this operating permit. This special condition limits the boiler to only combusting paper pellets and fuel oil #2; however, the installation received a No Construction Permit Required Determination on September 20, 2010 allowing the boiler to also combust natural gas. From this No Permit Required letter, EP-18 is allowed to burn RDF, natural gas, and fuel oil #2.

New Source Performance Standards (NSPS) Applicability

40 CFR 60 Subparts D and Da– *Standards of Performance for Steam Generating Units* are not applicable to the installation and have not been applied within this permit. Subparts D and Da are applicable to steam generating units with a heat input rate greater than 250 MMBtu/hr constructed after August 17, 1971 per §60.40(a) and §60.40a(a). There are no units at this facility that meet the size criteria to meet the applicability of this rule.

40 CFR 60 Subpart Db – *Standards of Performance for Steam Generating Units* are not applicable to the installation. Subpart Db is only applicable to steam generating units with a heat input rate greater than 100 MMBtu/hr constructed after June 19, 1984 per §60.40b(a), Boiler 4 (EP-04) and Boiler 5 (EP-05) meet the size criteria but were constructed prior to August 17, 1971.

40 CFR 60 Subpart Dc – *Standards of Performance for Steam Generating Units*

Subpart Dc is applicable to steam generating units with a heat input rate greater than 10 MMBtu/hr constructed after June 9, 1989 per §60.40c(a). Boiler 18 (EP-18) was constructed after the applicable date; however, the boiler is rated at 5.15 MMBtu/hr and is not subject. Boiler 4 (EP-04) and Boiler 5 (EP-05) meet the size criteria but were constructed prior to August 17, 1971.

40 CFR 60 Subparts K, Ka, and Kb – *Standards of Performance for Storage Vessels*

The only tanks located at the installation that are larger than 19,182 gallons were constructed in 1972 prior to the applicable dates per §60.110b(a).

40 CFR 60 Subpart Y – *Standards of Performance for Coal Preparation and Processing Plants*

Subpart Y is applicable to coal preparation and processing plant processing more than 200 tons per day constructed after October 27, 1974 per §60.250(a) and (b). Clean Coal Storage (EP-12) was constructed prior to the applicable date.

40 CFR 60 Subpart GG – *Standards of Performance for Stationary Gas Turbines*

This rule is applicable to stationary gas turbines with a heat input greater than 10 MMBtu/hr constructed after October 3, 1977 per §60.330(a) and (b). Combustion Turbine Unit 6 (EP-06) was constructed in 1973, which precedes the applicability date of the standard.

40 CFR 60 Subpart AAAA – *Standards of Performance for Small Municipal Waste Combustion Units*

This rule applies to municipal waste combustion units having a capacity to combust 35 ton/day constructed after August 30, 1999 per §60.1010(b). Boiler 18 (EP-18) was constructed in 2003 after the applicable date; however, at maximum design rating, the boiler can only combust 9.4 tons of refuse-derived fuel per day. Therefore Subpart AAAA does not apply to any boilers at this facility.

40 CFR 60 Subpart BBBB – *Standards of Performance for Small Municipal Waste Combustion Units*

This rule applies to municipal waste combustion units having a capacity to combust 35 ton/day constructed before August 30, 1999 per §60.1550(a)(1) Boiler Unit 4 (EP-04) was constructed before August 30, 1999; however, Boiler 4 is restricted by Permit Condition 4, Operational Limitation 3 to less than 35 tons per day of pellet fuel.

40 CFR 60 Subpart HHHH – *Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units*

This rule applies to coal-fired boilers and combustion turbines serving a generator with a nameplate capacity greater than 25 MWe per §60.4104(a). Neither of the coal-fired boilers (EP-04 and EP-05) serves a generator with a nameplate capacity greater than 25 MWe.

40 CFR 60 Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)*

This rule does not apply to this facility since all of the RICE at the installation were constructed prior to the applicable date of July 11, 2005.

40 CFR 60 Subpart KKKK—*Standards of Performance for Stationary Combustion Turbines*

This rule applies to stationary combustion turbines constructed after February 18, 2005. [§60.4300] Combustion Turbine Unit 6 (EP-06) was constructed in 1973 before the applicable date of the standard.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR 63 Subpart Q – *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*. This regulation applies to cooling towers operated with chromium-based water treatment chemicals per §63.400(a). The cooling tower chemicals used by the installation do not contain chromium, therefore MACT Q is not applicable.

40 CFR 63 Subpart T – *National Emission Standards for Halogenated Solvent Cleaning*
Subpart T applies to solvent cleaning machines using solvent containing methylene chloride (75-09-2), perchloroethylene (127-18-4), trichloroethylene (79-01-6), 1,1,1-trichloroethane (71-55-6), carbon tetrachloride (56-23-5), or chloroform (67-66-3). [§63.460(a)] The parts washer solvent does not contain any of the listed chemicals and is not subject to the standard.

40 CFR 63 Subpart YYYY – *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*
Existing stationary combustion turbines (defined at §63.6090(a)(1) as constructed prior to January 14, 2003) do not have to meet the requirements of MACT YYYY per §63.090(b)(4). Combustion Turbine Unit 6 was constructed in 1973 and has not since been reconstructed.

40 CFR 63 Subpart ZZZZ - *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*
40 CFR 63.6604(a) does not apply to Engines 10 (EP-10) and 11 (EP-11) because the cylinder displacement (68 liters) exceeds 30 liters.

MACT ZZZZ requires periodic repeat performance testing for the diesel engines, Engines 07, 08 and 09 (EP-07, EP-08 and EP-09), and for the dual fuel engines, Engines 10 (EP-10) and Engine 11 (EP-11). This performance test should be conducted at maximum operating load for the fuel mixtures allowed for normal operation. For the diesel engines, periodic repeat performance testing is completed when burning diesel fuel. For the dual fuel engines, normal operation requires startup and shutdown on diesel fuel and operations on mostly natural gas fuel with diesel pilot fuel. Normal operation for Engine 10 is 95% natural gas and 5 % diesel fuel. Normal operation for Engine 11 is 99% natural gas and 1 % diesel fuel. These mixtures are referenced in the potential emission calculations when the engines were permitted. The mixture for Engine 10 was also referenced as a special condition in permit 1191-010 but not in the amendment that followed. The mixture for Engine 11 is referenced as a special condition in permit 0493-002. According to a letter faxed to Kyle Gibbs June 25, 2002, these units are not permitted to run on only diesel fuel except during an emergency when natural gas is curtailed. Performance testing would not qualify as an emergency situation and therefore prevents the engines from operating solely on fuel oil for performance testing purposes. Performance testing for compliance with the RICE control requirements on the fuel mixtures permitted and referenced above is sufficient to satisfy the RICE performance testing requirements for Engines 10 and 11 and on diesel fuel for Engines 07, 08 and 09.

All of the RICE engines at the facility are unlimited use engines and each is equipped with a closed crankcase ventilaton system. Applicable requirements for these engine characteristics were selected for this permit. Applicable requirements for the initial compliance tests and initial notification of compliance status were not included in this permit since these requirements have already been completed and met.

40 CFR 63 Subpart DDDDD – *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, Institutional Boilers and Process Heaters*

This regulation applies to major sources of HAPs. Since the facility has limited their HAP emissions to less than major levels with this permit, this regulation is not applicable.

40 CFR Subpart JJJJJ - *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, Institutional Boilers Area Sources*

Marshall Municipal Utilities requested a 10.0 ton limitation for individual HAPs and a 25.0 ton limitation for combined HAPs to become an area source. Issuance of this operating permit requires Marshall Municipal Utilities to remain an area source beginning on the day of permit issuance. As an area source for HAPs, 40 CFR Subpart JJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, Institutional Boilers Area Sources will apply to Boilers 4, 5, and EP-18 after operating permit issuance and when these boilers use an applicable fuel other than natural gas. If these units only use natural gas fuel after permit issuance none of the requirements of Subpart JJJJJ are applicable since each of the emission units are “gas-fired units” and are exempt per 63.11195(e). 63.11210(h) allows “affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within subpart JJJJJ or the boiler becoming subject to subpart JJJJJ, to demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to §63.11225(g)”. If coal is ever burned in boiler 4 or 5 after the date of permit issuance, the boiler then becomes subject to Subpart JJJJJ requirements on the date of the fuel switch and must demonstrate compliance within 180 days. If pellet fuel is ever burned in boiler 4 or EP-18, the boiler then becomes Subject to Subpart JJJJJ requirements on the date of the fuel switch and must demonstrate compliance within 180 days.

Other Air Regulations Determined Not to Apply to the Operating Permit

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

10 CSR 10-6.100, *Alternate Emission Limits*

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

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 applicable to Boiler 4 (EP-04) and Boiler 5 (EP-05) as they require control devices to meet the emission limits of 10 CSR 10-6.405 and have pre-control emissions greater than the major source threshold (*see Permit Condition 1*).

Greenhouse Gas Emissions

On May 13, 2010, EPA issued the GHG Tailoring Rule which set the major source threshold for CO₂e to be 100,000 ton/year within 40 CFR Part 70. Potential emissions of greenhouse gases (CO₂e) for this

installation are calculated to be 519,144.4 tons, classifying the installation as a major source of GHGs. Please note that the potential emissions of greenhouse gases from this installation are only for stationary sources as §70.2 defines emission unit as “any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act.”

This source is subject to 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting Rule. However, 40 CFR Part 98 is not an applicable requirement under 40 CFR Part 70; therefore Part 98 requirements were not included within this operating permit. In addition, Missouri regulations do not require the installation to report CO₂ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation’s actual CO₂ emissions were not included within this permit. The applicant is required to report actual CO₂ emissions data directly to EPA.

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tons/yr) ¹
CO	577.10
CO ₂ e	519,144
HAP (Total)	<25
HAP (Individual, HCl)	<10
NO _x	2,294.54
PM ₁₀	675.22
PM _{2.5}	197.82
SO _x	10,376.48
VOC	113.62

¹Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.

- Potential emissions from EP-04, EP-05, EP-06, and EP-18 are based upon the worst case fuel for each pollutant.
 - EP-04: Bituminous coal was the worst case fuel for CO, CO₂e, NH₃, NO_x, SO_x, Hydrogen Fluoride, and Formaldehyde. Natural gas was the worst case fuel for VOC, Hexane, Toluene, Benzene, Manganese Compounds, Naphthalene, and Polycyclic Organic Matter. Refuse-derived fuel was the worst case for PM CON, PM₁₀, PM_{2.5}, HAP, Hydrogen Chloride, and Lead Compounds.
 - EP-05: Bituminous coal was the worst case fuel for CO₂e; PM CON; PM₁₀; PM_{2.5}; NH₃; NO_x; SO_x; HAP; Hydrogen Chloride; Hydrogen Fluoride; Toluene; Benzene; Acrolein; Xylene; Manganese and Lead Compounds; and Polycyclic Organic Compounds. Natural gas was the worst case for CO, VOC, Hexane, Formaldehyde, and Naphthalene.
 - EP-06: Fuel oil #2 was the worst case fuel for CO₂e; PM CON; PM₁₀; PM_{2.5}; NH₃; NO_x; SO_x; Benzene; Manganese and Lead Compounds; Naphthalene; and Polycyclic Organic Matter. Natural gas was the worst case fuel for CO, VOC, HAP, Formaldehyde, Toluene, Acrolein, and Xylene.
 - EP-18: Natural gas was the worst case fuel for CO₂e; PM CON; NH₃; VOC; Hexane; Formaldehyde; Toluene; Benzene; Manganese and Lead Compounds; Naphthalene; and Polycyclic Organic Matter. Refuse-derived fuel was the worst case fuel for CO, PM₁₀, PM_{2.5}, NO_x, SO_x, HAP, and Hydrogen Chloride.
- Potential emissions from EP-10 and EP-11 were referenced in Construction Permit 0493-002as 12.5 tpy for PM, 4.2 tpy SO_x, 579 tpy for NO_x, 335 tpy for CO, and 10 tpy for VOC.
- HAP emissions are limited by Plant wide Permit Condition PW001 to 10 tpy individual HAP and 25 tpy combined HAP.

Other Regulatory Determinations

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

This regulation is applicable to sources of visible emissions. This regulation is not applicable to EP-06, EP-07, EP-08, EP-09, EP-10, or EP-11 as 10 CSR 10-6.220(1)(A) exempts internal combustion engines.

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

The 0.259 percent sulfur content restriction within Permit Condition CT-02, RICE-3 and RICE-4 (for EP-10) was derived as follows:

$$500 \text{ ppmv} \times \frac{1.66 \times 10^{-7} \text{ lb}}{\text{scf} - \text{ppmw}} \times \frac{1,420 \text{ scf}}{\text{MMBtu}} \times \frac{64.066}{24.04 \text{ ppmw/ppmv}} = \frac{1.01\text{S lb}}{\text{MMBtu}}$$

$$0.262 \text{ lb/MMBtu} = 1.01\text{S lb/MMBtu}$$

$$\text{S} = 0.259 \text{ percent}$$

Where:

500 ppmv = 10 CSR 10-6.260(3)(A)2 emission limitation.

1.66×10^{-7} lb/scf-ppmw = conversion factor obtained from 40 CFR Part 60 Appendix A-7 Table 19-1.

1,420 scf/MMBtu = F factor obtained from 40 CFR Part 60 Appendix A-7 Table 19-2.

64.066/24.04 ppmw/ppmv = M/24.04 = conversion factor obtained from AP-42 Appendix A.

1.01S = emission factor taken from AP-42 Tables 3.1-2a and 3.4-1.

This demonstration shows that if the sulfur content of the fuel remains below 0.259%, then the sulfur dioxide emissions will not exceed 500 ppmv.

10 CSR 10-6.270 *Acid Rain Source Permits Required*

This rule is applicable to generators installed after November 15, 1990 or any generator with a nameplate capacity greater than 25 MWe per §72.6(3). None of the existing generators have a nameplate capacity greater than 25 MWe. Generator Unit 11 (EP-11) received a new unit exemption from EPA effective December 31, 1994.

10 CSR 10-6.350 *Emission Limitations and Emissions Trading of Oxides of Nitrogen*

This rule is applicable to fossil fuel-fired electric generating units that serve a generator with a nameplate capacity greater than 25 MWe per 10 CSR 10-6.350(1)(A). None of the generators have a nameplate capacity greater than 25 MWe.

10 CSR 10-6.362, 6.364, and 6.366 *Clean Air Interstate Rule (CAIR)*

CAIR is applicable to stationary fossil-fuel fired boilers and combustion turbines serving a generator with a nameplate capacity greater than 25 MWe per 10 CSR 10-6.362(1)(A)1, 6.364(1)(A)1, and 6.366(1)(A)1. None of the generators have a nameplate capacity greater than 25 MWe.

10 CSR 10-6.368 *Control of Mercury Emissions From Electric Generating Units*

This rule is applicable to stationary fossil-fuel fired boilers and combustion turbines serving a generator with a nameplate capacity greater than 25 MWe. [10 CSR 10-6.368(1)(A)1] None of the generators have a nameplate capacity greater than 25 MWe.

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

EQ Reference	Description	Fuel	MHDR (MMBtu/hr)	Construction Date
EP-04	Boiler Unit 4	Bituminous Coal, RDF ¹ , Natural Gas	108	1957
EP-05	Boiler Unit 5	Bituminous Coal, Natural Gas	235	1967
EP-18	Boiler 18	RDF ¹ , Fuel Oil #2, Natural Gas	5.15	2003
Q (Facility wide heat input)			348.15	
Existing (pre-1971) emission limit using equation $E=0.90Q^{-0.174}$			E = 0.33 lb/MMbtu	
New (post-1971) emission limit using equation $E=1.31Q^{-0.338}$			E = 0.18 lb/MMbtu	

Uncontrolled PM Calculations					
Emission Unit	Fuel	Emission Factor	Emission Factor Source	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)
Boiler Unit 4 (EP-04)	Bituminous Coal ²	66 lb/ton	FIRE SCC 10100204	2.54	0.33
	Natural Gas ¹	1.9 lb/MMscf	FIRE SCC 10100601	0.002	
	Refuse-Derived Fuel ³	80 lb/ton	FIRE SCC 10301202	4.71	
Boiler Unit 5 EP-05	Bituminous Coal ²	96.69 lb/ton A = 8.79%	AP-42 SCC 10100202	3.72	0.33
	Natural Gas ¹	1.9 lb/MMscf	FIRE SCC 10100601	0.002	
Boiler (EP-18)	Natural Gas ¹	1.9 lb/MMscf	FIRE SCC 10100601	0.002	0.18
	Refuse-Derived Fuel ³	80 lb/ton	FIRE SCC 10301202	4.71	

¹Natural gas was assumed to have an average heating value of 1,050 MMBtu/MMscf.

²Bituminous coal was assumed to have an average heating value of 26 MMBtu/ton.

³Refuse-derived fuel was assumed to have an average heating value of 17 MMBtu/ton.

Controlled PM Calculations					
Emission Unit	Fuel	Control Device	Control Device Efficiency	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)
EP-04	Bituminous Coal	CD-1 Baghouse	99%	0.005	0.33
	Refuse-Derived Fuel			0.047	
EP-05	Bituminous Coal	CD-2 Baghouse	99%	0.01	0.33
EP-18	Refuse-Derived Fuel	CD-3 Multiclone	93%	0.329	0.18

Boiler Unit 4 (EP-04) and Boiler Unit 5 (EP-05) were given 99 percent control efficiencies for baghouses. The permittee is in compliance with the PM limits while meeting the requirements of their *Compliance Assurance Monitoring* plan.

EP-18 was given a 93 percent control efficiency for a medium efficiency multiclone. The permittee is required to conduct a stack performance test to establish an emission factor to show compliance with this regulation.

WTP Space Heater (EP-17) is in compliance with 10 CSR 10-6.405 without the aid of a control device; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is not applicable.

Boiler (EP-18) is not in compliance with 10 CSR 10-6.405 while combusting refuse-derived fuel without the aid of a control device, but potential particulate emissions are below the 100 tons per year major source threshold; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is not applicable.

Boiler Unit 4 (EP-04) and Boiler Unit 5 (EP-05) are not in compliance with 10 CSR 10-6.405 while combusting coal and refuse-derived fuel without the aid of a control device, and the potential particulate emissions are above the 100 tons per year major source threshold; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is required.

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 APCP'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 APCP a schedule for achieving compliance for that regulation(s).

Response to Public Comments

A draft of the Marshall Municipal Utilities Power Plant's Part 70 Operating Permit was placed on public notice on September 02, 2015, by the Missouri Department of Natural Resources (MDNR). Comments were received on September 28, 2015 from Mark Smith, Air Permitting and Compliance Branch Chief at Environmental Protection Agency Region 7. The twelve (12) comments are presented below as submitted, with the response to each comment by the Air Pollution Control Program (APCP) directly following.

EPA Comment #1:

Permit Condition PW001 establishes a voluntary emission limitation of less than 10 tons of any individual hazardous air pollutant (HAP) in any 12-month consecutive period and less than 25 tons of any combination of hazardous air pollutants (HAPs) in any 12-month consecutive period. Permit Condition PW001 also approves the use of Attachments B1 and B2, or equivalent forms, to demonstrate compliance with the annual 10.0 ton individual HAP and 25.0 ton combined HAP limitations. However, Permit Condition PW001 fails to ensure that the individual HAP; and the total combined HAP emissions, respectively, will be below their established voluntary limits. While the draft operating permit intends to restrict HAP below the individual voluntary limits, these limits are not enforceable as a practical matter.

To effectively limit Marshall Municipal Utilities Power Plant individual and total HAP emissions to less than 10.0 and 25.0 tpy, respectively as specified, the individual and total HAP emission limits of Permit Condition PW001 must apply at all times to all actual emission units, and all individual and total HAP emission units must be considered in determining compliance with the respective limits. The draft permit for Marshall Municipal Utilities Power Plant fails to specify the emission units subject to these voluntary limitations. Attachments B1 and B2 appear to measure and record the emissions associated with the combustion of coal, paper pellets, natural gas and diesel fuel. However, there does not appear to be any tracking associated with the HAP emissions from other potential sources of HAP emission including, but not limited to: bulk storage tank vents; space heaters; and parts washers.

In its response to a petition filed against the Hu Honua Bioenergy Facility, the Environmental Protection Agency reiterates that, for purposes of determining the potential-to-emit (PTE) of a stationary source, the PTE shall encompass the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Thus, emissions from all units that are part of the entire installation must be included in calculating PTE for purpose of compliance determination. Similarly, EPA has previously explained that when a source accepts a source wide limit for a pollutant, all actual emissions of that pollutant, including all sources listed as insignificant; and start up, shut down and malfunction emissions must be considered in compliance determination with the emission limit. Therefore, EPA recommends MDNR-APCP revise Attachment B1 and B2 to include all emission units and clarify in the operating permit that the limit applies at all times.

Missouri Air Pollution Control Program Response to EPA Comment #1:

The introductory paragraph in Section II Plant Wide Emission Limitations clearly states that the plant wide limitations apply to all emission units at the installation both with and without limitations at all times.

Attachments B1 and B2 have been updated to further include all emission units at the installation and during startup/shutdown/malfunction time.

EPA Comment #2:

Permit Condition -1 incorporates the requirements associated with 10 CSR 10-6.405 and 40 CFR 64 which are applicable to boilers EP-04 and EP-05. The stipulated operational limitation 2) specifies that the permittee shall maintain and operate the baghouses, included in EP-04 and EP-05, according to the manufacturer's specification and recommendation. However, Permit Condition-1 includes a detailed compliance assurance monitoring (CAM) plan with specific baghouse performance requirements. It appears to the EPA, that an operational limitation 2) should require the permittee to maintain and operate their baghouses according to the CAM plan and EPA suggests MDNR consider this change. Additionally, the Quality Improvement Plan (QIP) requirement 4), in Permit Condition-1, identifies potential additional changes which the "administrator or permitting authority" may require. Permit Condition-1 compliance is being managed by MDNR and therefore, EPA suggests removal of the "Administrator" and leave the determination of potential QIP changes to MDNR.

Missouri Air Pollution Control Program Response to EPA Comment #2:

The language of this permit condition has changed to that the permittee shall operate the baghouses according to the CAM plan.

The determination authority has been changed from the Administrator to the MDNR.

EPA Comment #3:

Permit Condition-2 limits the emissions of sulfur dioxide into the atmosphere from any direct heating source (emphasis added) in excess of eight pounds of sulfur dioxide per million BTU actual heat input averaged on any consecutive three hour period. Permit Condition-2 requires the use of Attachment J, which contains calculations demonstrating the permittee is in compliance with this regulation. However, Attachment J requires the permittee to calculate SO₂ emissions once each week to demonstrate compliance. EPA recommends MDNR add clarifying language, to Attachment J, which describes how the weekly calculations satisfy the "any consecutive three hour" limitation.

Missouri Air Pollution Control Program Response to EPA Comment #3:

A paragraph has been added to Attachment J stating that by calculating the emission factor of the emission units, the permittee can demonstrate compliance with the "any consecutive three hour" limitation. This is done by calculating the maximum emission rate weekly for the fuel being combusted.

EPA Comment #4:

Permit Condition-3 and Permit Condition-9 incorporate the National Emission Standards for Hazardous Air Pollutants (HAPs) for Industrial, Commercial, and Institutional Boilers (ICI Boiler MACT) for area sources as found in 40 CFR Part 63, Subpart JJJJJJ. However, based on the Installation Description in this draft Part 70 operating permit, Marshall Municipal Utilities Power Plant is just now (with the issue of this final operating permit) taking a voluntary limit (Plant Wide Permit Limit PW001) in order to become a synthetic minor source of HAP emissions. In other words, Marshall Municipal Utilities Power Plant is currently a major source of HAPs and therefore subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers found in 40 CFR Part 63, Subpart DDDDDD. Therefore, it appears to EPA that Permit Condition-3 and Permit Condition-9 are not yet applicable requirements and therefore should not be included in the draft operating permit. Additionally, as Marshall Municipal Utilities Power Plant is a major HAPs source, and subject to 40 CFR Part 63, Subpart DDDDDD, it appears that the applicable requirements associated with the major source should be included in the draft operating permit and EPA recommends MDNR insert the necessary operating conditions from the major source ICI Boiler MACT, 40 CFR Part 63, Subpart DDDDDD.

If, on the other hand, it is MDNR's intent to position Marshall Municipal Utilities Power Plant to be in compliance with the area source ICI Boiler MACT (40 CFR Part 63, Subpart JJJJJJ) on the date of this operating permit issuance, then Permit Condition-3 and Permit Condition-9 become applicable requirements. In this case MDNR should add a discussion regarding 40 CFR Part 63, Subpart JJJJJJ in the Statement of Basis detailing how Marshall Municipal Utilities Power Plant is meeting its obligation for HAP compliance. In the event MDNR retains Permit Condition-3 and Permit Condition-9 in the operating permit, the permittee requirements should be written in a manner that reflects Marshall Municipal Utilities Power Plant compliance choice and be specific to Boilers EP-04 and EP-05. For example:

- References to "this section", "of this chapter" and "this subpart" should be replaced with specific regulatory citations;
- All references to "you" should be replaced by "permittee;"
- "Affected boilers" replaced by EP-04 and EP-05;
- Include all referenced 40 CFR Part 63, Subpart JJJJJJ Tables in Attachment K; and
- Multiple compliance options should be reduced to the specific Marshall Municipal Utilities Power Plant approach.

Additionally, there are several references to permittee requirements, in the event the permittee plans to burn a new fuel. However, nowhere is there the requirement for the permittee to obtain a construction permit to approve a fuel change. Finally, MDNR relies on EPA for the compliance management for area sources subject to 40 CFR Part 63, Subpart JJJJJJ. Therefore, notification, reporting and record keeping requirements should reflect the requirement for the permittee to submit compliance reports to the Missouri Air Compliance Coordinator at EPA Region 7 with copies to MDNR.

Missouri Air Pollution Control Program Response to EPA Comment #4:

Marshall Municipal Utilities intends to be in compliance with MACT JJJJJ at issuance of this operating permit. A discussion on MACT JJJJJ has been included in the Statement of Basis. The recommended changes to the wording have been accepted and the changes have been made.

The reporting has been updated to include EPA Region 7 as the recipient.

EPA Comment #5:

Permit Condition-7 incorporates requirements of 10 CSR 10-6.260; *Restriction of Emissions of Sulfur Compounds*, applicable to emission unit EP-18. However, Permit Condition-7 requirements appear to be identical to the requirements in Permit Condition-2 related to emission units EP-04 and EP-05. EPA suggests MDNR consider combining these two (2) permit conditions into one (1) permit condition, for simplicity and brevity.

Missouri Air Pollution Control Program Response to EPA Comment #5:

The two permit conditions are remaining separate in order to clearly set apart the additional information needed in the coal fired calculations.

EPA Comment #6:

Permit Condition-8 incorporates particulate matter emission limitations and controls for boiler EP-18, including the requirements from 10 CSR 10-6.405 and also from Construction Permit 092002-007. However, MDNR does not reference Construction Permit 092002-007 within the permit condition. EPA suggests MDNR add the construction permit to Permit Condition-8 header. Additionally, Permit Condition-8 includes requirements for a *Compliance Demonstration* to verify achievement of the Best Available Control Technology (BACT) emission limits, as detailed in a construction permit issued August 5, 2002. EPA questions whether this compliance demonstration is still an applicable requirement. It would appear that the initial demonstration would have been completed within 180 days after initial startup of the source authorized by the construction permit. However, EPA does recommend MDNR include a periodic monitoring requirement for Marshall Municipal Utilities Power Plant to verify their continuing compliance with the BACT limits.

Missouri Air Pollution Control Program Response to EPA Comment #6:

Permit Condition 8 has been included to show compliance requirements with 10 CSR 10-6.405. It does not address the sulfur limitations and requirements included in Construction Permit 092002-007. These requirements and special conditions have already been included in Permit Condition 5 of this operating permit.

No changes were made due to this comment.

EPA Comment #7:

Permit Condition CT-2 requires the permittee to limit emissions of sulfur compounds into the atmosphere of gasses containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of these gasses averaged over any

consecutive three-hour time period. Permit Condition CT-2 also requires the permittee to monitor sulfur content of each delivery of fuel, documenting that the sulfur content is equal to or less than 0.259 percent by weight. MDNR customary practice is to include a compliance record keeping example as an attachment in the operating permit. However, Permit Condition CT-2 does not include an example of Marshall Municipal Utilities Power Plant compliance data sheet used for Permit Condition CT-2. Also, the Statement of Basis presents the method used by MDNR to arrive at the fuel content sulfur limit of 0.259 percent by weight. However, the emission limitation is based on gaseous emissions averaged on any consecutive three-hour time period. Therefore, EPA recommends MDNR provide their basis where sulfur in fuel analysis verifies compliance with any consecutive three-hour time period gaseous discharge.

Missouri Air Pollution Control Program Response to EPA Comment #7:

The method of calculation for the fuel content sulfur limit of 0.259 % by weight has already been included in the Statement of Basis under Other Regulatory Determinations. This calculation shows that a sulfur content of 0.259% will give you 500 ppmv of sulfur dioxide emissions so anything less will be in compliance.

Attachment L has been included to record the sulfur percentages of the fuels combusted.

EPA Comment #8:

Permit Condition RICE-2 (EP-10) and **Permit Condition RICE-3** (EP-11) incorporate the Best Available Control Technology (BACT) limits from Construction Permits 1191-010A and 0493-002, respectively. The referenced construction permits established emission limits necessary to prevent significant deterioration to the ambient air quality. Additionally, each construction permit required the permittee to verify compliance with their BACT limits through a one-time performance evaluation test. EPA is concerned that, over the past 20 or more years, the diesel engines associated with EP-10 and EP-11 may not be operating as efficiently as when they were new. 10 CSR 10-6.065(6)(C)I.C authorizes MDNR to include periodic monitoring in operating permits when the underlying applicable requirement is silent, regarding monitoring. Therefore, EPA recommends MDNR include a periodic monitoring requirement in Permit Conditions RICE-2 and RICE-3 which requires Marshall Municipal Utilities Power Plant to verify BACT compliance, no less than once during the term of the operating permit.

Missouri Air Pollution Control Program Response to EPA Comment #8:

No additional retesting will be required at this time due to the low usage of EP-10 and EP-11. EP-10 has only been run for about 4,500 hours since being installed and EP-11 for 3,750 hours since installation.

EPA Comment #9:

Permit Condition RICE-4 requires the permittee to limit emissions of sulfur compounds into the atmosphere of gasses containing more than 500 ppmv of sulfur dioxide or more than 35 mg/m³ of sulfuric acid or sulfur trioxide or any combination of these gasses averaged over any consecutive three-hour time period. Permit Condition RICE-4 also requires the permittee to monitor sulfur content of each delivery of fuel, documenting that the sulfur content is equal to or less than 0.259 percent by weight and / or meets the requirements in 40 CFR 80.510(b) for non-road diesel fuel. MDNR customary practice is to include a compliance record keeping example

as an attachment in the operating permit. However, Permit Condition RICE-4 does not include an example of Marshall Municipal Utilities Power Plant compliance data sheet used for Permit Condition RICE-4. Also, the Statement of Basis presents the method used by MDNR to arrive at the fuel content sulfur limit of 0.259 percent by weight. However, the emission limitation is based on gaseous emissions averaged on any consecutive three-hour time period. Therefore, EPA recommends MDNR provide their basis where sulfur in fuel analysis verifies compliance with any consecutive three-hour time period gaseous discharge.

Missouri Air Pollution Control Program Response to EPA Comment #9:

The method of calculation for the fuel content sulfur limit of 0.259 % by weight has already been included in the Statement of Basis under Other Regulatory Determinations. This calculation shows that a sulfur content of 0.259% will give you 500 ppmv of sulfur dioxide emissions so anything less will be in compliance.

Attachment L has been included to record the sulfur percentages of the fuels combusted.

EPA Comment #10:

MDNR issued a letter to Marshall Municipal Utilities in response to a permit application (New Source Review Permit Application - Project Number: 2002-01-006) authorizing Marshall Municipal Utilities to burn strictly Fuel Oil No.2 for a maximum of 240 hours per engine for both EP-10 and EP-11 . This New Source Review Permit Application response letter appears to set requirements for the Marshall Municipal Utilities Power Plant which are not included in this draft Part 70 operating permit. EPA recommends MDNR review their construction permit file and verify that all Marshall Municipal Utilities Power Plant applicable requirements are incorporated in the Part 70 operating permit.

Missouri Air Pollution Control Program Response to EPA Comment #10:

The conditions included in this response letter have been included in Permit Condition Rice-2 and Permit Condition Rice-3.

EPA Comment #11:

Permit Condition RICE-05 incorporates the requirements from 40 CFR Part 63, Subpart ZZZZ; National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT), applicable to EP-07, EP-08, EP-09, EP-10 and EP-11. MDNR is incorporating, by reference, many of these requirements including the requirements detailed in Tables included in the RICE MACT. MDNR attempted to incorporate by reference the applicable requirements associated with the area source boiler MACT in Permit Conditions-3 and -4. As an aid to Marshall Municipal Utilities Power Plant, MDNR developed an Attachment K which provides a ready reference to the MACT applicable tables. EPA suggests that MDNR include this same approach in Permit Condition RICE-05 and prepare an attachment with all of the RICE MACT applicable tables. Additionally, MDNR relies on EPA for the compliance management responsibilities for area sources subject to the RICE MACT. Therefore, all compliance reports should be submitted to the Missouri Air Compliance Coordinator at EPA Region 7, with MDNR receiving copies as necessary. Reporting require 10), in Permit Condition RICE-05 should be modified to reflect this reporting change.

Missouri Air Pollution Control Program Response to EPA Comment #11:

The appropriate tables associated with MACT ZZZZ have already been included as text in the operating permit.

Reporting requirement 10) has been updated to include reporting to EPA Region 7.

EPA Comment #12:

The **Statement of Basis** includes a list of Permit Reference Documents MDNR relied upon in preparing this draft operating permit. However, Construction Permit 1189-012 which authorized the installation of EP-10 does not appear in the list. The table showing construction permit history/revisions indicates construction permit 1191-010 superseded construction permit 1189-012. However, EPA review of construction permit 1191-010 found no indication that this permit superseded construction permit 1189-012. Therefore, MDNR may wish to modify the Statement of Basis.

Missouri Air Pollution Control Program Response to EPA Comment #12:

Construction permit #1189-012 has been added to the list of documents used in the preparation of the Part 70 Operating Permit.

Construction Permit #1191-010 extended the operating hours for EP-10 therefore removing the previous special conditions included in Construction Permit #1189-012.