

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**

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Matt Blunt, Governor • Doyle Childers, Director

www.dnr.mo.gov

MAY 15 2007

CERTIFIED MAIL: 70052570000215823175  
RETURN RECEIPT REQUESTED

Mr. Randal W. Pick  
Results Engineer/Designated Representative  
Sikeston Power Station  
P.O. Box 370  
Sikeston, MO 63801

Re: Sikeston Power Station, 201-0017  
Permit Number: **OP2007-016**

Dear Mr. Pick:

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 you read and understand the requirements contained in your permit.

If you have any questions or need additional information regarding this permit, please contact Berhanu Getahun at (573) 751-4817 or write the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and attention.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



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

MJS: bgk

Enclosures

c: Ms. Tamara Freeman, U.S. EPA Region VII  
Southeast Regional Office  
PAMS File: 2005-02-036



## 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 here in.

**Operating Permit Number:** OP2007-016  
**Expiration Date:** MAY 14 2012  
**Installation ID:** 201-0017  
**Project Number:** 2005-02-036

**Installation Name and Address**

Sikeston Power Station  
1551 West Wakefield Street  
Sikeston, MO 63801  
Scott County

**Parent Company's Name and Address**

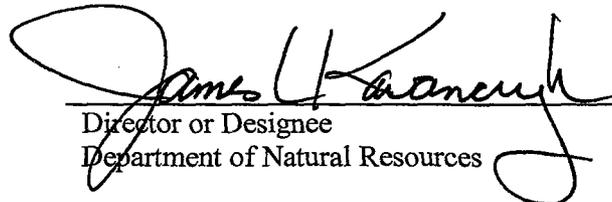
Sikeston Board of Municipal Utilities  
138 North Prairie  
P.O. Box 370  
Sikeston, MO 63801

**Installation Description:**

Sikeston Power Station is an electric generating station. The installation has one boiler that can burn strictly coal or a blend of coal and petroleum coke as fuel. The installation uses an electrostatic precipitator (ESP) to control particulate emissions and a wet scrubber to control sulfur oxide emissions.

MAY 15 2007

Effective Date

  
Director or Designee  
Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

Sikeston Power Station is an electric generating station. The installation has one boiler that can burn strictly coal or a blend of coal and petroleum coke as fuel. The installation uses an electrostatic precipitator (ESP) to control particulate emissions and a wet scrubber to control sulfur oxides emissions.

The reported actual emissions for the past five years for the installation are listed below:

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2005	92.27	7,564.90	2,689.66	5.84	313.45	0.00	0.00
2004	72.31	6,251.10	2,301.87	5.11	270.77	0.00	0.00
2003	122.76	6,232.50	2,247.48	5.09	270.92	0.00	0.00
2002	137.55	6,236.20	2,205.54	5.02	265.82	0.00	0.00
2001	21.60	6,796.50	2,368.20	34.10	284.50	0.00	0.00

### EMISSION UNITS WITH LIMITATIONS

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

Emission Unit #	EIQ Reference #	Description of Emission Unit
EU0010	EP-01	Boiler #1
EU0020	EP-03	Flyash Silo Vent
EU0021	EP-04	Flyash Silo Vacuum Pump Vent
EU0030	EP-05	Coal Bunker
EU0040	EP-09	Limestone Storage Silo
EU0050		Emergency Diesel Generator (500 kW)
EU0060	EP-10	Track Hoppers
EU0070	EP-10	1A & 1B Coal Conveyors
EU0071	EP-10	2A & 2B Coal Conveyors
EU0072	EP-10	3A Coal Conveyor
EU0073	EP-11	4A, 5A & 5B Reclaim Coal Conveyors
EU0074	EP-11	6A & 6B Reclaim Coal Conveyors
EU0075	EP-11	7A & 7B Reclaim Coal Conveyors
EU0076	EP-11	8A & 8B Reclaim Coal Conveyors
EU0080	EP-11	1A & 1B Coal Crushers
EU0090		Scrubber Space Heaters
EU0100		Emergency Diesel Fire Pump

### 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.

Reference #	Description of Emission Unit
EP-06	Coal Storage Pile
EP-07	Limestone Storage Pile
NA	Limestone Truck Hoppers
EP-09	1L Limestone Conveyor
EP-09	2L Limestone Conveyor
NA	Flyash Loadout
IA-01	500 Gallon Diesel Tank
IA-02	Twelve (12) 150,000 Btu/hr Portable Kerosene Space Heaters
IA-03	300 Gallon Kerosene Tank
IA-04	250,000 Gallon No. 2 Fuel Oil Storage Tank
IA-05	6,000 Gallon Waste Oil Tank
IA-06	Two (2) 1 ton Cylinders for Chlorine Storage (water treatment)
IA-07	Asbestos Abatement Activities Associated with Repair/Replacement
IA-08	250 Gallon Diesel Fuel Tank

**DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

- 1) Air Pollution Control Program Permit to Construct, Permit Number 1189-014A
- 2) Title IV: Air Pollution Control Program Acid Rain Permit, Project Number 2006-03-049

## **II. Plant Wide Emission Limitations**

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

None.

### III. Emission Unit Specific Emission Limitations

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

<b>EU0010 – Boiler #1</b>			
Emission Unit	Description	Manufacturer/ Model #	2005 EIQ Reference #
EU0010	A 2,349 MMBtu/hr boiler constructed on March 25, 1978 is used to generate electricity. The boiler combusts coal/petroleum coke/fuel oil #2. An electrostatic precipitator (ESP) and wet limestone scrubber are used to control emissions from this emission unit.	Babcock & Wilcox/ Model #RB577	EP-01

**Permit Condition EU0010-001**

**40 CFR Part 60 Subpart D**

**Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971.**

**Emission Limitation:**

- 1) Standard for particulate matter: [§60.42]
 

On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which: [§60.42(a)]

  - a) Contain particulate matter in excess of 43 nanograms per joule (ng/j) heat input (0.10 lb/MMBtu) derived from fossil fuel. [§60.42(a)(1)]
  - b) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity. [§60.42(a)(2)]
- 2) Standard for sulfur dioxide: [§60.43]
  - a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
    - i) 340 ng/j heat input (0.80 lb/MMBtu) derived from liquid fossil fuel. [§60.43(a)(1)]
    - ii) 520 ng/j heat input (1.2 lb/MMBtu) derived from solid fossil fuel or solid fossil fuel. [§60.43(a)(2)]
  - b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula: [§60.43(b)]

$$PS_{SO_2} = \frac{[y(340) + z(520)]}{(y + z)}$$

where:

$PS_{SO_2}$  is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in ng/j heat input derived from all fossil fuels,  
 y is the percentage of total heat input derived from liquid fossil fuel, and  
 z is the percentage of total heat input derived from solid fossil fuel.

- 3) Standard for nitrogen oxides: [§60.44]
  - a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the

atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO<sub>2</sub> in excess of: [§60.44(a)]

- i) 129 ng/j heat input (0.30 lb/MMBtu) derived from liquid fossil fuel. [§60.44(a)(2)]
  - ii) 300 ng/j heat input (0.70 lb/MMBtu) derived from solid fossil fuel. [§60.44(a)(3)]
- b) Except as provided under §60.44(c) and (d), when different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula: [§60.44(b)]

$$PS_{NO_x} = \frac{w(260) + x(86) + y(130) + z(300)}{w + x + y + z}$$

where:

$PS_{NO_x}$  = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in ng/j heat input derived from all fossil fuels fired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

**Monitoring:**

The permittee shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxide emissions, and either oxygen or carbon dioxide except as provided in §60.45(b). [§60.45(a)]

- 1) For performance evaluations under §60.13(c) and calibration checks under §60.13(d), the following procedures shall be used: [§60.45(c)]
  - a) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in §60.46(d). [§60.45(c)(1)]
  - b) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of appendix B to 40 CFR part 60. [§60.45(c)(2)]
  - c) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows: [§60.45(c)(3)]

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	Span value for nitrogen oxides
Gas	(1)	500
Liquid	1000	500
Solid	15000	1000
Combinations	1,000y + 1,500z	500(x + y) + 1,000z

\ \ Not applicable.

where:

x = the fraction of total heat input derived from gaseous fossil fuel, and

y = the fraction of total heat input derived from liquid fossil fuel, and

z = the fraction of total heat input derived from solid fossil fuel.

- d) All span values computed under §60.45(c)(3)] for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm. [§60.45(c)(4)]
- e) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval. [§60.45(c)(5)]

**Recordkeeping:**

- 1) The permittee shall maintain records of reports required under §60.7(c) and §60.45(g) as applicable.
- 2) Pursuant to §63.7(f) of Subpart A, the permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection.

**Reporting:**

Excess emission and monitoring system performance reports shall be submitted to the Administrator semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and monitoring system performance (MSP) report shall include the information required in §60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows: [§60.45(g)]

- 1) *Opacity*. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported. [§60.45(g)(1)]
  - a) For sources subject to the opacity standard of §60.42(b)(1), excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 35 percent opacity, except that one six-minute average per hour of up to 42 percent opacity need not be reported. [§60.45(g)(1)(i)]
- 2) *Sulfur dioxide*. Excess emissions for affected facilities are defined as: [§60.45(g)(2)]
  - a) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under §60.43. [§60.45(g)(2)(i)]
- 3) *Nitrogen oxides*. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under §60.44. [§60.45(g)(3)]

**Permit Condition EU0010-002**

**40 CFR Part 60 Subpart D**

**Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced after August 17, 1971.**

**40 CFR Part 64**

**Compliance Assurance Monitoring (CAM)**

**Emission Limitation:**

On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of 43 nanograms per joule (ng/j) heat input (0.10 lb/MMBtu) derived from fossil fuel. [§60.42(a)(1)]

**Monitoring Basis:**

The Department of Natural Resources, Air Pollution Control Program, Compliance/Enforcement Section has approved a Compliance Assurance Monitoring (CAM) Plan provided by the facility (see Attachment D). The CAM approach is as follows:

- 1) The CAM performance indicator is a continuous particulate monitor (CPM). The CPM will be a Monitor Labs Laserhawk or similar backscatter type CPM. The CPM output will be used to provide a reasonable level of compliance assurance by indicating ESP performance. The CPM readings shall not be used to directly demonstrate compliance with the particulate standard. The key elements of the monitoring approach are presented in Table 1 of Attachment D.

**Permit Condition EU0010-003**

**10 CSR 10-6.270**

**Acid Rain Source Permits Required**

**Emission Limitation:**

Sikeston Power Station shall obtain an Acid Rain Source Permit for Boiler #1 (EU0010), Unit ID 1, pursuant to Title IV of the Clean Air Act. Sikeston Power Station submitted Acid Rain Permit application on April 6, 2006 under 10 CSR 10-6.270, Acid Rain Source Permits Required. Acid Rain Permit (MDNR Project # 2006-03-049, ORIS Code 6768) issued on July 10, 2006. Pursuant to 40 CR Part 76, MDNR APCP approves the Phase II NOx Compliance Plan submitted for this unit, effective for calendar years 2005 through 2009.

**Monitoring/Recordkeeping:**

Sikeston Power Station shall retain the most current acid rain permit issued to this facility on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

**Reporting:**

Annual Compliance Certification

Sikeston Power Station is reminded that the term of its Acid Rain Source Permit is five (5) years.

**Permit Condition EU0010-004**

**10 CSR 10-6.060**

**Construction Permits Required**

**Construction Permit Number 1189-014A**

**Emission Limitation:**

- 1) While burning petroleum coke, Sikeston Power Station shall emit sulfur dioxide during any 12-month period at a level that satisfies the following mathematical inequality:  
[Construction Permit No. 1189-014A, Special Condition 6]

$$X < 7791.7 + \left[ \left( \frac{(2.2365)C + (0.2)O}{S_p P} \right) + 1 \right] [40]$$

Where:

X = actual sulfur dioxide emissions in tons as determined in accordance with special condition 7 for a 12-month period while burning petroleum coke;

C = tons of coal burned per 12-month period;

O = tons of fuel oil burned per 12-month period;

P = tons of petroleum coke burned per 12-month period;

$S_p$  = weighted average percent sulfur content of petroleum coke over 12-month period; and

Where the figures 2.2365 and 0.2 are the weighted average percent sulfur content of coal and fuel oil respectively, as taken from the base years for Permit Number 1189-014 – 1987 and 1988.

- 2) The sulfur dioxide emission limit (the expression on the right side of the inequality in special condition 6) shall be calculated and recorded for each 12-month rolling period. The result shall be placed side by side the actual sulfur dioxide emission rate for each 12-month rolling period for comparison. The actual 12-month rolling total shall be less than the limit for that same period. The values introduced for the variables in the expression shall be recorded as well for each 12 month rolling period. [Construction Permit No. 1189-014A, Special Condition 8]

**Operational Limitation/Equipment Specification:**

- 1) The petroleum coke/coal fuel blend shall contain no more petroleum coke than the highest level for which compliance has been demonstrated with the emission limitations contained in Missouri Regulation 10 CSR 10-6.070, New Source Performance Regulations, Subpart D, Sections 60.42. Standard for Particulate Matter, 60.43 Standard for Sulfur Dioxide, 60.44 Standard for Nitrogen Dioxide. The highest level of petroleum coke for which compliance has been demonstrated shall be noted in the performance test report in weighted average percent (by weight) of petroleum coke. [Construction Permit No. 1189-014A, Special Condition 3]
- 2) All air pollution control equipment shall be in use during power station operation unless prior permission for being taken off-line has been granted by the Missouri Air Pollution Control Program. All air pollution control equipment shall be operated and maintained using the principles Good Engineering Practice. This equipment includes a Babcock & Wilcox electrostatic precipitator which shall be maintained such that optimum particulate control efficiency shall be maintained at all times.  
[Construction Permit No. 1189-014A, Special Condition 4]

**Monitoring/Recordkeeping:**

- 1) Sikeston Power Station shall keep records of daily, monthly, and 12-month rolling totals of sulfur dioxide emitted. This shall be done by using the hourly reports generated by their Continuous Emissions Monitoring System. This report includes data on wet and dry stack flow rates and parts per million of sulfur dioxide concentration for each stack. Using this hourly data, Sikeston Power Station shall manually or automatically calculate the total tons of sulfur dioxide emitted each day. The daily total shall be cumulatively added to determine monthly and 12-month rolling totals. [Construction Permit No. 1189-014A, Special Condition 7]

- 2) Records shall be kept of the weekly weighted average percent (by weight) petroleum coke contained in the petroleum coke/coal fuel blend until such time as this facility acquires the capability to determine the daily weighted average percent (by weight) petroleum coke in the fuel blend. The calculations resulting in these figures shall be recorded as well. These figures shall not exceed the weighted average percent determined during performance testing. [Construction Permit No. 1189-014A, Special Condition 9]
- 3) The permittee shall keep records of the sulfur dioxide emission limit calculations by the equation expressed in the emission limitation of this permit condition and the comparison of actual sulfur dioxide emissions for the 12-month rolling time period. Additionally, the permittee shall keep a record of the variables that were used each month for the expression in the emission limitation.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of a 12-month rolling period when the record for the 12-month rolling total of sulfur dioxide emissions (as required by special condition 7 of Permit No. 1189-014A) for that period shows that this installation equaled or exceeded the level as determined by special condition 8 of Permit No. 1189-014A. [Construction Permit No. 1189-014A, Special Condition 11]
- 2) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of a weekly period when the record for the weekly weighted average percent petroleum coke (as required special condition 9 of Permit No. 1189-014A) for the week shows that the installation exceeded the level as limited by special condition 9 of Permit No. 1189-014A. Each exceedance shall be reported. [Construction Permit No. 1189-014A, Special Condition 11]

**Permit Condition EU0010-005**

**10 CSR 10-6.350**

**Emission Limitations and Emission Trading of Oxides of Nitrogen**

**Emission Limitation:**

- 1) Beginning May 1, 2004, the permittee shall limit emissions of NO<sub>x</sub> from emission unit EU0010 to the rate of 0.25 lbs. NO<sub>x</sub> per million British thermal units (MMBtu) of heat input during the control period.<sup>1</sup>
- 2) In lieu of complying with the above emission limit, the permittee may comply through the NO<sub>x</sub> emissions trading program under 10 CSR 10-6.350(3)(B).
  - a) Compliance with 10 CSR 10-6.350 shall not relieve the permittee of the responsibility to comply fully with applicable provisions of the Air Conservation Law and rules or any other requirements under local, state or federal law. Specifically, compliance with 10 CSR 10-6.350 shall not violate the permit conditions previously established under 10 CSR 10-6.060 or 10 CSR 10-6.065.

**Banking/Trading:**

- 1) NO<sub>x</sub> authorized account representative.
  - a) Each affected unit shall have only one NO<sub>x</sub> authorized account representative with respect to all matters under the NO<sub>x</sub> trading program. Each affected unit may have only one alternate NO<sub>x</sub> authorized account representative who may act on behalf of the NO<sub>x</sub> authorized account representative.
  - b) A NO<sub>x</sub> authorized account representative may be responsible for multiple units at an installation or within a system of installations with the same owner.
  - c) The department will act on a valid submission made on behalf of the permittee of an affected unit only if the submission has been made, signed and certified by the NO<sub>x</sub> authorized account representative or the alternate NO<sub>x</sub> authorized account representative.
- 2) Control Period NO<sub>x</sub> Allowances.

<sup>1</sup> A control period is the period beginning May 1 of a calendar year and ending on September 30 of the same year.

- a) By October 31 following each control period, each NO<sub>x</sub> authorized account representative shall submit to the department the actual total control period heat input and actual average emission rate in a compliance report consistent with 10 CSR 10-6.350(4) for each affected NO<sub>x</sub> unit.
- b) By November 15th following each control period, the department will issue a notice to each NO<sub>x</sub> authorized account representative of the actual NO<sub>x</sub> allowances recorded in the unit compliance account for each affected NO<sub>x</sub> unit.
- 3) By the end of the NO<sub>x</sub> allowance transfer deadline, each NO<sub>x</sub> unit shall have sufficient NO<sub>x</sub> allowances in their compliance account to allow for deductions in 10 CSR 10-6.350(3)(B)4.B.
  - a) The NO<sub>x</sub> allowances are available to be deducted for compliance with a unit's NO<sub>x</sub> emissions limitation for a control period in a given year only if the NO<sub>x</sub> allowances:
    - i) Were allocated for a control period in a prior year or the same year; and
    - ii) Are held in the unit's compliance account or the unit's overdraft account as of the NO<sub>x</sub> allowance transfer deadline for that control period.
  - b) The NO<sub>x</sub> authorized account representative may identify by serial number the NO<sub>x</sub> allowances to be deducted from the unit's compliance account under 10 CSR 10-6.350(3)(B)4.B., (3)(B)4.D., or (3)(B)4.E. Such identification will be made in the compliance certification report submitted in accordance with 10 CSR 10-6.350(4)(A)1.
- 4) NO<sub>x</sub> allowances may be banked for future use or transfer into a compliance account or an overdraft account, as follows:
  - a) Any NO<sub>x</sub> allowance that is held in a compliance account or an overdraft account, will remain in such account until the NO<sub>x</sub> allowance is deducted or transferred under 10 CSR 10-6.350(3)(B)4 – (3)(B)7.
  - b) The director will designate, as a banked NO<sub>x</sub> allowance, any NO<sub>x</sub> allowance that remains in a compliance account or an overdraft account after the director has made all deductions for a given control period from the compliance account or overdraft account pursuant to 10 CSR 10-6.350(3)(B)4.
- 5) Each year, starting in 2005, after the director has completed the designation of banked NO<sub>x</sub> allowances under 10 CSR 10-6.350(3)(B)5.A.(II) and before May 1 of the year, the department will determine the extent to which banked NO<sub>x</sub> allowances may be used for compliance in the control period for the current year.
- 6) Banked NO<sub>x</sub> allowances made available for use in 10 CSR 10-6.350(3)(B)5.B.(II) and (3)(B)5.B.(III) may be traded from the control region for which 10 CSR 10-6.350(3)(A)3. and (3)(A)4. are applicable to the control region for which 10 CSR 10-6.350(3)(A)1. is applicable on a one and one-half to one (1.5:1) basis.
- 7) Banked NO<sub>x</sub> allowances made available for use in 10 CSR 10-6.350(3)(B)5.B.(II) and (3)(B)5.B.(III) may be traded from the control region for which 10 CSR 10-6.350(3)(A)1.4, (3)(A)32. and (3)(A)4.3 are applicable to the control region for which 10 CSR 10-6.350(3)(A)2. is applicable on a one and one-half to one (1.5:1) basis.
- 8) Banked NO<sub>x</sub> allowances made available for use in 10 CSR 10-6.350(3)(B)5.B.(II) and (3)(B)5.B.(III) may be traded on a one to one (1:1) basis unless otherwise specified in 10 CSR 10-6.350(3)(B)5.B.(IV)(b) and (3)(B)5.B.(IV)(c).
- 9) All early reduction credits (ERCs) will be retired on January 31, 2006.
- 10) The director may correct any error in any NO<sub>x</sub> Allowance Tracking System account. Within ten business days of making such correction, the director will notify the NO<sub>x</sub> authorized account representative for the account. The NO<sub>x</sub> authorized account representative will then have ten business days to appeal the correction if they feel the correction was made in error.
- 11) A NO<sub>x</sub> allowance transfer that is submitted for recording following the NO<sub>x</sub> allowance transfer deadline and that includes any NO<sub>x</sub> allowances allocated for a control period prior to or the same as the control period to which the NO<sub>x</sub> allowance transfer deadline applies will not be recorded until after completion of the process of recording of NO<sub>x</sub> allowance allocations of 10 CSR 10-6.350.
- 12) Where a NO<sub>x</sub> allowance transfer submitted for recording fails to meet the requirements of 10 CSR 10-6.350(3)(B)9.A., the department will not record such transfer.

**Monitoring:**

- 1) Compliance shall be measured during the control period.
- 2) All valid data shall be used for calculating NOx emissions rates.
- 3) Any coal-affected unit subject to this rule shall install, certify, operate, maintain, and quality assure a NOx and diluent CEMS pursuant to the requirements in 40 CFR part 75;

**Recordkeeping:**

- 1) The permittee shall maintain records of the following:
  - a) Total fuel consumed during the control period;
  - b) The total heat input for each emissions unit during the control period;
  - c) Reports of all stack testing conducted to meet the requirements of 10 CSR 10-6.350;
  - d) All other data collected by a CEMS necessary to convert the monitoring data to the units of the applicable emission limitation;
  - e) All performance evaluations conducted in the past year;
  - f) All monitoring device calibration checks;
  - g) All monitoring system, monitoring device and performance testing measurements;
  - h) Records of adjustments and maintenance performed on monitoring systems and devices; and
  - i) A log identifying each period during which the CEMS or alternate procedure was inoperative, except for zero (0) and span checks, and the nature of the repairs and adjustments performed to make the system operative.
- 2) All records must be kept on-site for a period of five years and made available to the department upon request.

**Reporting:**

- 1) The NOx authorized account representatives seeking the recording of a NOx allowance transfer shall submit the transfer request to the director. To be considered correctly submitted, the NOx allowance transfer shall include the following elements in a format specified by the director:
  - a) The numbers identifying both the transferor and transferee accounts;
  - b) A specification by serial number of each NOx allowance to be transferred; and
  - c) The printed name and signature of the NOx authorized account representative of the transferor account and the date signed.
- 2) A compliance certification report for each affected unit shall be submitted to the department by October 31 following each control period. The report shall include:
  - a) The owner and operator;
  - b) The NOx authorized account representative;
  - c) NOx unit name, compliance and overdraft account numbers;
  - d) NOx emission rate limitation (lb/MMBtu);
  - e) Actual NOx emission rate (lb/MMBtu) for the control period;
  - f) Actual heat input (MMBtu) for the control period. The unit's total heat input for the control period in each year will be determined in accordance with 10 CSR 10-6.350(5);
  - g) Actual NOx mass emissions (tons) for the control period.
- 3) Any unit with valid continuous emission monitoring system (CEMS) data for the control period must use that data to determine compliance with the provisions of this rule. The permittee which performs non-CEMS testing to demonstrate compliance of a unit subject to 10 CSR10-6.350(3) shall submit:
  - a) A control period report identifying monthly fuel usage and monthly total heat input by December 31 of the same year as the control period; and
  - b) A written report of all stack tests completed after controls are effective to the department within 60 days after completion of sample and data collection.

<b>EU0020 through EU0021– Flyash Silo Vents EU0040 – Limestone Storage Silo</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2005 EIQ Reference #</b>
EU0020	Flyash silo vent with cartridge filter, constructed March 25, 1978	Allen Sherman Hoff	EP-03
EU0021	Flyash silo vacuum pump vent with cartridge filter, constructed March 25, 1978	Micro-pul	EP-04
EU0040	Limestone storage silo with bag filter, constructed March 25, 1978	Allen Sherman Hoff	EP-09

**Permit Condition EU0020-001 through EU0021-001 and EU0040-001**  
**10 CSR 10-6.400**  
**Restriction of Emission of Particulate Matter from Industrial Processes**

**Emission Limitation:**

- 1) The permittee shall not emit particulate matter in excess of:
  - a) 21.43 pounds per hour (lbs/hr) from any of EU0020 and EU0021; and
  - b) 68.96 lbs/hr from EU0040.
- 2) The concentration of particulate matter in the exhaust gases shall not exceed 0.30 grain per standard cubic foot (gr/scf).

**Monitoring/Recordkeeping:**

- 1) The permittee shall retain the potential to emit calculations in Attachment A which demonstrate that the above emission limitations will never be exceeded. No further recordkeeping shall be required to demonstrate compliance with the emission limitations.
- 2) The calculation shall be made available immediately for inspection to the Department of Natural Resources personnel upon request.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitation(s) listed above.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

**Permit Condition EU0020-002 through EU0021-002 and EU0040-002**

**10 CSR 10-6.220**

**Restriction of Emission of Visible Air Contaminants**

**Emission Limitation:**

- 1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any new source any visible emissions with an opacity greater than 20%.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly 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 observation results (see Attachments B-1 or B-2), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment B-3)
- 4) Attachments B-1, B-2 and B-3 contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

<b>EU0030 – Coal Bunker</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2005 EIQ Reference #</b>
EU0030	Coal bunker with dust collector, constructed on March 25, 1978. The dust collector (bag filter) made by American Air Filter is an inherent part of the coal bunker.	American Air Filter/ 12-108-1732	EP-05

<p style="text-align: center;"><b>Permit Condition EU0030-001</b></p> <p style="text-align: center;"><b>10 CSR 10-6.070</b></p> <p><b>New Source Performance Regulations</b></p> <p style="text-align: center;"><b>40 CFR Part 60 Subpart Y</b></p> <p><b>Standards of Performance for Coal Preparation Plants</b></p>
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**Emission Limitation:**

An owner or operator subject to the provisions of 40 CFR Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty percent (20%) opacity or greater. [§60.252(c)]

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly 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 observation results (see Attachments B-1 or B-2), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment B-3)
- 4) Attachments B-1, B-2 and B-3 contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

<b>EU0050 – Emergency Diesel Generator</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2005 EIQ Reference #</b>
EU0050	675 Hp diesel engine driven generator (500kW) constructed on March 25, 1978.	Detroit Diesel/ 7163-7305	

**Permit Condition EU0050-001**

**10 CSR 10-6.260**

**Restriction of Emissions of Sulfur Compounds<sup>2</sup>**

**Emission Limitation:**

- 1) Emissions from this source operation shall not contain more than 500 parts per million by volume (ppmv) of sulfur dioxide or more that 35 milligrams per cubic meter (mg/m<sup>3</sup>) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) & 10 CSR 10-6.010 Ambient Air Quality Standards]

**Operational Limitation:**

The emission units shall be limited to burning fuel oil with a sulfur content of no more than 0.5% sulfur by weight. The fuel oils known to be less than 0.5% by weight sulfur per Chapter 414 RSMo, section 414.032, ASTM D396-Table 1 and ASTM D975-Table 1, are fuel oil No. 1 and No. 2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. However, these units are not limited to the known fuel oils listed above, but are limited to fuel oils based solely on having a percent sulfur by weight content of 0.5% or less.

**Monitoring/Recordkeeping:**

The permittee shall maintain records of the fuel type used verifying a sulfur content less than 0.5% by weight. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5% by weight will be acceptable.

**Reporting:**

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 Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

<sup>2</sup> 10 CSR 10-6.260(3)(B) is a state-only requirement

<b>EU0060 through EU0080 Coal Crushers, Coal Conveyors, Coal Transfer and Loading Systems</b>				
Emission Unit	Description	Construction Date	Manufacturer/ Model #	2005 EIQ Reference #
EU0060	Track Hoppers – Bottom dump coal unloading, partially enclosed and PM emissions controlled by water spray	March 25, 1978	Fairfield Engineering	EP-10
EU0070	1A & 1B Coal Conveyors – fully enclosed and PM emissions controlled by water spray with surfactant addition			
EU0071	2A & 2B Coal Conveyors - fully enclosed and PM emissions controlled by water spray with surfactant addition			
EU0072	3A Coal Conveyor - PM emissions controlled by water spray with surfactant addition			
EU0073	4A, 5A & 5B Reclaim Coal Conveyors - fully enclosed and PM emissions controlled by water spray with surfactant addition	March 25, 1978	Fairfield Engineering	EP-11
EU0074	6A & 6B Reclaim Coal Conveyors - fully enclosed and PM emissions controlled by water spray with surfactant addition			
EU0075	7A & 7B Reclaim Coal Conveyors - fully enclosed and PM emissions controlled by water spray with surfactant addition			
EU0076	8A & 8B Reclaim Coal Conveyors - fully enclosed and PM emissions controlled by water spray with surfactant addition			
EU0080	1A & 1B Coal Crushers – fully enclosed and PM emissions controlled by foam dust suppression	March 25, 1978	American Pulverizer/ FCC-3	EP-11

**Permit Condition EU0060-001 through EU0080-001**  
**10 CSR 10-6.070**  
**New Source Performance Regulations**  
**40 CFR Part 60 Subpart Y**  
**Standards of Performance for Coal Preparation Plants**

**Emission Limitation:**

An owner or operator subject to the provisions of 40 CFR Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit twenty percent (20%) opacity or greater. [§60.252(c)]

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit(s) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible

emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.

- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly 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 observation results (see Attachments B-1 or B-2), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment B-3)
- 4) Attachments B-1, B-2 and B-3 contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

<b>EU0090 – Scrubber Space Heaters</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2005 EIQ Reference #</b>
EU0050	Four No.2 fuel oil-fired space heaters, 1.0625 MMBtu/hr (each)	Applied Air Systems/ 021F-85 VH	

**Permit Condition EU0090-001**  
**10 CSR 10-6.260**  
**Restriction of Emissions of Sulfur Compounds<sup>3</sup>**

**Emission Limitation:**

- 1) No person shall 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.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) & 10 CSR 10-6.010 Ambient Air Quality Standards]

**Operational Limitation:**

The emission units shall be limited to burning fuel oil with a sulfur content of no more than 0.5% sulfur by weight. The fuel oils known to be less than 0.5% by weight sulfur per Chapter 414 RSMo, section 414.032, ASTM D396-Table 1 and ASTM D975-Table 1, are fuel oil No. 1 and No. 2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. However, these units are not limited to the known fuel oils listed above, but are limited to fuel oils based solely on having a percent sulfur by weight content of 0.5% or less.

**Monitoring/Recordkeeping:**

The permittee shall maintain records of the fuel type used verifying a sulfur content less than 0.5% by weight. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5% by weight will be acceptable.

**Reporting:**

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 Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

**Permit Condition EU0090-002**  
**10 CSR 10-3.060**  
**Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating**

**Emission Limitation:**

The permittee shall not emit particulate matter in excess of 0.10 pounds per million Btus of heat input.

**Operational Limitation:**

The emission units shall be limited to burning fuel oil with a sulfur content of no more than 0.5% sulfur by weight.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain on the premises of the installation calculations demonstrating compliance with this rule (see Attachment C).

<sup>3</sup> 10 CSR 10-6.260(3)(B) is a state-only requirement

- 2) The calculation shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

**Reporting:**

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 Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

**Permit Condition EU0090-003**

**10 CSR 10-6.220**

**Restriction of Emission of Visible Air Contaminants**

**Emission Limitation:**

- 1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any new source any visible emissions with an opacity greater than 20%.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on the emission unit using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit(s) is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Monthly observations shall be conducted for a minimum of eight consecutive months after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two months for a period of eight months. If a violation is noted, monitoring reverts to monthly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually (i.e., once per reporting period). Observation shall be conducted during the January-June reporting period and during the July-December reporting period. If a violation is noted, monitoring reverts to monthly.
- 3) If the source reverts to monthly 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 observation results (see Attachments B-1 or B-2), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission unit, and
  - b) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions.
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment B-3)
- 4) Attachments B-1, B-2 and B-3 contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

<b>EU0100 – Emergency Diesel Fire Pump</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2005 EIQ Reference #</b>
EU0050	285 Hp emergency diesel fire pump constructed on March 25, 1978.	Cummins/ NT-885-F2	

**Permit Condition EU0100-001**

**10 CSR 10-6.260**

**Restriction of Emissions of Sulfur Compounds<sup>4</sup>**

**Emission Limitation:**

- 1) Emissions from this source operation shall not contain more than 500 parts per million by volume (ppmv) of sulfur dioxide or more than 35 milligrams per cubic meter (mg/m<sup>3</sup>) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(3)(B) & 10 CSR 10-6.010 Ambient Air Quality Standards]

**Operational Limitation:**

The emission units shall be limited to burning fuel oil with a sulfur content of no more than 0.5% sulfur by weight. The fuel oils known to be less than 0.5% by weight sulfur per Chapter 414 RSMo, section 414.032, ASTM D396-Table 1 and ASTM D975-Table 1, are fuel oil No. 1 and No. 2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. However, these units are not limited to the known fuel oils listed above, but are limited to fuel oils based solely on having a percent sulfur by weight content of 0.5% or less.

**Monitoring/Recordkeeping:**

The permittee shall maintain records of the fuel type used verifying a sulfur content less than 0.5% by weight. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5% by weight will be acceptable.

**Reporting:**

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 Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

<sup>4</sup> 10 CSR 10-6.260(3)(B) is a state-only requirement

## IV. Core 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 10-6.050 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 10-6.110 Submission of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee 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 to satisfy the requirements of the Federal Clean Air Act, Title V.
- 3) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

### **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**

- 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.

### **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. Qualified personnel shall perform all tests.

- 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 10-3.030 Open Burning Restrictions**

- 1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- 2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- 3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
  - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
  - b) The schedule of burning operations;
  - c) The exact location where open burning will be used to dispose of the trade wastes;
  - d) Reasons why no method other than open burning is feasible; and
  - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- 4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Sikeston Power Station from the provisions of any other law, ordinance or regulation.
- 5) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

#### **10 CSR 10-3.090 Restriction of Emission of Odors**

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 requirement is not federally enforceable.**

#### **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 10-6.250 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 recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

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 Recordkeeping and Reporting Requirements

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or 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.E Title IV Allowances**

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

- 1) No permit revisions shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program if the increases do not require a permit revision under any other applicable requirement.
- 2) Limits cannot be placed on the number of allowances that may be held by an installation. The installation may not use these allowances, however, as a defense for noncompliance with any other applicable requirement.
- 3) Any allowances held by a Title IV installation shall be accounted for according to procedures established in rules promulgated under Title IV of the Clean Air Act.
- 4) Sikeston Power Station submitted a Title IV: Acid Rain Permit application on April 6, 2006 under 10 CSR 10-6.270, "Acid Rain Source Permits Required." The Acid Rain Permit (MDNR Project # 2006-03-049, ORIS Code 6768) issued on July 10, 2006.

#### **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**

The boiler (EU0010) has been permitted to burn strictly coal or a combination of coal and petroleum coke. The requirements for the anticipated operating scenarios are outlined under EU0010 and permitted under APCP Construction Permit No.1189-014A.

The boiler is also expected to burn No. 1 or No. 2 fuel oil in start up condition.

**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, 901 North 5th Street, Kansas City, Kansas 66101, 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 application requirements are included and specifically identified in this permit, or
  - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
  - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
  - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
  - c) The applicable requirements of the acid rain program,
  - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
  - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

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

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the 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, 901 North 5th Street, Kansas City, Kansas 66101, 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), recordkeeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, 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 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, 901 North 5th Street, Kansas City, Kansas 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
  - d) The permit shield shall not apply to these changes.

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

The application utilized in the preparation of this permit was signed by Randal W. Pick, Results Engineer/Designated Representative. 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 draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## **VI. Attachments**

Attachments follow.

**Attachment A**

This attachment may be used to help meet the recordkeeping requirements of Permit Conditions: EU0020-001 through EU0021-001 and EU0040-001.

**Allowable Hourly Emission Rate**

Maximum Allowable PM Emissions =  $E \text{ (lb/hr)} = 4.1(P)^{0.67}$  if  $P \leq 30 \text{ tons/hr}$   
 =  $E \text{ (lb/hr)} = 55(P)^{0.11} - 40$  if  $P > 30 \text{ tons/hr}$

P = Process weight rate (tons/hr)

E = Allowable emission rate limit (lb/hr)

Emissions from these units are exhausted through cyclones.

Emission Unit	Maximum Hourly Design Rate	PM Emission Factor	Emission Factor Reference	PM Emission Rate <sup>1</sup>	Allowable PM Emission Rate
EU0020	11.80 tons/hr	0.72 lbs/ton	AP-42	8.50 lbs/hr	21.43 lbs/hr
EU0021	11.80 tons/hr	0.72 lbs/ton	AP-42	8.50 lbs/hr	21.43 lbs/hr
EU0040	500.00 tons/hr	0.0014 lbs/ton	Fire	0.70 lbs/hr	68.96 lbs/hr

<sup>1</sup> Uncontrolled Potential PM Emission Rate = MHDR(lbs/hr) × Emission Factor(lbs/lb)

**Attachment B-1**  
**10 CSR 10-6.220 Compliance Demonstration**  
**Opacity Emission Observations**

This attachment or an equivalent may be used to help meet the visible emissions recordkeeping requirements.

Method 22 (Outdoor) Observation Log		
Emission Unit		
Observer	Date	
Sky Conditions		
Precipitation		
Wind Direction	Wind Speed	
Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing emission points.		
Observation Clock Time	Observation Period Duration (minute:second)	Accumulative Emission Time (minute:second)
Begin Observation		
End Observation		



**Attachment B-3**

**10 CSR 10-6.220 Compliance Demonstration  
 Method 9 Visual Determination of Opacity**

This attachment or an equivalent may be used to help meet the visible emissions recordkeeping requirements.

Method 9 Opacity Emissions Observation	
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 \_\_\_\_\_ % opacity.

Was the emission unit in compliance at the time of evaluation?

YES

NO

Signature of Observer

**Attachment C**

This attachment may be used to demonstrate compliance with 10 CSR 10-3.060 *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*

Emission Limit for EU0090 (new, i.e. installed after February 24, 1971):

The following equipment was used to obtain the total heat input (Q) for the above equation:

Equipment	Heat Input (MMBtu/hr)
Boiler #1 (EU0010)	2,349.00
Four Scrubber Space Heaters (EU0090)	4.25
<b>TOTAL</b>	<b>2,353.25</b>

Since the total equipment heat input has a capacity rating of more than 2,000 MMBtu/hr, according to 10 CSR 10-3.050(5)(A)2., the maximum allowable PM emission rate is 0.10 lb/MMBtu.

The following table demonstrates compliance with the emission limit:

$$\text{Emission Rate (lb/MMBtu)} = \left[ \frac{\text{MHDR} \times \text{Emission Factor}}{\text{Heat Capacity}} \right]$$

Emission Unit #	Heat Capacity	Fuel Type	Maximum Hourly Design Rate <sup>5</sup>	PM Emission Factor	Emission Factor Reference	Potential Emission Rate	Emission Rate Limit
EU0090	4.25 (MMBtu/hr)	Fuel Oil #2	0.03036 10 <sup>3</sup> gal/hr	2.00 lb/10 <sup>3</sup> gal	AP-42 Table 1.3-6	0.014 (lb/MMBtu)	0.10 (lb/MMBtu)

<sup>5</sup> Maximum Hourly Design Rate = Heat capacity divided by heating value of fuel; Heating value of fuel oil = 140 MMBtu/1000gal for fuel oil (AP-42, Appendix A)

**Attachment D**  
**CAM Plan for Boiler #1 (EU0010)**

**COMPLIANCE ASSURANCE MONITORING PLAN**  
**Sikeston Power Station, Sikeston, MO**

**BACKGROUND**

Emission Unit

Description: Unit 1 – Babcock & Wilcox wall fired boiler, 2349 mmBTU/hr

Facility: Sikeston Power Station  
1551 West Wakefield Street  
Sikeston, MO 63801

Applicable Requirement:

Regulation: 10 CFR 60.42, Standard for Particulate Matter, 10 CSR 10-6.070

Pollutants: Particulate Matter (PM)

Emission Limit: 0.10 lb/MMBtu, except during periods of startup, shutdown, or malfunction

Monitoring Requirements: Per regulations – none

Per Operating Permit - currently none

Per Proposed CAM – a backscatter-type particulate monitor installed in the dry stack to serve as an indicator of precipitator performance.

Control Technology: Cold-side B&W Rothemule electrostatic precipitator (ESP)

**MONITORING APPROACH**

The key elements of the monitoring approach are presented in Table 1. The CAM performance indicator is a continuous particulate monitor (CPM). The CPM will be a Monitor Labs Laserhawk or similar backscatter type CPM. The CPM output will be used to provide a reasonable level of compliance assurance by indicating ESP performance. The CPM readings shall not be used to directly demonstrate compliance with the particulate standard.

TABLE 1 – MONITORING APPROACH

I. Indicator	Particulate level of dry stack exhaust, as measured by the output of the CPM. The monitor output will be in units of pounds of PM per MMBtu. Correlation between the monitor output and Reference Method (RM) will be established during a performance test.
Measurement Approach	CPM in stack exhaust. An excursion will occur when the hourly CPM reading reaches or exceeds a value equivalent to 1.25 times the highest CPM response value reached during the correlation tests or 0.9 time the source emissions limit. Corrective action must be taken at this time to bring the unit back within these limits (see section on Inspection/Corrective Action)
II. Indicator Range	The CPM indicator range is an hourly average reading covering the full range of measurements made during initial calibration plus 25%. The indicator range is a calibrated instrument output that offers reasonable assurance of compliance with the PM emissions limit. An Excursion (defined above and in section on Inspection/Corrective Action) triggers corrective action and/or reporting.
III. Performance Criteria A. Representativeness	The CPM will be installed at the platform elevation currently used for the PART 75 CEMS sample probe. This sample point was previously checked for flow disturbances and representativeness during installation of the CEMS.
B. Verification of Operational Status	Initial correlation tests will be conducted as specified in this document with a minimum of 9 valid test runs (3 runs at three different PM concentration levels). The results of these tests will be used to determine the correlation equation. See section on Instrument Calibration for definition of "valid" test run.
C. QA/QC Practices and Criteria	Daily zero and span checks will be made and the results documented. The instrument will be recalibrated if the zero or span error exceeds $\pm 5\%$ of the reference value. In addition, quarterly calibrations, and routine maintenance will be conducted in accordance with the manufacturer's instructions. An annual check of the CPM correlation curve will be conducted.
D. Monitoring Frequency	The PM concentration in the stack gas is monitored continuously.
E. Data Collection Procedures	The computerized data acquisition and handling system (DAHS) retains all hourly average PM concentration data plus all daily zero/span calibrations. Alarms will signal an instrument malfunction or excursion.
F. Averaging Period	One minute average PM concentration data are used to calculate hourly block averages.

## Monitoring Approach Justification

### Background:

The pollutant specific emission unit is a wall fired steam boiler that routes exhaust to one of two stacks. The "wet stack" serves the wet limestone SO<sub>2</sub> scrubber which is currently not used and is blanked off. If the scrubber is put in service at some time in the future, a new CPM will be added and a corresponding PM CAM Plan developed at that time. All flue gas currently passes through the "dry stack" which bypasses the scrubber. The boiler is nominally rated at 2349 MMBtu/hr heat input and is equipped with an ESP to control particulate emissions. Unit construction commenced after August 17, 1971 and before September 18, 1978 and is therefore subject to 40 CFR 60 Subpart D and 10 CSR 10-6.070.

### Rationale for Selection of Performance Indicator

The CAM indicator selected is an "in-situ" particulate monitor based on light scattering principles. The rationale for this specific approach is as follows:

CPM's are widely used to measure and report PM emissions in many parts of the world and are considered to be reliable real-time indicators of actual mass concentrations.

Rather than using a COMS as a precursor to further action (calculation of PM emissions via an ESP model) the CPM can directly indicate the need to take corrective action or generate reports.

The backscatter CPM instrument been used as both a performance and regulatory monitor in hundreds of field installations.

The backscatter CPM has a good record for reliability and low maintenance in this application (dry flue gas).

The Monitor Labs Laserhawk in particular has been designed to meet PS-11 and has passed PS-11 certification in many installations with similar application (although this application will not need to meet the full PS-11 specification).

The instrument selected is compatible with the existing Monitor Labs Part 75 CEMS which can be readily configured to record the appropriate averages, perform calibrations, and signal malfunctions or PM excursions.

### Instrument Calibration

- 1) General and Pre-Test Monitoring Period: The instrument will be calibrated based on boiler load, fuel, ESP characteristics, and any other performance or test data deemed applicable. RM measurements (normally EPA RM 5 or RM 17) will be conducted in accordance with accepted standards, and compared with the averaged CPM output over the RM test period as described below.

The CPM will be installed in vertical stack location recommended by Sikeston. This will be a location with existing platforms, access, and power which has been shown to meet Part 75 standards for representativeness. The CPM will be operated for an initial period of at least 30 days under various operating conditions to identify conditions necessary to three target concentration levels for correlation testing (see below). During the pre-test period the following parameters will be recorded:

CPM Output  
Plant Load  
ESP Voltage and Current

- 2) Correlation/Performance Testing: A minimum of nine valid runs (e.g. 3 PM concentration levels and 3 tests per condition) will be used to obtain the correlation equation and correlation coefficient. A run will be declared "not valid" only when performed during a time when conditions are clearly not representative of normal operations, including periods of startup, shutdown, or malfunction. The PM concentration will be calculated according to equation 11-3 of PS-11.
- 3) Tests will be performed at three different PM concentration levels, with a minimum of three tests at each level, if possible. Level 1 encompasses the range from 0 to 50% of the maximum PM concentration (it is expected the maximum PM concentration will be slightly above the PM standard). Level 2 should range from 50% to 75% of the maximum concentration. Level 3 should be from 75% to 100% of the maximum concentration. The source should be operated over the complete range of expected conditions to assure the data produced are representative. Data gathered during the 30 day pre-test monitoring period will be used to produce the desired concentrations for the test runs. The Sikeston Power Station operates on 100% sub-bituminous Powder River Basin coal, except during startup, so fuel should not be major variable in the correlation testing.
- 4) During correlation testing, the RM data and the CPM measurements will be converted into units of lb/MMBtu to establish limits comparable to the regulatory standard of 0.1 lb/MMBtu.
- 5) The correlation coefficient ( $r$ ) resulting from correlation testing shall be greater than 0.75.
- 6) Once the correlation equation has been determined, it will be applied to PM data reported by the DAHS.
- 7) Based on the results of the RM measurements, the data will be documented in a manner similar to the example shown in Table 2, and plotted as shown in Figure 1. The alarm point triggering corrective action and required reporting will be established when the hourly average PM emission rate reaches the lower of the following two values:
  - a) A value equivalent to 1.25 times the highest CPM response value reached during correlation testing.
  - b) A value equivalent to 0.9 times the source emission limit.

#### Inspection/Corrective Action

In the event of an excursion (the alarm points defined above) Sikeston will take steps to identify and correct operational conditions that may be contributing to the excursion. Operational checks will be made as soon as possible and may include:

- ESP field parameters (T/R voltage, current, spark rate)
- Visual inspection of control equipment
- Unusual fuel characteristics
- Boiler upset conditions

#### QA/QC Criteria

Factory supplied standards will be used to calibrate the instrument at a reference zero and upscale span value. Calibration standards will be maintained in accordance with the manufacturer's recommendations.

Following this calibration an internal "zero-span" cycle will be initiated, thus establishing initial values for future reference. Daily "zero-span" calibration cycles will be performed with the results stored in the DAHS. Should either the zero or span value error exceed  $\pm 5\%$ , an alarm will be triggered to signal the need for recalibration of the CPM using the factory standards.

A quarterly zero and span calibration will be performed using the factory standards.

The correlation curve will be checked at least annually using RM-5 or RM-17. The test will be conducted under normal operating conditions at a single PM concentration. A minimum of 3 runs will be averaged. If the CPM average emission rate differs from the RM average by more than  $\pm 10\%$  a new correlation curve will be developed using the procedures described above. This is equivalent to a single point Relative Response Audit.

Finally, routine maintenance procedures will be established in accordance with the manufacturer's recommendations.

Data Acquisition Requirements

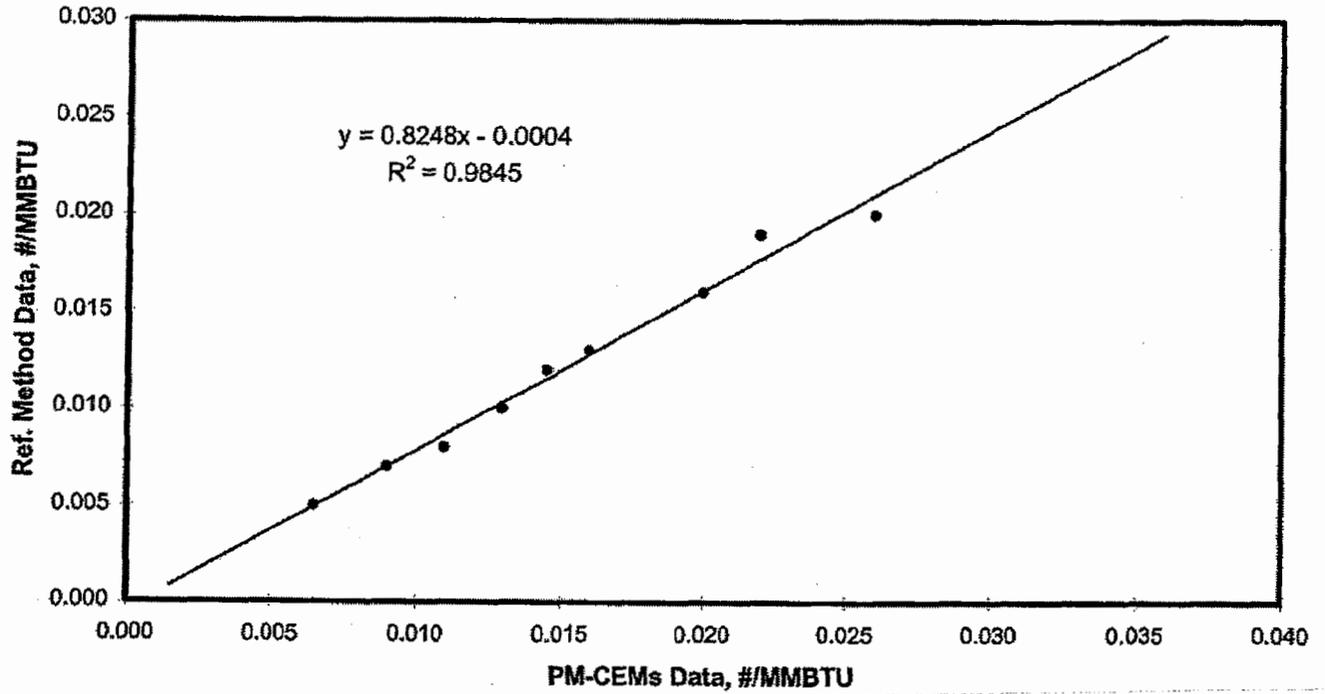
The DAHS will be set up to perform the following tasks:

- Record analog output of the CPM
- Calculate emission values in units of the standard and according to the correlation curve established during correlation testing
- Record daily "zero = span" calibration results
- Store hourly averages of calculated emission values
- Initiate an alarm if any daily zero or span calibration error exceeds  $\pm 5\%$
- Initiate an alarm if any of the alarm points defined above is reached.
- Initiate an alarm if the CPM detects a malfunction of the instrument.

**Table 2. - Example**

Date	Run #	PM Level	Reference Method Data	PM CEMS Data
	1	1	0.0050	0.0065
	2	1	0.0070	0.0090
	3	1	0.0080	0.0110
	4	2	0.0100	0.0130
	5	2	0.0120	0.0145
	6	2	0.0130	0.0160
	7	3	0.0160	0.0200
	8	3	0.0190	0.0220
	9	3	0.0200	0.0260
Correlation Equation:			$y = .8248x - 0.0004$	
Highest PM CEMS Reading:			0.0260	
Limit 1 (Highest PM CEMS X 1.25):			0.0325	
Limit 2 (0.9 X Emissions Limit):			Calculated	

Figure 1. Calibration Graph Example



The following storage tank is not subject to the requirements of Subpart Ka – 40,000 Gallons since the material being stored (No. 2 Fuel Oil) does not meet the definition of petroleum liquids according to 40 CFR Part 60, Subpart Ka.

EQ Ref. #	Description	Capacity	Date Placed in Service
IA-04	No. 2 fuel oil storage tank	250,000 gallons	1979

#### Maximum Available Control Technology (MACT) Applicability

40 CFR part 63, Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*

This subpart applies to industrial, commercial, or institutional boilers and process heaters located at, or a part of, a major source of HAP. A major source of HAP for purposes of subpart DDDDD is a source that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

- 1) The scrubber space heaters, which are existing small (less than 10 MMBtu/hr) liquid fuel heaters, meet the definition of affected units under the boilers and process heaters MACT. However, the space heaters have no requirements under the boilers and process heaters MACT.
- 2) Boiler #1 (EU0010) – Is an electric utility steam generating unit and fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. The boilers and process heaters MACT does not regulate fossil fuel-fired utility boilers greater than 25 megawatts.

[§63.7490(b)(3)]

40 CFR part 63, Subpart ZZZZ - *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines(RICE)*.

The RICE MACT applies to stationary reciprocating internal combustion engines with a site rating of greater than 500 brake horsepower (Hp) located at, or part of, a major source of HAP.

The installation operates a 675 Hp emergency diesel generator (EU0050) and a 285 Hp emergency diesel fire pump (EU0100). EU0100 with a rating of less than 500 Hp is exempt from this MACT. EU0050 meets the definition of an “emergency stationary RICE” contained in 40 CFR 63.6675 and is therefore exempt from the requirements this MACT. EU0050 is operated 1 hour per week for testing purposes and would also meet the definition of a “limited use stationary RICE”. Although EU0050 has been used occasionally during emergencies, annual use has never exceeded 100 hours per year.

#### National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61 Subpart M, *National Emission Standard for Asbestos*, §61.145(a), Standard for demolition and renovation, applies to the installation.

#### 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.

Because the installation’s boiler (EU0010) uses a control device to achieve compliance with an emission limitation and the pre-control emissions are greater than the major source threshold level, 40 CFR Part 64 is applicable to this emissions unit and CAM requirements are included in the permit.

**Other Regulatory Determinations**

- 1) 10 CSR 106-350, *Emission Limitations and Emissions Trading of Oxides of Nitrogen*  
 Several portions of 10 CSR 10-6.350 which pertain to department actions were not included in the permit conditions, since the installation is not responsible for the department actions identified in 10 CSR 10-6.350. These provisions are identified in: 10 CSR 10-6.350(3)(B)2.; the equations of (3)(B)3.A.(III) and (3)(B)3.B.(II); (3)(B)4.B.; (3)(B)4.C.(II); (3)(B)4.D.(II); (3)(B)4.E.; (3)(B)5.B.; (3)(B)8.; (3)(B)9; and (3)(B)10.A-H.
  
- 2) The limestone conveyors, limestone loading and unloading system and the flyash loadout system were being subject to 10 CSR 10-6.220, *Restriction of Emissions of Visible Air Contaminants*, and 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*, in the initial operating permit. Upon further review, these sources are fugitive sources that do not emit regulated pollutants from a discrete stack or vent. These sources emit particulate matter directly into the ambient air. These sources do not have any type of capture/control devices and are not covered or required to control their emissions based on any past or current regulations. These sources are not subject to any specific rule except the core permit requirement of 10 CSR 10-6.170 and must comply with this requirement.
  
- 3) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Process*  
 Calculation of the PM limits and emission rates for emission units subject to 10 CSR 10-6.400. Process information and data used in these calculations are from the Operating Permit Renewal Application, 2005 EIQ, AP-42 and FIRE factors.

Also, one of the following equations from 10 CSR 10-6.400 is used to calculate the PM allowable limit:

$E = 4.10P^{0.67}$  for process weight rates up to 30 tons (60,000 lbs) per hour, and

$E = 55.0P^{0.11} - 40$  for process weight rates greater than 30 tons (60,000 lbs) per hour

Where: E = rate of emission in lb/hr; and

P = process weight rate in tons/hr (maximum hourly design rate)

Emission Unit # or EIQ Ref #	PM Control Device & Efficiency	Maximum Design Rate (ton/hr)	PM Emission Factor (lb/ton)	PM Uncontrolled Emissions (lb/hr)	PM Controlled Emissions (lb/hr)	PM Allowable Emission Rate
EU0020	Fabric Filter 99%	11.80	0.72	8.50	0.085	21.43
EU0021	Fabric Filter 99%	11.80	0.72	8.50	0.085	21.43
EU0040	Fabric Filter 99%	500.00	0.0014	0.70	0.007	68.96

EU0020 and EU0021 – Flyash Silos Vents

At the maximum hourly design rate (11.80 tons/hr), the uncontrolled emission rate (8.50 lbs/hr) is approximately two and five tenth (2.5) times less than the allowable emission rate (21.43 lbs/hr). The process is equipped with a fabric filter (99% control efficiency). It is highly unlikely that the allowable emission rate will be exceeded without the control device operating. The permittee will retain the potential to emit calculations in Attachment A which demonstrate that the allowable emission rate will never be exceeded. No further recordkeeping or monitoring will be required to demonstrate compliance with the emission limitations.

EU0040 - Limestone Storage Silo

At the maximum hourly design rate (500 tons/hr), the uncontrolled emission rate (0.70 lbs/hr) is

approximately ninety-eight and five tenth (98.5) times less than the allowable emission rate (68.96 lbs/hr). The process is equipped with a fabric filter (99% control efficiency). It is highly unlikely that the allowable emission rate will be exceeded without the control device operating. The permittee will retain the potential to emit calculations in Attachment A which demonstrate that the allowable emission rate will never be exceeded. No further recordkeeping or monitoring will be required to demonstrate compliance with the emission limitations.

EU0030 – Coal Bunker

EU0060 through EU0080 - Coal Conveyors, Coal Hoppers and Coal Crushers

Coal bunker, coal conveyors, coal hoppers and coal crushers are not subject to this rule because, per §(1)(B)12, it does not apply to the grinding, crushing and conveying operations at a power plant.

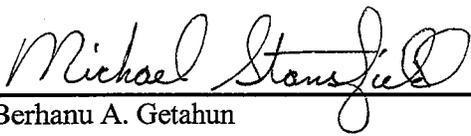
**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

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).

Prepared by:

for   
\_\_\_\_\_  
Berhanu A. Getahun  
Environmental Engineer