



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: OP2008-055
Expiration Date: NOV 25 2013
Installation ID: 077-0005
Project Number: 2005-12-024

Installation Name and Address

James River Power Station
5701 S. Kissick Road
Springfield, MO 65804
Greene County

Parent Company's Name and Address

City Utilities of Springfield
301 E. Central
Springfield, MO 65801

Installation Description:

James River Power Station is a fossil-fuel steam electric generation facility owned and operated by City Utilities of Springfield, Missouri. The installation consists of five coal-fired boilers with a gross electrical output capacity of 255 megawatts. In addition, the installation is equipped with two natural-gas fired combustion turbines with nameplate capacities of seventy-five and eighty megawatts. Other sources of emissions include fuel handling and storage; coal and ash handling; conveying and coal unloading and crushing.

NOV 26 2008

Effective Date

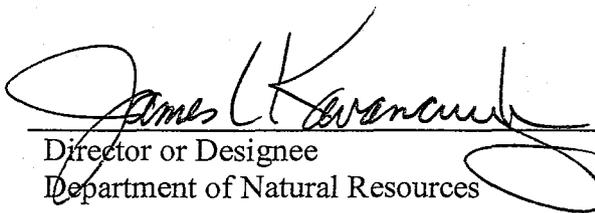

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

James River Power Station is a fossil-fuel steam electric generation facility owned and operated by City Utilities of Springfield, Missouri. The installation consists of five coal-fired boilers with a gross electrical output capacity of 255 megawatts. In addition, the installation is equipped with two natural-gas fired combustion turbines with nameplate capacities of seventy-five and eighty megawatts. Other sources of emissions include fuel handling and storage; coal and ash handling; conveying and coal unloading and crushing.

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2006	572.06	4,920.74	3,903.81	33.85	282.50	0.00	37.46
2005	254.45	4,894.23	4,013.30	33.08	275.78	0.00	40.15
2004	314.61	4,925.27	3,675.42	31.70	264.49	0.00	86.42
2003	295.44	4,490.33	5,105.75	30.78	257.57	0.35	86.64
2002	296.75	5,655.96	5,346.16	29.74	249.16	1.25	123.73
2001	284.46	6,190.97	4,814.97	28.09	235.38	0.03	151.64
2000	275.20	7,504.90	5,862.60	29.60	248.40	0.10	185.50

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 #	Description of Emission Unit	Emission Unit
EU0010	Coal Unloading	FE01
EU0020	Coal Conveyors	FE03
EU0030	Sub-bituminous Coal Conveyors	EP28
EU0035	Coal Crusher	EP175
EU0040	Boiler 1	EP04
EU0045	Boiler 2	EP05
EU0050	Boiler 3	EP06
EU0060	Boiler 4	EP07
EU0070	Boiler 5	EP08
EU0080	Combustion Turbine 1	EP11
EU0090	Combustion Turbine 2	EP12
EU0100	Dry Fly Ash Exhauster	EP160
EU0110	Fly Ash Silo Dry Unloading Spout	EP161
EU0120	Fly Ash Unloading (Paddle Mixer)	EP162
EU0130	Emergency Fire Pump	EP127
EU0140	Emergency DC Generator	EP159
EU0150	Paved Haul Road (Propane-Air Facility)	FE255

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.

Description of Emission Source

Coal storage piles	FE02
587,200-gallon No. 2 fuel oil storage tank, installed 1978	EP10
500-gallon gasoline storage tank, vehicle fueling	EP13, EP27
300-gallon gasoline underground storage tank	EP14
1,000-gallon sulfuric acid storage tank	EP15
6,000-gallon sulfuric acid storage tank	EP16
Haul roads	FE17
Space heaters, natural gas, total 1.44 MMBtu	EP18
Solvent cleaning parts washer	EP19
Propane truck unloading (Propane Air Facility)	EP195, EP196, EP197
Natural gas vents	EP21
Lube and loop seal oil system	EP22, EP23
Hydrogen seal oil vents	EP24
Combustion turbine lube oil vents	EP25
Hydrazine tank vents	EP26
Cooling tower	EP29, EP169
Natural gas pilot fuel vents	EP44, EP68
Unit 5 hydrazine pressure relief vent	EP51
Unit 4 loop seal oil extractor	EP78
Maintenance welding	EP124
CT-1 & 2 lube oil tank vent	EP130, EP131
Natural gas-fired hot water heater	EP133
Coal transfer house	EP139
200-gallon diesel storage tank	EP140
Ash landfill	EP143
2,000-gallon diesel storage tank, installed 2005	EP170
8,000-gallon diesel storage tank, installed 2007	EP171
Propane bulk storage tanks (Propane-Air Facility)	EP200-EP217
NG-fired water bath (vaporizers) (Propane Air Facility) 14.8 MMBtu/hr ea	EP225, EP226
Waste Gas Purge (Flare) (Propane Air Facility)	EP235
Methanol Injection (Propane Air Facility)	FE240
Pressure relief valve releases (miscellaneous) (Propane Air Facility)	EP245

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Construction Permit 0391-002, issued March 6, 1991
- 2) Construction Permit 0697-008, issued May 27, 1997
- 3) Construction Permit 082001-003, issued July 12, 2001
- 4) Construction Permit 032003-017, issued January 31, 2003
- 5) Acid Rain Permit
- 6) Compliance Assurance Monitoring (CAM) Plan
- 7) Construction Permit 102006-006, issued October 10, 2006
- 8) Construction Permit 032007-003, issued March 8, 2007
- 9) 2001 Consent Agreement

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.

<p style="text-align: center;">PERMIT CONDITION PW001 Voluntary Limitation</p>
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Emission Limitation:

James River Power Station shall be limited, when burning fuel oil, to fuel oils with a sulfur content not to exceed zero and one tenth percent sulfur, by weight.

Monitoring/Record Keeping:

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable. Fuel oil samples taken by the permittee shall be conducted following delivery of the shipment or lot to the bulk storage facilities. Specifically, the permittee may use one of the total sulfur sampling options and the associated sampling frequency described in Appendix D to Part 75. Attachment A or an equivalent record keeping form shall be used to record all fuel oil samples and analyses required by this voluntary condition.
- 2) All records shall be maintained for five years. They shall be kept on-site for at least two years. They may be kept in either hard-copy form or on computer media.
- 3) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

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.

EU0010 THROUGH EU0030 – COAL UNLOADING AND TRANSFER			
Emission Unit	Description	Manufacturer/ Model #	2004 EIQ Reference #
EU0010	Coal Unloading including Belt 1A; coal unloading from unit trains; bottom dump; MHDR 2400 ton/hr.	NA	EP01
EU0020	Coal Conveyors: belt 2A - conveying of bituminous coal from storage area to crusher house building; MHDR 600 ton/hr; belts 3 & 4- conveying blended coal to boilers; MHDR 600 ton/hr each.	NA	EP03
EU0030	Sub-bituminous Coal Conveyors: belt 1B - conveying of sub-bituminous coal from rail road cars to the sub-bituminous storage area; MHDR 2400 ton/hr; belt 2B - conveying of sub-bituminous coal from storage area to crusher house; MHDR 600 ton/hr; both belts are equipped with water spray (CD9) with 56% PM ₁₀ control efficiency	NA	EP28

PERMIT CONDITION (EU0010 through EU0030)-001
10 CSR 10-6.060 Construction Permits Required
Construction Permit 0697-008, Issued May 27, 1997
Construction Permit 082001-003, Issued July 12, 2001

Emission Limitation:

- 1) James River Power Station shall emit less than fifteen tons of particulate matter less than ten microns in diameter (PM₁₀) from EU0010 through EU0030 in any consecutive twelve-month period. The fifteen ton limit applies to the combined contributions from coal unloading (EU0010), bituminous and sub-bituminous coal conveyors (EU0020 and EU0030).
 [Permit 082001-003, Special Condition 1A]
- 2) James River Power Station shall continually operate and maintain the dust suppression system rated at fifty-six percent efficiency to control PM₁₀ emissions from the sub-bituminous coal transfer conveyor (EU0030). [Permit 082001-003, Special Condition 2A; Permit 0697-008, Special Condition 1]

Record Keeping:

- 1) James River Power Station shall keep accurate records of monthly and annual PM₁₀ emissions on-site for at least sixty consecutive months. Attachments B-1 and B-2, “PM₁₀ Emission Tracking Worksheet Parts 1 and 2”, are example forms which may be used for this purpose. A form created by the company may be used instead of the attached forms provided all the requested information is logged. These records shall be made available immediately to the Department of Natural Resources’ personnel upon request. [Permit 082001-003, Special Condition 1B]
- 2) Records shall be kept on site for the most recent twenty-four months for the dust suppression system listing periods or malfunction, the cause of the malfunction, and remedial action taken. These

records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request. [Permit 082001-003, Special Condition 2B; Permit 0697-008, Special Condition 2]

Reporting:

- 1) James River Power Station shall notify the director at least twenty-four hours in advance of the shutdown of any control or process equipment if the shutdown would cause an increase in the emission of air contaminants. At the time of notification, James River Power Station shall also notify the director of the cause of the shutdown and the estimated duration. James River Power Station shall notify when the shutdown is over. [Permit 082001-003, Special Condition 1C]
- 2) James River Power Station personnel shall report to the Air Pollution Control Program's Enforcement Section, no later than ten (10) days after the end of any month, if permit 082001-003's condition 1A (less than fifteen tons of PM₁₀ emitted in any consecutive twelve-month period) is exceeded. [Permit 082001-003, Special Condition 1D]
- 3) If the presence of PM₁₀ in the ambient air exists in quantities and duration that directly or proximately cause or contribute to injury to human, plant, or animal life or health, or to property, or that unreasonably interferes with the enjoyment of life or use of property, the director may require James River Power Station to submit a corrective action plan within ten days adequate to timely and significantly mitigate the emission of PM₁₀. James River Power Station shall implement any such plan immediately upon its approval by the director. Failure to either submit or implement such plan shall be a violation of permit 082001-003 and this permit. [Permit 082001-003, Special Condition 1F]

PERMIT CONDITION (EU0010 through EU0030)-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 **existing** source (EU0020) any visible emissions with an opacity greater than forty percent.
- 2) *Existing source*-any equipment, machine, device, article, contrivance or installation installed or in construction in the outstate Missouri area on February 24, 1971, or in the Springfield metropolitan area on September 24, 1971.
- 3) Exception: If the source is altered, repaired, or rebuilt at a cost of fifty percent or more of its replacement cost exclusive of routine maintenance, it shall no longer be existing, but shall be considered new as defined in this regulation.
- 4) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any **new** source (EU0010 and EU0030) any visible emissions with an opacity greater than twenty percent.
- 5) *New source*: any equipment, machine, device, article, contrivance or installation installed in the outstate Missouri area after February 24, 1971, or in the Springfield metropolitan area after September 24, 1971.
- 6) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any sixty minutes air contaminants with an opacity up to sixty percent.

Monitoring:

- 1) The permittee shall conduct opacity readings on these emission units (EU0010 through EU0030) using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained, when visible emissions perceived or believed to exceed the applicable opacity standard, otherwise see bullet 4), below:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- 4) The permittee is allowed to maintain its current monitoring schedule, unless visible emission perceived or believed to exceed the applicable opacity standard.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment C-1 or C-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. (see Attachment D)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
- 4) All records shall be maintained for five years. They shall be kept on-site for at least two years. They may be kept in either hard-copy form or on computer media.
- 5) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION (EU0010 through EU0030)-003
City of Springfield Code, Chapter 6, Article III, Division 2, Visible Air Contaminants

Note: This requirement is not federally or state enforceable.

Emission Limitation:

- 1) No person shall discharge or permit the discharge of, into the outdoor atmosphere, from any single new source (EU0010 and EU0030) of emission whatsoever, any air contaminant:
 - a) Of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart; or
 - b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart.
- 2) No person shall discharge or permit the discharge of, into the outdoor atmosphere, from any single existing source (EU0020) of emission whatsoever, any air contaminant:
 - a) Of a shade or density equal to or darker than that designated as number 2 on the Ringelmann smoke chart; or
 - b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke of a shade or density equal to or darker than that designated as number 2 on the Ringelmann smoke chart.
- 3) Exceptions: Notwithstanding any of the provisions of Sections 6-221 and 6-212, it shall not be unlawful to discharge into the outdoor atmosphere from any single source of emission:
- 4) Air contaminants of a shade, density or opacity equal to but not darker than that designated as number 2 (forty percent opacity) on the Ringelmann chart so long as the emission shall not exist for a period aggregating more than six minutes in any consecutive sixty-minute period.
 - a) Air contaminants resulting from an unavoidable breakdown or malfunction of equipment.

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained, when visible emissions perceived or believed to exceed the applicable opacity standard, otherwise see bullet 4), below:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made once per month. If a violation is noted following a Method 9 Visual Observation, monitoring reverts to weekly.

- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- 4) The permittee is allowed to maintain its current monitoring schedule under its existing permit, unless visible emissions perceived or believed to exceed the applicable opacity standard.
- 5) A Method 9 Visual Observation can be used to satisfy the monitoring requirement, in lieu of a Method 22.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment C1 or C2), 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. (see Attachment D)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
- 4) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION (EU0010 through EU0030)-004
City of Springfield Code, Chapter 6, Article III, Division 4, Particulate Matter from Industrial Processes

Note: This requirement is not federally or state enforceable.

Emission Limitation:

- 1) Particulate matter shall not be emitted from EU0010 through EU0030 in excess of 89.48 lb/hr.
- 2) This emission rate was calculated using the following equation:
For process weight rates greater than 60,000 lb/hr:
$$E = 55.0(P)^{0.11} - 40$$
Where:
E = rate of emission in lb/hr
P = process weight rate in ton/hr
- 3) The concentration of particulate matter in the exhaust gases shall not exceed zero and three-tenths grain per standard cubic feet of exhaust gases.
- 4) The emission limitation is not federally enforceable.

Monitoring/Record Keeping/Reporting:

The permittee is assumed always to be in compliance with this regulation. Calculations demonstrating compliance are in Attachment F. The permittee shall keep this attachment with this permit. No additional monitoring, record keeping or reporting is required for this permit condition.

EU0350 – Coal Crusher			
Emission Unit	Description	Manufacturer/ Model #	EIQ Reference #
EU0350	Coal Crusher to reduce the size of coal being introduced to boilers; MHDR = 720 tons/hr; throughput limited to 1,250,000 tons/year (max. coal that can be burned in boilers); constructed 2007	Gundlach Equipment Corp./ Style 3080S	unknown

<p>PERMIT CONDITION EU0350-001 10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60 Subpart Y, Standards of Performance for Coal Preparation Plants</p>

Emission Limitation:

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 twenty percent.

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained when visible emissions perceived or believed to exceed applicable opacity standard, otherwise see bullet 4), below:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made once per month. If a violation is noted following a Method 9 Visual Observation, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- 4) The permittee is allowed to maintain its current monitoring schedule under its existing permit, unless visible emission perceived or believed to exceed the applicable opacity standard.
- 5) For any new emission unit initially follow the monitoring schedule listed in bullet 2), above if not previously performed.
- 6) A Method 9 Visual Observation can be used to satisfy the monitoring requirement, in lieu of a Method 22.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment C1 and C2), 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. (see Attachment D)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
- 4) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION EU0350-002

City of Springfield Code, Chapter 6, Article III, Division 4, Particulate Matter from Industrial Processes

Note: This requirement is not federally or state enforceable.

Emission Limitation:

- 1) Particulate matter shall not be emitted from EU0350 in excess of 73.4 lb/hr.
- 2) This emission rate was calculated using the following equation:
For process weight rates greater than 60,000 lb/hr:
$$E = 55.0(P)^{0.11} - 40$$

Where:
E = rate of emission in lb/hr
P = process weight rate in ton/hr
- 3) The concentration of particulate matter in the exhaust gases shall not exceed zero and three tenths grain per standard cubic feet of exhaust gases.
- 4) The emission limitation is not federally enforceable.

Monitoring/Record Keeping/Reporting:

The permittee is assumed always to be in compliance with this regulation. Calculations demonstrating compliance are in Attachment F. The permittee shall keep this attachment with this permit. No additional monitoring, record keeping or reporting is required for this permit condition.

EU0040 AND EU0045 – BOILERS 1 AND 2			
Emission Unit	Description	Manufacturer/ Model #	2004 EIQ Reference #
EU0040	Boiler 1: tangentially-fired dry bottom; primary fuel - coal; secondary fuel - propane and natural gas; MHDR 250 MMBtu; nameplate capacity 22 MW, gross electrical output 23 MW; equipped with ESP (CD02); emits through common stack with EU0045; installed 1957	Boiler - Combustion Engineering/ VU class 40S ESP - Buell	EP04
EU0045	Boiler 2: tangentially-fired dry bottom; primary fuel - coal; secondary fuel - propane and natural gas; MHDR 250 MMBtu; nameplate capacity 22 MW, gross electrical output 23 MW.; equipped with ESP (CD03); emits through common stack with EU0040; installed 1957	Boiler - Combustion Engineering/ VU class 40S ESP - Buell	EP05

PERMIT CONDITION (EU0040 and EU0045)-001
10 CSR 10-4.040 Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating
City of Springfield Code, Chapter 6, Article III, Division 3, Particulate Matter from Fuel Burning Equipment
40 CFR Part 64, Compliance Assurance Monitoring (CAM)

NOTE:

Compliance Assurance Monitoring (CAM) applies to these units, so this permit condition incorporates parts of 40 CFR Part 64 and, through that, parts of 40 CFR Part 60. Where conflicts arise between these documents and 40 CFR Part 60, the approved conditions of the CAM plan and CAM test plan (included in this permit condition) govern.

Emission Limitations:

- 1) The permittee shall not emit particulate matter into the atmosphere from EU0040 and EU0045 in excess of 0.16 pounds per million BTu per City of Springfield Code, Chapter 6, Article III, Division 3 (**note: not federally or state enforceable**) and in excess of 0.23 pounds per million BTu per 10 CSR 10-4.040. Compliance with the City of Springfield Code limit ensures compliance with the Missouri Code of State Regulations limit.
- 2) Emissions in excess of the level of the emission limit in bullet 1) above during periods of startup, shutdown, and malfunction shall not be considered a violation.

Monitoring:

- 1) The permittee shall install, certify, operate and maintain a certified Continuous Opacity Monitoring System (COMS) with an automated data acquisition and handling system for measuring and recording the opacity (in percent opacity in order to provide a reasonable assurance of the performance of the electrostatic precipitators (ESPs). Previously installed and certified monitoring systems that conform to provisions of the Performance Specification for COMS meet the monitoring requirements.
- 2) The performance requirements for the COMS shall be as specified in Table 1: City Utilities of Springfield – James River Power Plant – CAM Monitoring Approach.
- 3) An excursion and its associated averaging time for each emission unit shall be as specified in Table 1: City Utilities of Springfield – James River Power Plant – CAM Monitoring Approach, rather than that which is specified in City Utilities CAM Plan.

- 4) City Utilities shall conduct monitoring continuously except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities, in accordance with 40 CFR 64.7(c). Although compliance with the PM emission limitation may be exempted in some circumstances during conditions such as startup, shutdown, and malfunction, City Utilities is required to operate and maintain the source in accordance with good air pollution control practices for minimizing emissions during such periods. This requires City Utilities to minimize periods of startup, shutdown or malfunction, and take corrective action to restore normal operation and prevent recurrence of the problem that led to the excursion except where the excursion was related to an excused startup, shutdown, or malfunction.

Table 1

City Utilities of Springfield – James River Power Plant – CAM Monitoring Approach		
Particulate Matter (PM) Compliance Indicator		
Indicator	Opacity	
Measurement Approach	Continuous Opacity Monitoring System (COMS)	
Indicator Range	The following operational levels are based on stack testing information supplied by the Permittee	
	Unit 1	Unit 2
	The baseline 1-hour average opacity is in the range of 5-6%. An excursion is defined as a 1-hour average opacity greater than 16%. A PM exceedance has likely occurred when a 3-hour average opacity is greater than 17%	The baseline 1-hour average opacity is in the range of 5-6%. An excursion is defined as a 1-hour average opacity greater than 16%. A PM exceedance has likely occurred when a 3-hour average opacity is greater than 17%
	Excursions trigger an inspection, corrective action, and a reporting requirement	
Performance Criteria		
Data Representativeness	Each boiler discharges to a dedicated stack with no bypass capabilities. Each stack is equipped with a COMS located downstream of the ESP that complies with the applicable version of 40 CFR Part 60, Appendix B, Performance Specification 1 (PS-1)	
Verification of Operational Status	Not applicable since the selected monitoring approach utilizes an existing COMS that was initially installed and evaluated per the applicable version of PS-1.	
QA/QC Practices and Criteria	Perform a daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified for the COMS in the applicable version of PS-1	
Monitoring Frequency	Continuous [i.e., the COMS is to complete a minimum of one cycle (i.e., sampling, analyzing, and data recording) for each successive 10-second period].	
Averaging Period	The data acquisition system is to reduce the 10-second data points to 6-minute, 1-hour, and 3-hour block averages.	
Data Collection Procedure	The data acquisition system is to retain all 6-minute, 1-hour, and 3-hour block average opacity data for 5 years.	
Reporting	Summary information on the number, duration, and cause for any excursions and COMS downtime will be reported on a semiannual basis in the Semiannual Monitoring Report for the Part 70 Operating Permit.	

- 5) *Proper Maintenance.* At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (40 CFR 64.7(b))
- 6) *Continued Operation.* Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that the boilers (EU0040 and EU0045) are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for data averages and calculations, or fulfilling a minimum data availability requirement. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable

failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.7(c))

- 7) The permittee shall follow the following procedure in response to excursions or exceedances.
 - a) Upon detecting an excursion or exceedance, the permittee shall restore operation of the boilers (EU0040 and EU0045) (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. (40 CFR 64.7(d)(1))
 - b) Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (40 CFR 64.7(d)(2))

Record Keeping:

- 1) *General Record Keeping Requirements.* The permittee shall comply with the record keeping requirements specified in 40 CFR 70.6(a)(3)(ii). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under Part 64 (40 CFR Part 64.9(b)(1)). Record keeping requirements of 40 CFR 70.6(a)(3)(ii) include the following:
 - a) The date, place, and time of sampling or measurements;
 - b) The date(s) analyses were performed;
 - c) If applicable, the company or entity that performed the analyses;
 - d) The analytical techniques or methods used;
 - e) The results of such analyses; and
 - f) The operating conditions as existing at the time of sampling or measurement.
- 2) The permittee shall maintain a file of the following information:
 - a) All information reported in the quarterly summaries including:
 - i) The charts or printouts generated by the COMS, where applicable;
 - ii) An opacity summary report;
 - iii) An excess opacity emission summary;
 - iv) An excess opacity emission summary list;
 - v) An opacity monitoring downtime summary list; and
 - b) All one-hour, and three-hour opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records. This includes, but is not restricted to the daily monitoring system calibration check done on the continuous opacity monitoring system.
- 3) The permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, instead of paper provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable record keeping requirements. (40 CFR 64.9(b)(2))

- 4) The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all required calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all required reports (including any written Quality Improvement Plan (QIP), if QIP is required).
- 5) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

- 1) *COMS Reporting Requirements.* The permittee shall submit a quarterly written report (Attachment M or equivalent form shall be used) to the director of the Air Pollution Control Program. All quarterly reports shall be postmarked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data:
 - a) A summary including total time for each cause of excess emissions and/or monitor downtime;
 - b) Nature and cause of excess emissions, if known;
 - c) The one-hour average or three-hour average opacity values greater than the opacity emission requirements (the average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions);
 - d) The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and
 - e) If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired or adjusted, this information shall be stated in the report.
- 2) *General Reporting Requirements.* The permittee shall submit semi-annual monitoring certified by a responsible official. The report shall include, at a minimum, the following information, as applicable:
 - a) All instances of deviations from permit requirements must be clearly identified;
 - b) Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken;
 - c) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - d) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - e) A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8, if a QIP is required. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.
- 3) *Performance Testing.*
 - a) The permittee shall submit operating parameter data obtained during the conduct of any applicable compliance or performance tests.
 - b) The permittee shall submit documentation that no changes to the emission units, including the control device and capture system, have taken place that could result in a significant change in the control system performance or selected indicator ranges since the last performance or compliance test.

- 4) *Documentation of need for improved monitoring.* If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Missouri Division of Natural Resources and, if necessary, submit a proposed modification to the part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
- 5) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, Missouri 65102, no later than ten days after any deviations/exceedance of this permit condition.

PERMIT CONDITION (EU0040 and EU0045)-002 10 CSR 10-6.220 Restriction 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 **existing** source any visible emissions with an opacity greater than forth percent.
Existing source-any equipment, machine, device, article, contrivance or installation installed or in construction in the outstate Missouri area on February 24, 1971, or in the Springfield metropolitan area on September 24, 1971.
Exception: If the source is altered, repaired, or rebuilt at a cost of fifty percent or more of its replacement cost exclusive of routine maintenance, it shall no longer be existing, but shall be considered new as defined in this regulation.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any sixty minutes air contaminants with an opacity up to sixty percent.

Monitoring:

- 1) The permittee may install, calibrate, maintain and operate in accordance with 40 CFR Part 60, Performance Specification 1, a Continuous Opacity Monitoring System (COMS) with an automated data acquisition and handling system for measuring and recording the opacity; or
- 2) The permittee shall conduct opacity readings on these emission units (EU0080 and EU0090) using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.
- 3) The following monitoring schedule must be maintained, when visible emissions perceived or believed to exceed the applicable opacity standard, otherwise see bullet 4), below:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-

- b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
- c) Observations must be made once per month. If a violation is noted following a Method 9 Visual Observation, monitoring reverts to weekly.
- 4) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- 5) The permittee is allowed to maintain the current monitoring schedule under its existing permit, unless visible emissions perceived or believed to exceed the applicable opacity standard.
- 6) Provisions of this condition should not be construed to require operating the emission unit for the sole purpose of conducting monitoring.
- 7) A Method 9 Visual Observation can be used to satisfy the monitoring requirement, in lieu of a Method 22.

Record Keeping:

- 1) If the permittee uses the COMs for measuring opacity to demonstrate compliance then the permittee shall maintain a file (hard copy or electronic version of the following information for a minimum of two years from the date the data was collected:
 - 2) All information reported in the quarterly summaries; and
 - 3) All six-minute opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records.
 - 4) If the permittee conducts visible opacity observations to demonstrate compliance then the permittee shall maintain records of all observation results (see Attachment C-1 or C-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.
 - 5) The permittee shall maintain records of any equipment malfunctions. (see Attachment D)
 - 6) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
 - 7) All records shall be maintained for five years. They shall be kept on-site for at least two years. They may be kept in either hard-copy form or on computer media.
 - 8) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

Reporting:

- 1) If the permittee uses the COMs for measuring opacity to demonstrate compliance then the permittee shall submit a quarterly written report to the director that shall be postmarked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data:
 - a) A summary including total time for each cause of excess emissions and /or monitor downtime;
 - b) Nature and cause of excess emissions, if known;
 - c) The six-minute average opacity values greater than the opacity emission requirements (the average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions);
 - d) The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and
 - e) If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired or adjusted, this information shall be stated in the report.

- 2) If the permittee conducts visible opacity observations to demonstrate compliance then the permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the permittee determined using the Method 9 test that the emission unit exceeded the opacity limit.
- 3) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION (EU0040 and EU0045)-003
City of Springfield Code, Chapter 6, Article III, Division 2, Visible Air Contaminants

Note: This requirement is not federally or state enforceable.

Emission Limitation:

- 1) No person shall discharge or permit the discharge of, into the outdoor atmosphere, from any single new source of emission whatsoever, any air contaminant:
- 2) Of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart; or
- 3) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart.
- 4) Exceptions: Notwithstanding any of the provisions of Sections 6-221 and 6-212, it shall not be unlawful to discharge into the outdoor atmosphere from any single source of emission:
 - a) Air contaminants of a shade, density or opacity equal to but not darker than that designated as number 2 (forty percent opacity) on the Ringelmann chart so long as the emission shall not exist for a period aggregating more than six minutes in any consecutive sixty-minute period.
 - b) Air contaminants resulting from an unavoidable breakdown or malfunction of equipment.

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained, when visible emissions perceived or believed to exceed the applicable opacity standard, otherwise see bullet 4), below:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made once per month. If a violation is noted following a Method 9 Visual Observation, monitoring reverts to weekly.

- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- 4) The permittee is allowed to maintain its current monitoring schedule under its existing permit, unless visible emissions perceived or believed to exceed the applicable opacity standard.
- 5) A Method 9 Visual Observation can be used to satisfy the monitoring requirement, in lieu of a Method 22.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment C1 or C2), 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. (see Attachment D)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
- 4) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION (EU0040 and EU0045)-004
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63 Subpart A, General Provisions and Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

NOTE:

On July 20, 2007, the United States Court of Appeals, District of Columbia Circuit ordered a full vacatur of 40 CFR Part 63 Subpart DDDDD. The vacatur has the same effect as if this MACT rule was never promulgated. This means there is no longer a September 13, 2007 compliance date for sources affected by this HAP source category. If and when the EPA promulgates an approved version of this MACT, emission units EU0040 and EU0045 will be reevaluated for applicability.

PERMIT CONDITION (EU0040 and EU0045)-005
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds and
August 17, 2001 Consent Agreement

Emission Limitations:

- 1) James River Power Station (JRPS) fossil-fired steam units (EU0040 and EU0045) shall not emit to the atmosphere any gases with a sulfur dioxide (SO₂) content in excess of the following limits, based on a twenty-four hour block average. A twenty-four block averaging period begins and ends at midnight of each operating day. [2001 Consent Agreement, Paragraph 1]

EU ID #	Description	Sulfur Limit (lb/MMBtu heat input)
EU0040	Boiler 1	1.5
EU0045	Boiler 2	1.5

- 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.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$))	Annual arithmetic mean
	0.14 ppm (365 $\mu\text{g}/\text{m}^3$)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 $\mu\text{g}/\text{m}^3$)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 $\mu\text{g}/\text{m}^3$)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 $\mu\text{g}/\text{m}^3$)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 $\mu\text{g}/\text{m}^3$	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 $\mu\text{g}/\text{m}^3$	1-hour average not to be exceeded more than once in any 2 consecutive days

Operational Limitation/Monitoring:

- 1) City Utilities shall comply with the stipulated emission rates by burning fuels with a reduced sulfur content. Compliance with the numeric limitations shall be based on unit by unit demonstration of emission rates. The coal blend consistency requirement is only required if City Utilities chooses to blend different coal types (specifically bituminous with sub-bituminous coal blends). [2001 Consent Agreement, Paragraph 2]
- City Utilities shall operate and maintain the belt scales used to document coal blend consistency, as describe in Appendix I (see Attachment G), in accordance with accepted industry practice for quality assurance and quality control, including but not limited to the manufacturer’s recommended QA/QC practices. [2001 Consent Agreement, Paragraph 2.1]
 - 2001 Consent Agreement Paragraph 2.2 is listed in Permit Condition (EU0050 through EU0070)-002.
 - Boiler 3 (EU0050) CEMS will serve as a surrogate monitor for Boiler 1 (EU0040) and Boiler 2 (EU0045) by applying a rebuttable presumption regarding coal characteristics and emissions

equivalence. City Utilities shall modify the plant data system to report an estimate SO₂ emission rate for Boiler 1 (EU0040) and Boiler 2 (EU0045) based on the contemporaneous emission rate for Boiler 3 (EU0050) (if operating) or Boiler 4 (EU0060). The data system will adjust the Boiler 1 (EU0040) and Boiler 2 (EU0045) emission data for differences in natural gas firing between the CEMS and non-CEMS units. [2001 Consent Agreement, Paragraph 2.3]

- i) In the event Boiler 1 (EU0040) or Boiler 2 (EU0045) operates when there are no contemporaneous data available for Boiler 3 (EU0050) and Boiler 4 (EU0060) (e.g. the larger units are off-line or CEMS are out of service), City Utilities will demonstrate compliance through daily coal sample analyses. This will not apply to brief periods of CEMS unavailability due to quality assurance activities. [2001 Consent Agreement, Paragraph 2.3.1]
 - ii) If the twenty-four hour average SO₂ emission rate recorded by CEMS ever exceeds 1.25 pounds per million Btu, the permittee shall perform a thirty day equivalence test to demonstrate that the accuracy and precision of CEMS data are sufficient to meet the confidence criteria for the rebuttable presumption. [2001 Consent Agreement, Paragraph 2.3.2]
 - iii) Additional technical provisions necessary to implement this paragraph are detailed in Appendix I (see Attachment G), affixed hereto and included as part of the 2001 Consent Agreement. [2001 Consent Agreement, Paragraph 2.3.3]
- 2) Any instance of excess emissions during periods of startup, shutdown, or malfunction shall be governed by the provisions of 10 CSR 10-6.050. These terms shall have the same meaning as given in the Missouri clean air regulations at 10 CSR 10-6.020. Moreover, the Missouri Department of Natural Resources recognizes the need for a short period of one hundred percent bituminous coal as a purge fuel for safety purposes when these units are started and shut down. [2001 Consent Agreement, Paragraph 3]
 - 3) In the event that any of the permanent monitors deployed near James River Power Station are challenged by air contaminant levels in excess of seventy-five percent of the primary or secondary standard, based on respective averaging times, City Utilities shall provide two additional auxiliary monitoring stations, subject to the following: [2001 Consent Agreement, Paragraph 7]
 - a) The auxiliary monitors shall meet the same criteria as listed for the permanent monitors; [2001 Consent Agreement, Paragraph 7.1]
 - b) The auxiliary monitors shall be installed and operated by City Utilities for a period of eight calendar quarters which includes at least two consecutive calendar years. At the end of the period, the monitors shall be removed from service if there are no monitored episodes greater than seventy-five percent of the primary and secondary ambient SO₂ standards. Removal from service under these conditions shall terminate City Utilities' auxiliary monitoring requirement under the 2001 Consent Agreement. [2001 Consent Agreement, Paragraph 7.2]
 - 4) Following monitor installation, City Utilities shall be responsible for monitor maintenance and quality assurance activities. City Utilities shall have direct access to its monitoring data through direct telephone hookup. City Utilities will provide dial-up modem access to their monitors to the Missouri Department of Natural Resources in a format compatible with the existing Missouri Department of Natural Resources ambient data collection system. City Utilities shall develop a Quality Assurance Plan and a Standard Operating Plan for the Missouri Department of Natural Resources' approval. QA protocols must be at least as stringent as the QA requirements of 40 CFR Part 58 and Quality Assurance Handbook for Air Pollution Measurements Systems. City Utilities and the Missouri Department of Natural Resources shall inform each other of all quality assurance activities performed on their respective monitors in the vicinity of James River Power

Station. Each party shall provide the other with adequate notice and opportunity to observe such quality assurance activities. [2001 Consent Agreement, Paragraph 8]

- 5) The Missouri Department of Natural Resources shall incorporate the compliance, monitoring, reporting, and recordkeeping provisions of the 2001 Consent Agreement into this Title V operating permit for the James River Power Station. The Missouri Department of Natural Resources shall also submit the 2001 Consent Agreement to the Missouri Air Conservation Commission for incorporation into the Missouri State Implementation Plan. [2001 Consent Agreement, Paragraph 9]
- 6) 2001 Consent Agreement, Paragraph 10, is listed in Permit Condition (EU0050 through EU0070)-002.
- 7) If, at any time after the effective date of the 2001 Consent Agreement, either the Missouri Department of Natural Resources or U.S. EPA find it necessary to impose more stringent emission limits or monitoring requirements at James River Power Station than those contained in the 2001 Consent Agreement, the 2001 Consent Agreement will terminate automatically on the effective date of the more stringent requirements. [2001 Consent Agreement, Paragraph 11]

Record Keeping:

- 1) City Utilities shall maintain emissions monitoring data, fuel analysis data, fuel consumption record, and CEMS QA/QC records for five years from the date collected or recorded. [2001 Consent Agreement, Paragraph 5]
- 2) All records shall be kept in a form suitable for inspection and be made available immediately to the Department of Natural Resources' personnel upon request.

Reporting:

- 1) City Utilities shall submit quarterly excess emissions reports to the Missouri Department of Natural Resources. Quarterly reports (See Attachment N or equivalent form shall be use) shall identify any twenty-four hour period wherein the emission rate from Boiler 1 (EU0040) and Boiler 2 (EU0045), exceeded the applicable SO₂ equivalence assurance threshold of 1.25 pounds per million BTu, together with the magnitude and duration of excess emissions. The report also will identify any period of unit operation in which the corresponding CEMS is out of service, as defined under 40 CFR Part 75. In addition, the report shall include the following certification statement:
"I hereby certify that the emission data collected and reported herein for Boiler 1 (EU0040) and/or Boiler 2 (EU0045) are representative of the actual emissions from said units. For every boiler operating day during the period, the sulfur-emitting characteristics of coal introduced to Boiler 1 (EU0040) and Boiler 2 (EU0045) were essentially equivalent to the corresponding characteristics for the surrogate CEMS-equipped unit, unless noted otherwise in this report. The criteria defining equivalence of coal quality, coal blend percentages, and consistency within the storage pile, as described in Appendix I of the 2001 Consent Agreement between City Utilities and the Missouri Department Natural Resources, were met for this quarter. This certification is based on my personal inquiry of persons responsible for these data, and over whom I have supervisory authority."
The certification must be signed by a responsible City Utilities representative with the title of Power Station Director or higher. Quarterly excess emissions reports shall be due on or before the thirtieth day following each calendar quarter, beginning with the calendar quarter during which the 2001 Consent Agreement became effective. [2001 Consent Agreement, Paragraph 4]
- 2) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, Missouri 65102, no later than ten days after any deviations/exceedance of this permit condition.

EU0050 THROUGH EU0070 – BOILERS 3, 4, AND 5			
Emission Unit	Description	Manufacturer/Model #	2004 EIQ Reference #
EU0050	Boiler 3: wall-fired dry bottom; primary fuel - coal; secondary fuel - propane and natural gas; MHDR 496 MMBtu; nameplate capacity 44 MW; equipped with ESP (CD04) and an ultra low-NOx burner design with Over-fire Air (OFA); installed 1960	Boiler - Riley/Class RX34TWW ESP - Buell/Merrick Env. Technologies	EP06
EU0060	Boiler 4: wall-fired dry bottom/radiant-convection; primary fuel - coal; secondary fuel - propane and natural gas; MHDR 600 MMBtu; nameplate capacity 60 MW; equipped with ESP (CD05) and an ultra low-NOx burner design with Over-fire Air (OFA); installed 1964	Boiler - Riley/Radiant Convection ESP - UOP/PECO	EP07
EU0070	Boiler 5: wall-fired dry bottom; primary fuel - coal; secondary fuel - propane and natural gas; MHDR 1000 MMBtu; nameplate capacity 105 MW; equipped with ESP (CD06) and an ultra low-NOx burner design with Over-fire Air (OFA); installed 1970	Boiler - Riley/Radiant Convection ESP - Belco	EP08

PERMIT CONDITION (EU0050 through EU0070)-001
10 CSR 10-4.040 Maximum Allowable Emission of Particulate Matter for Fuel Burning Equipment for Indirect Heating
City of Springfield Code, Chapter 6, Article III, Division 3, Particulate Matter from Fuel Burning Equipment
40 CFR Part 64, Compliance Assurance Monitoring (CAM)

NOTE:

Compliance Assurance Monitoring (CAM) applies to these units, so this permit condition incorporates parts of 40 CFR Part 64 and, through that, parts of 40 CFR Part 60. Where conflicts arise between these documents and 40 CFR Part 60, the approved conditions of the CAM plan and CAM test plan (included in this permit condition) govern.

Emission Limitations:

- 1) The permittee shall not emit particulate matter into the atmosphere from EU0040 and EU0045 in excess of 0.16 pounds per million BTu per City of Springfield Code, Chapter 6, Article III, Division 3 (**note: not federally or state enforceable**) and in excess of 0.23 pounds per million BTu per 10 CSR 10-4.040. Compliance with the City of Springfield Code limit ensures compliance with the Missouri Code of State Regulations limit.
- 2) Emissions in excess of the level of the emission limits in bullet 1) above during periods of startup, shutdown, and malfunction shall not be considered a violation.

Monitoring:

- 1) The permittee shall install, certify, operate and maintain a certified Continuous Opacity Monitoring System (COMS) with an automated data acquisition and handling system for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere in order to provide a reasonable assurance of the performance of the electrostatic precipitators (ESP). Previously installed and certified monitoring systems that conform to provisions of the Performance Specification for COMS meet the monitoring requirements.
- 2) The performance requirements for the COMS shall be as specified in Table 2: City Utilities of Springfield – James River Power Plant – CAM Monitoring Approach.
- 3) An excursion and its associated averaging time for each emission unit shall be as specified in Table 2: City Utilities of Springfield – James River Power Plant – CAM Monitoring Approach, rather than that which is specified in City Utilities CAM Plan.
- 4) City Utilities shall conduct monitoring continuously except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities, in accordance with 40 CFR 64.7(c). Although compliance with the PM emission limitation may be exempted in some circumstances during conditions such as startup, shutdown, and malfunction, City Utilities is required to operate and maintain the source in accordance with good air pollution control practices for minimizing emissions during such periods. This requires City Utilities to minimize periods of startup, shutdown or malfunction, and take corrective action to restore normal operation and prevent recurrence of the problem that led to the excursion except where the excursion was related to an excused startup, shutdown, or malfunction.

Table 2

City Utilities of Springfield – James River Power Plant – CAM Monitoring Approach			
Particulate Matter (PM) Compliance Indicator			
Indicator	Opacity		
Measurement Approach	Continuous Opacity Monitoring System (COMS)		
Indicator Range	The following operational levels are based on stack testing information supplied by the permittee		
	Unit 3	Unit 4	Unit 5
	The baseline 1-hour average opacity is in the range of 14-16%. An excursion is defined as a 1-hour average opacity greater than 25%. A 3-hour average opacity greater than 29% provides credible evidence that the emission unit has exceeded its applicable PM limitation based on the opacity to PM correlation data provided by the Permittee.	The baseline 1-hour average opacity is in the range of 10-12%. An excursion is defined as a 1-hour average opacity greater than 16%. A 3-hour average opacity greater than 18% provides credible evidence that the emission unit has exceeded its applicable PM limitation based on the opacity to PM correlation data provided by the Permittee.	The baseline 1-hour average opacity is in the range of 6-8%. An excursion is defined as a 1-hour average opacity greater than 20%. A 3-hour average opacity greater than 22% provides credible evidence that the emission unit has exceeded its applicable PM limitation based on the opacity to PM correlation data provided by the Permittee.
	Excursions trigger an inspection, corrective action, and a reporting requirement.		
Performance Criteria			
Data Representativeness	Each boiler discharges to a dedicated stack with no bypass capabilities. Each stack is equipped with a COMS located downstream of the ESP that complies with the applicable version of 40 CFR Part 60, Appendix B, Performance Specification 1 (PS-1).		
Verification of Operational Status	Not applicable since the selected monitoring approach utilizes an existing COMS that was initially installed and evaluated per the applicable version of PS-1.		
QA/QC Practices and Criteria	Perform a daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified for the COMS in the applicable version of PS-1.		
Monitoring Frequency	Continuous [i.e., the COMS is to complete a minimum of one cycle (i.e., sampling, analyzing, and data recording) for each successive 10-second period].		
Averaging Period	The data acquisition system is to reduce the 10-second data points to 6-minute, 1-hour, and 3-hour block averages.		
Data Collection Procedure	The data acquisition system is to retain all 6-minute, 1-hour, and 3-hour block average opacity data for 5 years.		
Reporting	Summary information of the number, duration, and cause for any excursions and COMS downtime will be reported on a semiannual basis in the Semiannual Monitoring Report for the Part 70 Operating Permit.		

- 5) *Proper Maintenance.* At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (40 CFR 64.7(b))
- 6) *Continued Operation.* Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that Boilers 3, 4 and 5 (EU0050 through EU0070) are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for data averages and calculations, or fulfilling a minimum data availability requirement. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.7(c))

- 7) The permittee shall follow the following procedure in response to excursions or exceedances.
 - a) Upon detecting an excursion or exceedance, the permittee shall restore operation of Boilers 3, 4 and 5 (EU0050 through EU0070) (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. (40 CFR 64.7(d)(1))
 - b) Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (40 CFR 64.7(d)(1))

Record Keeping:

- 1) *General Record Keeping Requirements.* The permittee shall comply with the record keeping requirements specified in 40 CFR 70.6(a)(3)(ii). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under Part 64 (40 CFR Part 64.9(b)(1)). Record keeping requirements of 40 CFR 70.6(a)(3)(ii) include the following:
 - a) The date, place, and time of sampling or measurements;
 - b) The date(s) analyses were performed;
 - c) If applicable, the company or entity that performed the analyses;
 - d) The analytical techniques or methods used;
 - e) The results of such analyses; and
 - f) The operating conditions as existing at the time of sampling or measurement.
- 2) The permittee shall maintain a file of the following information:
 - a) All information reported in the quarterly summaries including:
 - i) The charts or printouts generated by the COMS, where applicable;
 - ii) An opacity summary report;
 - iii) An excess opacity emission summary;
 - iv) An excess opacity emission summary list;
 - v) An opacity monitoring downtime summary list; and
 - b) All one-hour, and three-hour opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records. This includes, but is not restricted to the daily monitoring system calibration check done on the continuous opacity monitoring system.
- 3) The permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, instead of paper provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable record keeping requirements. (40 CFR 64.9(b)(2))

- 4) The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all required calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all required reports (including any written Quality Improvement Plan (QIP), if QIP is required).
- 5) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

- 1) *COMS Reporting Requirements.* The permittee shall submit a quarterly written report to the director of the Air Pollution Control Program. All quarterly reports (See Attachment M or equivalent form shall be used) shall be postmarked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data:
 - a) A summary including total time for each cause of excess emissions and/or monitor downtime;
 - b) Nature and cause of excess emissions, if known;
 - c) The one-hour, and three-hour average opacity values greater than the opacity emission requirements (the average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions);
 - d) The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and
 - e) If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired or adjusted, this information shall be stated in the report.
- 2) *General Reporting Requirements.* The permittee shall submit semi-annual monitoring certified by a responsible official. The report shall include, at a minimum, the following information, as applicable:
 - a) All instances of deviations from permit requirements must be clearly identified;
 - b) Prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken;
 - c) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - d) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - e) A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8, if a QIP is required. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.
- 3) *Performance Testing.*
 - a) The permittee shall submit operating parameter data obtained during the conduct of any applicable compliance or performance tests.
 - b) The permittee shall submit documentation that no changes to the emission units, including the control device and capture system, have taken place that could result in a significant change in the control system performance or selected indicator ranges since the last performance or compliance test.

- 4) *Documentation of need for improved monitoring.* If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify The Missouri Department of Natural Resources and, if necessary, submit a proposed modification to the part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
- 5) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, Missouri 65102, no later than ten days after any deviations/exceedance of this permit condition.

PERMIT CONDITION (EU0050 through EU0070)-002 10 CSR 10-6.220 Restriction 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 **existing** source any visible emissions with an opacity greater than forty percent.
- 2) *Existing source*-any equipment, machine, device, article, contrivance or installation installed or in construction in the outstate Missouri area on February 24, 1971, or in the Springfield metropolitan area on September 24, 1971.
- 3) Exception: If the source is altered, repaired, or rebuilt at a cost of fifty percent or more of its replacement cost exclusive of routine maintenance, it shall no longer be existing, but shall be considered new as defined in this regulation.
- 4) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any sixty minutes air contaminants with an opacity up to sixty percent.

Monitoring:

The permittee shall install, calibrate, maintain and operate in accordance with 40 CFR Part 60, Performance Specification 1, a Continuous Opacity Monitoring System (COMS) with an automated data acquisition and handling system for measuring and recording the opacity.

Record Keeping:

The permittee shall maintain a file (hard copy or electronic version of the following information for a minimum of two years from the date the data was collected:

- 1) All information reported in the quarterly summaries; and
- 2) All six-minute opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records.

Reporting:

The permittee shall submit a quarterly written report (See Attachment M or equivalent form shall be used) to the director that shall be postmarked no later than the thirtieth (30th) day following the end of each calendar quarter and shall include the following emissions data:

- 1) A summary including total time for each cause of excess emissions and /or monitor downtime;
- 2) Nature and cause of excess emissions, if known;

- 3) The six-minute average opacity values greater than the opacity emission requirements (the average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions);
- 4) The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and
- 5) If no excess emissions have occurred during the reporting period and the COMS has not be inoperative, repaired or adjusted, this information shall be stated in the report.

PERMIT CONDITION (EU0050 through EU0070)-003 City of Springfield Code, Chapter 6, Article III, Division 2, Visible Air Contaminants
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Note: This requirement is not federally or state enforceable.

Emission Limitation:

- 1) No person shall discharge or permit the discharge of, into the outdoor atmosphere, from any single new source of emission whatsoever, any air contaminant:
 - a) Of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart; or
 - b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart.
- 2) Exceptions: Notwithstanding any of the provisions of Sections 6-221 and 6-212, it shall not be unlawful to discharge into the outdoor atmosphere from any single source of emission:
 - a) Air contaminants of a shade, density or opacity equal to but not darker than that designated as number 2 (forty percent opacity) on the Ringelmann chart so long as the emission shall not exist for a period aggregating more than six minutes in any consecutive sixty-minute period.
 - b) Air contaminants resulting from an unavoidable breakdown or malfunction of equipment.

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained, when visible emissions perceived or believed to exceed the applicable opacity standard, otherwise see bullet 4), below:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-

- c) Observations must be made once per month. If a violation is noted following a Method 9 Visual Observation, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- 4) The permittee is allowed to maintain its current monitoring schedule under its existing permit, unless visible emissions perceived or believed to exceed the applicable opacity standard.
- 5) A Method 9 Visual Observation can be used to satisfy the monitoring requirement, in lieu of a Method 22.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment C1 or C2), 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. (see Attachment D)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
- 4) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

**PERMIT CONDITION (EU0050 through EU0070)-004
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds and
August 17, 2001 Consent Agreement**

Emission Limitations:

- 1) James River Power Station (JRPS) fossil-fired steam units (EU0050 through EU0070) shall not emit to the atmosphere any gases with a sulfur dioxide (SO₂) content in excess of the following limits, based on a twenty-four hour block average. A twenty-four block averaging period begins and ends at midnight of each operating day. [2001 Consent Agreement, Paragraph 1]

EU ID #	Description	Sulfur Limit (lb/MMBtu heat input)
EU0050	Boiler 3	1.5
EU0060	Boiler 4	1.5
EU0070	Boiler 5	2.0

- 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.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$))	Annual arithmetic mean
	0.14 ppm (365 $\mu\text{g}/\text{m}^3$)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 $\mu\text{g}/\text{m}^3$)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 $\mu\text{g}/\text{m}^3$)	1/2-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 $\mu\text{g}/\text{m}^3$)	1/2-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 $\mu\text{g}/\text{m}^3$	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 $\mu\text{g}/\text{m}^3$	1-hour average not to be exceeded more than once in any 2 consecutive days

Operational Limitation/Monitoring:

- 1) The permittee shall maintain and operate a continuous emission monitoring system (CEMS) in accordance with all the requirements of 40 CFR Part 75 to monitor SO₂ emissions. Results shall be recorded on an automated Data Acquisition Handling System (DAHS).
- 2) The permittee shall ensure that each CEMS meets the equipment, installation, and performance specifications in Appendix A to 40 CFR Part 75; and is maintained according to the quality assurance and quality control procedures in Appendix B to 40 CFR Part 75.
- 3) The permittee shall ensure that all CEMS are in operation and monitoring unit emissions at all times that the affected units (EU0050 through EU0070) combusts any fuel except during periods of calibration, quality assurance, or preventative maintenance, as well as, periods of repair, periods of backups of data from the DAHS or recertification.
- 4) The permittee shall ensure that each CEMS is capable of completing a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive fifteen-minute interval. The permittee shall reduce all SO₂ emissions data to hourly averages. Hourly averages shall be computed using at least one data point in each fifteen minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly average may be computed from at least two data points separated by a minimum of fifteen minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the performance of calibration, quality assurance, or preventive maintenance, or backups of data from the DAHS, or recertification. The permittee shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour.
- 5) The permittee shall prepare and maintain a monitoring plan in accordance with 40 CFR 75.53. A monitoring plan shall contain sufficient information on the CEMS to demonstrate that all unit SO₂ emissions are monitored and reported.

- 6) Whenever the permittee makes a replacement, modification, or change in the certified CEMS, including a change in the automated DAHS or in the flue gas handling system, that affects information reported in the monitoring, then the permittee shall update the monitoring plan, by the applicable deadline specified in 40 CFR 75.62.
- 7) City Utilities shall comply with the stipulated emission rates by burning fuels with a reduced sulfur content. Compliance with the numeric limitations shall be based on unit by unit demonstration of emission rates. The coal blend consistency requirement is only required if City Utilities chooses to blend different coal types (specifically bituminous with sub-bituminous coal blends).
[2001 Consent Agreement, Paragraph 2]
 - a) City Utilities shall operate and maintain the belt scales used to document coal blend consistency, as describe in Appendix I (see Attachment G), in accordance with accepted industry practice for quality assurance and quality control, including but not limited to the manufacturer’s recommended QA/QC practices. [2001 Consent Agreement, Paragraph 2.1]
 - b) The existing Part 75 continuous emission monitoring system (CEMS) will be used to demonstrate compliance for Boilers 3, 4, and 5 (EU0050 through EU0070). City Utilities shall modify the existing data acquisition and reporting systems as necessary to calculate twenty-four hour block averages for reporting purposes. [2001 Consent Agreement, Paragraph 2.2]
 - c) 2001 Consent Agreement, Paragraphs 2.3, 2.3.1, 2.3.2, and 2.3.3 are listed in Permit Condition (EU0040 and EU0045)-003
- 8) Any instance of excess emissions during periods of startup, shutdown, or malfunction shall be governed by the provisions of 10 CSR 10-6.050. These terms shall have the same meaning as given in the Missouri clean air regulations at 10 CSR 10-6.020. Moreover, The Missouri Department of Natural Resources recognizes the need for a short period of one hundred percent bituminous coal as a purge fuel for safety purposes when these units are started and shut down.
[2001 Consent Agreement, Paragraph 3]
- 9) 2001 Consent Agreement, Paragraphs 7, 7.1, 7.2, and 8 are listed in Permit Condition (EU0040 and EU0045)-003
- 10) These *Force Majeure* provisions shall apply to fuel emergencies on Boiler 5 (EU0070). Under certain circumstances beyond the control of City Utilities, the alternate emission limit specified in Paragraph 10.7 of the 2001 Consent Agreement shall apply temporarily to James River Unit 5 (EU0070). This adjustment shall be for the sole purpose of allowing City Utilities to conserve its lowest emitting fuel for use in Units 1 through 4 (EU0040 through EU0060) and shall be implemented only if all of the following conditions are met:
[2001 Consent Agreement, Paragraph 10]
 - a) The need for the adjustment is attributable directly and solely to a temporary emergency conversion to an alternative fuel containing constituents that prevent compliance with the otherwise applicable emission limitations (“nonconforming fuel”).
[2001 Consent Agreement, Paragraph 10.1]
 - b) The conversion to nonconforming fuel is necessary to avoid a significant disruption of power supply from City Utilities to its customers, and an alternative power source is not reasonably available for the duration of the emergency. For the purposes of this paragraph, “reasonably available” shall mean available to City Utilities at a reasonable delivered price.
[2001 Consent Agreement, Paragraph 10.2]
 - c) Alternative sources of fuel, which would enable City Utilities to continue operation in compliance with the emission limitation, are not reasonably available in quantities that would allow continued compliance on all five units. For the purpose of this paragraph, “reasonably available” shall mean available to City Utilities at a reasonable delivered price.
[2001 Consent Agreement, Paragraph 10.3]

- d) City Utilities is unable to make reasonable changes in its method of operation during the emergency period to comply with the emission limit during the emergency.
[2001 Consent Agreement, Paragraph 10.4]
- e) The disruption of a fuel supply of conforming fuel (fuel which would enable City Utilities to comply with the emission limitations) is unforeseeable and unavoidable despite use of the best effects by City Utilities to ensure a supply of conforming fuel.
[2001 Consent Agreement, Paragraph 10.5]
- f) The alternate emission limitation shall continue to apply only so long as the normal supply of conforming fuel is disrupted due to the emergency conditions, and City Utilities resumes compliance with the otherwise applicable emission limitations immediately after resumption of delivery of conforming fuel to James River Power Station.
[2001 Consent Agreement, Paragraph 10.6]
- g) During such an event, the following conditions shall apply:
[2001 Consent Agreement, Paragraph 10.7]
- i) The alternate emission limit applicable to James River Unit 5 (EU0070) shall be three and one-tenth pounds SO₂ per million Btu. Any exceedance of this alternate emission limit shall constitute a violation of the 2001 Consent Agreement, except as may be provided for under paragraph 3 of the consent agreement. [2001 Consent Agreement, Paragraph 10.7.1]
- ii) City Utilities shall notify the Missouri Department of Natural Resources in writing that a fuel emergency condition exists and obtain written approval from the Missouri Department of Natural Resources before charging the Unit 5 bunkers with nonconforming fuel for the purpose of complying with the alternate limit. Notification will also be made to the Missouri Department of Natural Resources' twenty-four hour emergency response telephone line. Written notifications and approvals may be in the form of traditional mail, facsimile transmission, electronic mail, or mutually verifiable means of documentation. Due to the emergency nature of the events covered herein, the Missouri Department of Natural Resources shall respond to City Utilities within thirty-six hours of receiving written notification. [2001 Consent Agreement, Paragraph 10.7.2]
- iii) In order to satisfy paragraphs 10.2, 10.3 and 10.4 of the 2001 Consent Agreement, City Utilities shall prepare a written justification for each claimed fuel emergency incident. The justification shall be submitted to the Department of Natural Resources, as stated in Paragraph 10.7.2 of the consent agreement, to allow a determination of reasonableness on a case-by-base basis by the Missouri Department of Natural Resources.
[2001 Consent Agreement, Paragraph 10.7.3]
- iv) This notification must include a description of the emergency, including the reason for the fuel shortage, the quantities of low-sulfur and high-sulfur coal in storage, steps taken by City Utilities to avoid the emergency condition, and an estimate of the duration of the fuel shortage. [2001 Consent Agreement, Paragraph 10.7.4]
- v) This alternate emission limitation applies only to Unit 5 (EU0070) and will not excuse City Utilities from compliance with the emission limits for Units 1 through 4 (EU0040 through EU0070) nor any other provision of 2001 Consent Agreement.
[2001 Consent Agreement, Paragraph 10.7.5]
- vi) This provision on *Force Majeure* shall not excuse City Utilities from compliance with the ambient SO₂ provision of 10 CSR 10-6.260(4).
[2001 Consent Agreement, Paragraph 10.7.6]

11) If, at any time after the effective date of the 2001 Consent Agreement, either the Missouri Department of Natural Resources or U.S. EPA find it necessary to impose more stringent emission limits or monitoring requirements at James River Power Station than those contained in the 2001 Consent Agreement, the 2001 Consent Agreement will terminate automatically on the effective date of the more stringent requirements. [2001 Consent Agreement, Paragraph 11]

Record Keeping:

- 1) The permittee shall maintain a file on-site of all measurements, data, reports, and other information required by 40 CFR 75.53, 40 CFR 75.57 and 40 CFR 75.59 and the 2001 Consent Agreement. Records include the following: [2001 Consent Agreement, Paragraph 5]
 - a) Fuel analysis data;
 - b) Total fuel consumed during the control period;
 - c) The total heat input for each emissions unit during the control period;
 - d) Reports of all stack testing conducted;
 - e) All other data collected by a CEMS necessary to convert the monitoring data to the units of the applicable emission limitation;
 - f) All performance evaluations conducted in the past year;
 - g) All monitoring device calibration checks including CEMS QA/QC data;
 - h) All monitoring system, monitoring device and performance testing measurements;
 - i) Records of adjustments and maintenance performed on monitoring systems and devices; and
 - j) A log identifying each period during which the CEMS or alternate procedure was inoperative, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.
- 2) All records shall be kept in a form suitable for inspection for at least five years and be made available immediately to the Department of Natural Resources' personnel upon request.

Reporting:

- 1) The permittee shall submit all quarterly reports required by 40 CFR Part 75. These reports are due within thirty days after the end of each calendar quarter. The quarterly reports must include the following essential information:
 - a) Facility information in accordance with 40 CFR 75.64(a)(1);
 - b) Hourly and cumulative emissions data;
 - c) Hourly unit operating information (e.g., load, heat input rate, operating time, etc.);
 - d) Monitoring plan information;
 - e) Results of required quality assurance tests (e.g., daily calibrations, linearity checks, RATAs, etc.); and
 - f) Certification statements from the Designated Representative or Authorized Account Representative (or the Alternate Representative), attesting to the completeness and accuracy of the data.
- 2) The permittee shall submit quarterly excess emissions reports to the Missouri Department of Natural Resources. Quarterly reports shall identify any twenty-four hour period wherein the emission rate from any unit exceeded the applicable SO₂ standard, together with the magnitude and duration of excess emissions. The report also will identify any period of unit operation in which the corresponding CEMS is out of service, as defined under 40 CFR Part 75. Quarterly excess emissions reports shall be due on or before the thirtieth day following each calendar quarter, beginning with the calendar quarter during which 2001 Consent Agreement became effective. [2001 Consent Agreement, Paragraph 4]

- 3) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, Missouri 65102, no later than ten days after any deviations/exceedance of this permit condition.

PERMIT CONDITION (EU0050 through EU0070)-005
10 CSR 10-6.270 Acid Rain Source Permits Required

Emission Limitation:

The permittee shall obtain an Acid Rain Permit for EU0050 through EU0070 pursuant to Title IV of the Clean Air Act.

A Phase II permit (Missouri Department of Natural Resources project 2004-06-092, ORIS Code 2161) was issued to the permittee on December 7, 2007, with effective date from January 1, 2007, through December 31, 2011. Sulfur dioxide (SO₂) and nitrous oxides (NO_x) are referenced in this existing Title IV: Phase II Acid Rain Permit for the installation. (See Attachment H)

Monitoring/ Record Keeping:

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

Reporting:

The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75. Submission of these reports through electronic media provided by EPA is acceptable.

PERMIT CONDITION (EU0050 through EU0070)-006
10 CSR 10-6.350 Emission Limitations and Emission Trading of Oxides of Nitrogen

Emission Limitations:

- 1) The permittee shall limit emissions of NO_x to the rate of 0.35 pounds per million Btu NO_x of heat input during the control period. The control period is defined as the period between May 1 and September 30 of each calendar year.
- 2) In lieu of complying with the above emission limit, the permittee may comply through the NO_x emissions trading program under 10 CSR 10-6.350(3)(B).
 - a) Compliance with this rule 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_x authorized account representative.
 - a) Each affected unit shall have only one NO_x authorized account representative with respect to all matters under the NO_x trading program. Each affected unit may have only one alternate NO_x authorized account representative who may act on behalf of the NO_x authorized account representative.

- b) A NO_x 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_x authorized account representative or the alternate NO_x authorized account representative.
- 2) Control Period NO_x Allowances.
 - a) By October 31 following each control period, each NO_x 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_x unit.
 - 3) By the end of the NO_x allowance transfer deadline¹, each NO_x unit shall have sufficient NO_x allowances in their compliance account to allow for deductions in 10 CSR 10-6.350(3)(B)4.B.
 - a) The NO_x allowances are available to be deducted for compliance with a unit's NO_x emissions limitation for a control period in a given year only if the NO_x 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_x allowance transfer deadline for that control period.
 - b) The NO_x authorized account representative may identify by serial number, the NO_x 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_x allowances may be banked for future use or transfer into a compliance account or an overdraft account, as follows:
 - a) Any NO_x allowance that is held in a compliance account or an overdraft account, will remain in such account until the NO_x 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_x allowance, any NO_x 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_x 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_x allowances may be used for compliance in the control period for the current year.
 - 6) Banked NO_x 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)3.² and (3)(A)4.³ are applicable to the control region for which 10 CSR 10-6.350(3)(A)1.⁴ is applicable on a one and one-half to one (1.5:1) basis.

¹ Close of business on December 31 following the control period or, if December 31 is not a business day, close of business on the first business day thereafter and is the deadline by which NO_x allowances may be submitted for recording in an affected unit's compliance account, or the overdraft account of the installation where the unit is located.

² Cyclone EGUs located in the counties of Buchanan, Jackson, Jasper or Randolph.

³ EGUs, other than cyclone EGUs, located in any county not identified in paragraph (3)(A)1. or (3)(A)2. of 10-6.350.

⁴ EGUs located in the counties of Bollinger, Butler, Cape Girardeau, Carter, Clark, Crawford, Dent, Dunklin, Gasconade, Iron, Lewis, Lincoln, Madison, Marion, Mississippi, Montgomery, New Madrid, Oregon, Pemiscot, Perry, Phelps, Pike, Ralls, Reynolds, Ripley, St. Charles, St. Francois, Ste. Genevieve, Scott, Shannon, Stoddard, Warren, Washington and Wayne.

- 7) Banked NO_x 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)2.⁵ is applicable on a one and one-half to one (1.5:1) basis.
- 8) Banked NO_x 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) The director may correct any error in any NO_x Allowance Tracking System account. Within ten business days of making such correction, the director will notify the NO_x authorized account representative for the account. The NO_x authorized account representative will then have ten business days to appeal the correction if they feel the correction was made in error.
- 10) A NO_x allowance transfer that is submitted for recording following the NO_x allowance transfer deadline and that includes any NO_x allowances allocated for a control period prior to or the same as the control period to which the NO_x allowance transfer deadline applies will not be recorded until after completion of the process of recording of NO_x allowance allocations of 10 CSR 10-6.350.

Where a NO_x 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 using the certified Continuous Emissions Monitoring Systems (CEMS) (See bullet 3), below).
- 2) All valid data shall be used for calculating NO_x emissions rates. Substituted missing data required by 40 CFR Part 75, Subpart D are not considered valid data and should not be used for calculating NO_x emissions rate.
- 3) Any affected coal-fired unit shall install, certify, operate, maintain, and quality assure a NO_x and diluent CEMS pursuant to the requirements in 40 CFR Part 75.

Record Keeping:

- 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 this rule;
 - 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 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.

⁵ EGUs located in the City of St. Louis and the counties of Franklin, Jefferson and St. Louis.

Reporting:

- 1) Projected NO_x allowances.
 - a) By March 1, of each year (beginning 2004), the NO_x authorized account representative for each affected unit shall submit to the department a report containing the following:
 - i) The projected control period NO_x emission rate for each affected unit;
 - ii) The average of the three most recent control period heat inputs, unless those three periods are not representative of normal operation; and
 - iii) A plan identifying the methodology for compliance with the emission limitations of 10 CSR 10-6.350.
 - b) The department will review each report and make any amendments within fifteen working days.
 - c) The department will develop a summary of projected NO_x allowances on a unit by unit and statewide basis for distribution on or before May 1 of each year.
- 2) The NO_x authorized account representatives seeking the recording of a NO_x allowance transfer shall submit the transfer request to the director. To be considered correctly submitted, the NO_x 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 NO_x allowance to be transferred; and
 - c) The printed name and signature of the NO_x authorized account representative of the transferor account and the date signed.
- 3) 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 NO_x authorized account representative;
 - c) NO_x unit name, compliance and overdraft account numbers;
 - d) NO_x emission rate limitation (pounds per million BTu);
 - e) Actual NO_x emission rate (pounds per million BTu) for the control period;
 - f) Actual heat input (Pounds per million BTu) for the control period. The unit's total heat input for the control period in each year will be determined in accordance with the test methods and monitoring requirements;
 - g) Actual NO_x mass emissions (tons) for the control period.
- 4) Any unit with valid CEMS data for the control period must use that data to determine compliance with the provisions of this rule.
- 5) 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's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, as required by Section IV of this permit.

PERMIT CONDITION (EU0050 through EU0070)– 007
10 CSR 10-6.060 Construction Permits Required
Construction Permit No. 032007-003, Issued March 8, 2007

Emission Limitations:

- Standards of Performance for Best Available Control Technology (BACT) for Carbon Monoxide (CO)
- 1) James River Power Station shall not emit more than 0.35 pounds of CO per million British Thermal Units (pounds per million BTu) of heat input each from Unit 3, Unit 4, and Unit 5 based on a thirty-day rolling average. This limit is exclusive of emissions occurring during start-up, shutdown and malfunction. [Special Condition 1A]

- 2) James River Power Station shall not emit more than 3,213 tons per year of CO combined from Unit 3, Unit 4, and Unit 5. This limit is inclusive of emissions during start-up, shutdown and malfunction. [Special Condition 1B]

Monitoring:

- 1) James River Power Station shall operate continuous CO emission monitors to measure, record and report CO emissions compliance with the limitations. [Special Condition 1C]
- 2) James River Power Station shall install, certify, operate, calibrate, test and maintain Continuous Emission Monitoring System (CEMS) for CO and any necessary auxiliary monitoring equipment in accordance with all applicable regulations. If there are conflicting regulatory requirements, the more stringent shall apply. [Special Condition 2A]
- 3) CEMS certification shall be made pursuant to 40 CFR Part 60, Appendix B, Performance Specification 4. [Special Condition 2B]
- 4) Periodic quality assurance assessments shall be conducted according to the procedures outlined in 40 CFR Part 60, Appendix F. [Special Condition 2C]
- 5) James River Power Station shall install and operate a data acquisition and handling system to calculate emissions in terms of the emission limitations specified in this permit. [Special Condition 2D]

Record Keeping:

James River Power Station shall maintain all records required by this permit, on-site, for the most recent sixty months of operation and shall make such records available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 3]

Reporting:

James River Power Station shall report CO emissions in their semi-annual monitoring (SAM) report and in the annual compliance certification (ACC) statement. [Special Condition 4]

EU0080 AND EU0090 – COMBUSTION TURBINES 1 AND 2			
Emission Unit	Description	Manufacturer/ Model #	2004 EIQ Reference #
EU0080	Combustion Turbine 1: combustion turbine; dual fueled - natural gas and No. 2 fuel oil; MHDR 991 MMBtu/hr; design rated power output 75 MW; equipped with water injection (CD07); installed 1989	General Electric/ Frame 7 EA	EP11
EU0090	Combustion Turbine 2: combustion turbine; dual fueled - natural gas and No. 2 fuel oil; MHDR 973 MMBtu/hr; design rated power output 80 MW; equipped with water injection (CD08); installed 1991	General Electric/ Frame 7 EA	EP12

PERMIT CONDITION (EU0080 and EU0090)-001

10 CSR 10-6.060 Construction Permits Required

Construction Permit 0391-002, Issued March 6, 1991

10 CSR 10-6.070 New Source Performance Regulations

40 CFR Part 60 Subpart A General Provisions and Subpart GG Standards of Performance for Stationary Gas Turbines

Notes:

The Combustion Turbines 1 and 2 (EU0080 and EU0090) are subject to the standards for nitrogen oxides in both construction permit 0391-002 and the NSPS 40 CFR Part 60 Subpart GG. The emissions limitations established in subpart GG are less stringent than the emissions limitations established by construction permit 0391-002. Therefore, Permit Condition (EU0080 and EU0090)-001 includes the more stringent limitations established by construction permit 0391-002.

Emission Limitations/Operational Limitations:

- 1) Best Available Control Technology for the emissions of nitrogen oxides from the operation of each of these turbines (Combustion Turbine 1 and Combustion Turbine 2) is set at forty-two parts per million by volume, one-hour rolling average, corrected to fifteen percent oxygen, when burning natural gas. [Permit 0391-002, Special Condition 1]
- 2) Best Available Control Technology for the emissions of nitrogen oxides from the operation of each of these turbines (Combustion Turbine 1 and Combustion Turbine 2) is set at sixty-five parts per million by volume, one-hour rolling average, corrected to fifteen percent oxygen, when combusting No. 2 fuel oil. Recognizing that fuel-bound nitrogen can be a problem when combusting No. 2 fuel oil, an allowance for fuel-bound nitrogen is allowed. The allowance is taken from the following table, and added to the sixty-five ppm_v limit. [Permit 0391-002, Special Condition 2]

Fuel-bound Nitrogen (percent by weight)	Allowance (ppm _v)
$N \leq 0.015$	0
$0.015 < N \leq 0.05$	400 (N)

- 3) The permittee shall comply with one or the other of the following conditions: [40 CFR 60.333]
 - a) The permittee shall not cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at fifteen percent oxygen and on a dry basis. [40 CFR 60.333(a)]
 - b) The permittee shall not burn in any stationary gas turbine any fuel which contains total sulfur in excess of zero and eight-tenths percent by weight (8,000 ppmw). [40 CFR 60.333(b)]
- 4) The aggregate emissions from the operation of both turbines shall not exceed the de minimis emissions limits for any pollutant except nitrogen oxides. Performance testing shall be conducted by the permittee in order to verify that the de minimis emissions rates for particulate matter, carbon monoxide, and volatile organic compounds will not be exceeded under any operating conditions permitted by permit 0391-002. Performance testing shall be conducted in accordance to with relevant test methods of 10 CSR 10-6.030 Sampling Methods for Air Pollution Sources, (5) for particulate emissions, (10) for carbon monoxide, and (18) Section 7.2 for volatile organic compounds. Particulate testing shall be conducted at maximum load, both fuels, three runs each. Testing for carbon monoxide and volatile organic compounds shall be conducted at four loads, both

fuels (natural gas and No. 2 fuel oil), three runs each. Test Method 18, Section 7.2 is specified because it has lower minimum detection level than the Department of Natural Resources' Method 13A. Sulfur dioxide will be measured by fuel analysis rather than by Method 6 or 6C. There being no SO₂ reduction in the gas turbine, this method will provide acceptable accuracy.

[Permit 0391-002, Special Condition 3]

- 5) Neither of these turbines shall be operated in excess of 3,000 hours per year. This operation restriction is established on a rolling monthly basis, with the end of each month establishing a new yearly period. [Permit 0391-002, Special Condition 4]
- 6) These two turbines combined shall not combust in excess of 1.4 million gallons of No. 2 fuel oil, with a sulfur content of zero and four-tenths percent. (However, the voluntary PW permit condition (PW001) limits the sulfur content to zero and one-tenth percent, by weight.) This is equivalent to 260 hours per year. This will insure that the de minimis emission limit of forty tons per year sulfur dioxide will not be exceeded due to sulfur dioxide emissions from fuel-bound sulfur. This operating restriction is established on a rolling monthly basis, with the end of each month establishing a newly yearly period. These operating hours may be split between the two turbines in any manner which City Utilities chooses. Should City Utilities choose to use a distillate oil with a sulfur content different from zero and four-tenths percent, the maximum combustion limit of 1.4 million gallons of No. 2 fuel oil must be adjusted to compensate for the difference in fuel sulfur content. [Permit 0391-002, Special Condition 5 and 40 CFR 60.333(b)]
- 7) City Utilities shall adhere to the requirements of 10 CSR 10-6.050, Start-up, Shutdown and Malfunction Conditions, at all times that these turbines are operated. [Permit 0391-002, Special Condition 6]
- 8) If any one or more of the baseload coal-fired units at either James River or Southwest is out of service due to malfunction, or if additional electrical power is required in order to preserve the integrity of the power grid, City Utilities may operate these two turbines for up to an additional 3,000 hours in any calendar year, not to exceed a combined (both turbines together) annual operating rate of 9,000 hours. Further, such operation shall be done only while combusting natural gas. City Utilities shall take all reasonable steps necessary to restore to operation the affected baseload units in as timely a manner as possible. BACT must be re-evaluated if this agency subsequently decides that either of these turbines have been used in excess of 3,000 hours per year without a generation emergency having actually existed, or that such excess usage of these turbines is no longer temporary. [Permit 0391-002, Special Condition 7]
- 9) No fuels other than natural gas or No. 2 fuel oil shall be combusted in these gas turbines at any time. [Permit 0391-002, Special Condition 8]
- 10) Combustion Turbine 1 and Combustion Turbine 2 are subject to the requirements of 10 CSR 10-6.070 New Source Performance Standards. As such, these turbines are subject to the requirements of 40 CFR Subpart A General Provisions and Subpart GG Standards of Performance for Stationary Gas Turbines. [Permit 0391-002, Special Condition 11]
- 11) City Utilities is exempt from conditions 1) and 2) in this section, (Special Conditions 1 and 2 of permit 0391-002), when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine. "Ice fog" is defined as an atmospheric suspension of highly reflective ice crystals. [Permit 0391-002, Special Condition 15 and 40 CFR 60.332(f)]

Monitoring:

- 1) City Utilities shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the fuel consumption and ratio of water to fuel being fired in the turbine. This system

shall be accurate to within \pm five percent, and shall be approved by the director.

[Permit 0391-002, Special Condition 9 and 40 CFR 60.334(a)]

- 2) The water to fuel ratio that are continuously monitored as described in 40 CFR 60.334(a) shall be monitored during the performance test required under 40 CFR 60.8, to establish acceptable values and ranges. The permittee may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The permittee shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan.
[40 CFR 60.334(g)]
- 3) The permittee shall monitor the total sulfur content of the fuel being fired in the turbine using the total sulfur methods described in 40 CFR 60.335(b)(10), except as provided in 40 CFR 60.334(h)(3) and listed below: [40 CFR 60.334(h)(1)]
 - a) The permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u). The permittee shall use one of the following sources of information to make the required demonstration: [40 CFR 60.334(h)(3)]
 - i) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is twenty grains/100 scf or less; or [40 CFR 60.334(h)(3)(i)]
 - ii) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed twenty grains/100 scf. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of appendix D to Part 75 of Chapter 40 is required.
[40 CFR 60.334(h)(3)(ii)]
- 4) The permittee shall monitor the nitrogen content of the fuel combusted in the turbine, if the permittee claims an emission allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the permittee to calculate STD). The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.
[40 CFR 60.334(h)(2)]
- 5) City Utilities shall monitor the sulfur content and the nitrogen content of the fuel being fired in the turbines. The frequency of determination of these values shall be as follows: [Permit 0391-002, Special Condition 10]
 - a) If the turbines are supplied their fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from another source. [Permit 0391-002, Special Condition 10.A]
 - b) If the turbines are supplied fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators, or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by both the director of the Department of Natural Resources, and by the administrator of the U. S. Environmental Protection Agency, before they can be used to comply with this condition. [Permit 0391-002, Special Condition 10.B]
- 6) The frequency of determining the sulfur and nitrogen content of the fuel shall be as follows:
[40 CFR 60.334(i)]

- a) *Fuel oil.* For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D to Part 75 (*i.e.*, flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). If an emission allowance is being claimed for fuel-bound nitrogen, the nitrogen content of the oil shall be determined and recorded once per unit operating day. [40 CFR 60.334(i)(1)]
- b) *Gaseous fuel.* Any applicable nitrogen content value of the gaseous fuel shall be determined and recorded once per unit operating day, only if the permittee claims an allowance for fuel bound nitrogen (*i.e.*, if an F-value greater than zero is being or will be used by the permittee to calculate STD). [40 CFR 60.334(i)(2)]
- 7) If a custom schedule has been approved, the permittee may, without submitting a special petition to the administrator, continue monitoring on this schedule. [40 CFR 60.334(h)(4)]
- 8) Alternately, two custom sulfur monitoring schedules set forth in paragraphs (i)(3)(i)(A) through (D) and in paragraph (i)(3)(ii) of 40 CFR 60.334 are acceptable, without prior approval.

Testing:

- 1) The test procedures outline at 10 CSR 10-6.030 Sampling Methods for Air Pollution Sources shall be adhered to by the permittee. Performance testing in accordance with EPA Test Method 20 or 7E/3A shall be conducted by the permittee in order to verify that the emission concentration of nitrogen oxides does not exceed the requirements imposed by bullets 1) and 2) in the Emission Limitation Section of this permit condition (Special Conditions 1 and 2 of permit 0391-002). This testing shall be done at four loads, for both fuels (natural gas and No. 2 fuel oil). A valid test will encompass three runs. The intent is to perform eight valid tests, covering the eight combinations of load and fuel. All test reports shall be submitted to the director. A pre-test meeting shall be held between representatives of the testing firm and this program at least thirty days prior to the date of these performance tests. [Permit 0391-002, Special Condition 13]
- 2) Should performance testing indicate non-compliance with applicable performance standards, the non-compliant turbine shall not be operated for any reason except to provide data for further compliance testing. [Permit 0391-002, Special Condition 14]
- 3) To determine the fuel bound nitrogen content of fuel being fired (if an emission allowance is claimed for fuel bound nitrogen), the permittee may use equipment and procedures meeting the requirements of: [40 CFR 60.335(b)(9)]
 - a) For liquid fuels, ASTM D2597-94 (Reapproved 1999), D6366-99, D4629-02, D5762-02 (all of which are incorporated by reference, *see* §60.17); or [40 CFR 60.335(b)(9)(i)]
 - b) For gaseous fuels, shall use analytical methods and procedures that are accurate to within five percent of the instrument range and are approved by the administrator. [40 CFR 60.335(b)(9)(ii)]
- 4) If the permittee is required under §60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using: [40 CFR 60.335(b)(10)]
 - a) For liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, *see* 40 CFR 60.17); or [40 CFR 60.335(b)(10)(i)]
- 5) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, *see* §60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels

- of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the administrator. [40 CFR 60.335(b)(10)(ii)]
- 6) The fuel analyses required under 40 CFR 60.335(b)(9) and (b)(10) may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency. [40 CFR 60.335(b)(11)]

Record Keeping/Reporting:

- 1) Records shall be kept on-site which detail the number of hours each unit is operated, and the amount of natural gas consumed in these gas turbines, on a per-month basis. These records shall be kept for a period of at least five years, and shall be made available to department personnel during any site inspection. Compliance with the restriction on annual operating hours shall be verified monthly. Reports shall be submitted to the department on a quarterly basis, within thirty days after the end of each quarter. [Permit 0391-002, Special Condition 4]
- 2) Records shall be kept on-site which detail the number of hours each unit is operated, and the amount of No. 2 fuel oil consumed in these gas turbines, on a per-month basis. These records shall be kept for a period of at least five years, and shall be made available to department personnel during any site inspection. Compliance with the restriction on annual operating hours shall be verified monthly. Reports shall be submitted to the department on a quarterly basis, within thirty days after the end of each quarter. [Permit 0391-002, Special Condition 5]
- 3) City Utilities shall be required to keep records in sufficient detail that compliance with the requirement that the annual emission rate of sulfur dioxide not exceed forty tons may be easily and unambiguously verified. Records shall follow the guidelines stated above. [Permit 0391-002, Special Condition 5]
- 4) City Utilities shall record the fuel consumption and ratio of water to fuel being fired in the turbine with a continuous monitoring system. These records shall be kept on-site for a period of at least five years, and shall be made available to department personnel during any site inspection. Excess emissions shall be reported to the department on a quarterly basis. [Permit 0391-002, Special Condition 9]
- 5) The permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows: [40 CFR 60.334(j)]
 - a) Nitrogen oxides. [40 CFR 60.334(j)(1)]
 - i) For turbines using water to fuel ratio monitoring: [40 CFR 60.334(j)(1)(i)]
 1. An excess emission shall be any unit operating hour for which the average water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable water to fuel ratio needed to demonstrate compliance with emission limitations, as established during the performance test required in 40 CFR 60.8. Any unit operating hour in which no water is injected into the turbine shall also be considered an excess emission. [40 CFR 60.334(j)(1)(i)(A)]
 2. A period of monitor downtime shall be any unit operating hour in which water is injected into the turbine, but the essential parametric data needed to determine the water to fuel ratio are unavailable or invalid. [40 CFR 60.334(j)(1)(i)(B)]

3. Each report shall include the average water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of 40 CFR 60.335(b)(1). [40 CFR 60.334(j)(1)(i)(C)]
- ii) If the permittee elects to take an emission allowance for fuel bound nitrogen, then excess emissions and periods of monitor downtime are as described in 40 CFR 60.334(j)(1)(ii)(A) and (B). [40 CFR 60.334(j)(1)(ii)]
 1. An excess emission shall be the period of time during which the fuel-bound nitrogen (N) is greater than the value measured during the performance test required in 40 CFR 60.8 and used to determine the allowance. The excess emission begins on the date and hour of the sample which shows that N is greater than the performance test value, and ends with the date and hour of a subsequent sample which shows a fuel nitrogen content less than or equal to the performance test value. [40 CFR 60.334(j)(1)(ii)(A)]
 2. A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour that a required sample is taken, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample. [40 CFR 60.334(j)(1)(ii)(A)]
- b) Sulfur dioxide. If the permittee is required to monitor the sulfur content of the fuel under 40 CFR 60.334(h): [40 CFR 60.334(j)(2)]
 - i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds zero and eight-tenths weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. [40 CFR 60.334(j)(2)(i)]
 - ii) If the option to sample each delivery of fuel oil has been selected, the permittee shall immediately switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds zero and eight-tenths weight percent. The permittee shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to 40 CFR 60.334(j)(2)(i). When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option. [40 CFR 60.334(j)(2)(ii)]
 - iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.
[40 CFR 60.334(j)(2)(iii)]
- c) Ice fog. Each period during which an exemption provided in 40 CFR 60.332(f) is in effect shall be reported in writing to the administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.
[40 CFR 60.334(j)(4)]

- d) All quarterly reports (See Attachment O or equivalent form shall be used) required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each calendar quarter. [\[40 CFR 60.334\(j\)\(5\)\]](#)
- 6) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, Missouri 65102, no later than ten days after any deviations/exceedance of this permit condition.

PERMIT CONDITION (EU0080 and EU0090)-002 10 CSR 10-6.350 Emission Limitation and Emissions Trading of Oxides of Nitrogen

Emission Limitations:

The permittee shall limit emissions of NO_x to the rate of the more stringent applicable permitted NO_x limitation under Permit Condition (EU0080 and EU0090)-001 during the control period (the period beginning May 1 of a calendar year and ending on September 30 of the same calendar year.)

Monitoring/Record Keeping/Reporting:

The NO_x emission limitations of Permit Condition (EU0080 and EU0090)-001 will ensure that Combustion Turbines 1 and 2 (EU0080 and EU0090) will to be in compliance with this regulation. Calculations demonstrating compliance are in Attachment J. The permittee shall keep this attachment with this permit. No additional monitoring, record keeping or reporting is required for this permit condition.

PERMIT CONDITION (EU0080 and EU0090)-003 City of Springfield Code, Chapter 6, Article III, Division 2, Visible Air Contaminants
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Note: This requirement is not federally or state enforceable.

Emission Limitation:

- 1) No person shall discharge or permit the discharge of, into the outdoor atmosphere, from any single new source of emission whatsoever, any air contaminant:
 - a) Of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart; or
 - b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart.
- 2) Exceptions: Notwithstanding any of the provisions of Sections 6-221 and 6-212, it shall not be unlawful to discharge into the outdoor atmosphere from any single source of emission:
 - a) Air contaminants of a shade, density or opacity equal to but not darker than that designated as number 2 (forty percent opacity) on the Ringelmann chart so long as the emission shall not exist for a period aggregating more than six minutes in any consecutive sixty-minute period.
 - b) Air contaminants resulting from an unavoidable breakdown or malfunction of equipment.

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.

- 2) The following monitoring schedule must be maintained, when visible emissions perceived or believed to exceed the applicable opacity standard, otherwise see bullet 4), below:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made once per month. If a violation is noted following a Method 9 Visual Observation, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- 4) The permittee is allowed to maintain its current monitoring schedule under its existing permit, unless visible emissions perceived or believed to exceed the applicable opacity standard.
- 5) A Method 9 Visual Observation can be used to satisfy the monitoring requirement, in lieu of a Method 22.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment C1 or C2), 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. (see Attachment D)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
- 4) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION EU0090-004
10 CSR 10-6.270 Acid Rain Source Permits Required

Emission Limitation:

The permittee shall obtain an Acid Rain Permit for EU0090 pursuant to Title IV of the Clean Air Act.

A Phase II permit (Missouri Department of Natural Resources project 2004-06-092, ORIS Code 2161) was issued to the permittee on December 7, 2007, with effective date from January 1, 2007, through December 31, 2011. Sulfur dioxide (SO₂) and nitrous oxides (NO_x) are referenced in this existing Title IV: Phase II Acid Rain Permit for the installation. (See Attachment H)

Monitoring/ Record Keeping:

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

Reporting:

The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I and 40 CFR part 75. Submission of these reports through electronic media provided by EPA is acceptable.

EU0100 THROUGH EU0120 – FLY ASH COLLECTION SYSTEM			
Emission Unit	Description	Manufacturer/ Model #	2004 EIQ Reference #
EU0100	Dry Fly Ash Exhauster: pneumatic conveying of the fly ash from the electric precipitators to dry storage silos; MHDR 13 ton/hr; equipped with fabric filter; installed 2003	United Conveyor	EP160
EU0110	Fly Ash Silo Dry Unloading Spout: marketable portion of fly ash is transferred to transport trucks via a spout with a local exhaust fan to return fugitive emissions to the storage silo; MHDR 120 ton/hr; equipped with dust suppression system; installed 2003	United Conveyor	EP161
EU0120	Fly Ash Unloading (Paddle Mixer or DustMaster): remaining portion of fly ash is run through a paddle mixer at the discharge point of the storage silo and the conditioner tumbles the ash with water to form pellets; pellets are loaded on truck and hauled to landfill; MHDR 120 ton/hr; installed 2003	United Conveyor	EP162

PERMIT CONDITION (EU0100 through EU0120)-001
10 CSR 10-6.060 Construction Permits Required
Construction Permit 032003-017, Issued January 31, 2003

Operational Limitation/Monitoring:

- 1) Baghouse(s) - Operation, Maintenance & Record Keeping Requirements
 - a) The baghouse(s) associated with the pneumatic conveying units (EU0100) must be in use at all times when the associated equipment is in operation. The baghouse(s) and any related

instrumentation or equipment shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse(s) shall be equipped with a gauge or meter, which indicates the pressure drop across the baghouse. This gauge or meter shall be located in such a way it may be easily observed by Department of Natural Resources' employees.

[Permit 032003-017, Special Condition 1.A.]

- b) Replacement bags for the baghouse(s) shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance). [Permit 032003-017, Special Condition 1.B.]
 - c) The installation shall monitor and record the operating pressure drop across the baghouse at least once in every twenty four hour period when the associated equipment is operated. The operating pressure drop shall be maintained within the normal operating range specified by the manufacturer's performance warranty. If the pressure drop reading should fall outside of this normal operating range, then the associated equipment shall be shut down as quickly as is reasonably practical. Corrective actions shall be taken to address the cause of the non-normal pressure drop and the baghouse(s) shall be returned to normal operation before re-starting the equipment. [Permit 032003-017, Special Condition 1.C.]
 - d) The installation shall inspect the baghouse(s) at least once every six months and at a minimum, conduct the following activities:
 - i) Check the cleaning sequence for the baghouse for proper operation;
 - ii) Thoroughly inspect the bags for leaks and signs of wear;
 - iii) Inspect all components of the control system that are not subject to wear or plugging, including structural components, housing, ducts, hoods, etc.; and
 - iv) If leaks or abnormal conditions are found during these inspections, the appropriate remedial actions shall be implemented before re-starting the equipment. [Permit 032003-017, Special Condition 1.D.]
- 2) Fly Ash Truck Loading
- a) James River Power Station shall continually operate and maintain the dust suppression system (the close-fitting snorkel encased by a transfer tube that vents fugitive emissions back to the silo during truck loading) rated at fifty percent efficiency to control PM₁₀ emissions from the fly ash truck loading (EU0110). [Permit 032003-017, Special Condition 2.A.]
- 3) Paddle Mixer (or DustMaster)
- a) The Paddle Mixer (EU0120) must be in use at all times when ash is being conditioned for disposal in the landfill. The Paddle Mixer (or DustMaster) shall be operated and maintained in accordance with the manufacturer's specifications. [Permit 032003-017, Special Condition 3.A.]

Record Keeping:

- 1) Baghouse(s) - Operation, Maintenance & Recordkeeping Requirements
 - a) The installation shall maintain an operating, maintenance and inspection log for the baghouse(s) which shall include the following: [Permit 032003-017, Special Condition 1.E.]
 - i) Incidents of malfunction(s) including the date(s) and duration of the event, the probable cause, any corrective actions taken and the impact on emissions due to the malfunction;
 - ii) Any maintenance activities conducted on the unit, such as bag replacement, replacement of equipment, etc.; and
 - iii) A written record of regular inspection schedule, the date and results of all inspections including any actions or maintenance activities that result from that inspection.
- 2) Fly Ash Truck Loading
 - a) Records shall be kept on site for the most recent twenty-four months for the dust suppression system listing periods of malfunction, the cause of the malfunction, and remedial action taken.

These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request. [Permit 032003-017, Special Condition 2.B.]

- 3) Paddle Mixer (or DustMaster)
 - a) Records shall be kept on site for the most recent twenty-four months for the Paddle Mixer (or DustMaster) listing periods of malfunction, the cause of the malfunction, and remedial action taken. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request. [Permit 032003-017, Special Condition 3.B.]
- 4) All records shall be maintained for five years. They shall be kept on-site for at least two years. They may be kept in either hard-copy form or on computer media.

Reporting:

Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION (EU0100 through EU0120)-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 source any visible emissions with an opacity equal to or greater than twenty percent.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any sixty minutes air contaminants with an opacity equal to but not greater than forty percent.
- 3) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any sixty minutes air contaminants with an opacity equal to but not greater than sixty percent if the emission is caused by the starting of or cleaning of a fire, and so long as such emissions do not occur on more than three occasions during any consecutive twenty-four hour period.

Monitoring:

- 1) The permittee shall conduct opacity readings on these emission units (EU0100 through EU0120) using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained, when visible emissions perceived or believed to exceed the applicable opacity standard, otherwise see bullet 4), below:

- a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made once per month. If a violation is noted following a Method 9 Visual Observation, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
 - 4) The permittee is allowed to maintain the current monitoring schedule under its existing permit, unless visible emissions perceived or believed to exceed the applicable opacity standard.
 - 5) A Method 9 Visual Observation can be used to satisfy the monitoring requirement, in lieu of a Method 22.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment C-1 or C-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. (see Attachment D)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
- 4) All records shall be maintained for five years. They shall be kept on-site for at least two years. They may be kept in either hard-copy form or on computer media.
- 5) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the permittee determined using the Method 9 test that the emission unit exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

<p>PERMIT CONDITION (EU0100 through EU0120)-003 City of Springfield Code, Chapter 6, Article III, Div. 2 Visible Air Contaminants</p>

Note: This requirement is not federally or state enforceable.

Emission Limitation:

- 1) No person shall discharge or permit the discharge of, into the outdoor atmosphere, from any single new source of emission whatsoever, any air contaminant:
 - a) Of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart; or

- b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke of a shade or density equal to or darker than that designated as number 1 (twenty percent opacity) on the Ringelmann smoke chart.
- 2) Exceptions: Notwithstanding any of the provisions of Sections 6-221 and 6-212, it shall not be unlawful to discharge into the outdoor atmosphere from any single source of emission:
 - a) Air contaminants of a shade, density or opacity equal to but not darker than that designated as number 2 (forty percent opacity) on the Ringelmann chart so long as the emission shall not exist for a period aggregating more than six minutes in any consecutive sixty-minute period.
 - b) Air contaminants resulting from an unavoidable breakdown or malfunction of equipment.

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in U.S. EPA 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 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 certified source representative or contracted service provider would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained, when visible emissions perceived or believed to exceed the applicable opacity standard, otherwise see bullet 4), below:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks. Should no violation of this regulation be observed during this period then-
 - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
 - c) Observations must be made once per month. If a violation is noted following a Method 9 Visual Observation, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- 4) The permittee is allowed to maintain its current monitoring schedule under its existing permit, unless visible emissions perceived or believed to exceed the applicable opacity standard.
- 5) A Method 9 Visual Observation can be used to satisfy the monitoring requirement, in lieu of a Method 22.

Record Keeping:

- 1) The permittee shall maintain records of all observation results (see Attachment C1 or C2), 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. (see Attachment D)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment E)
- 4) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.

5) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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, record keeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION (EU0100 through EU0120)-004
City of Springfield Code, Chapter 6, Article III, Division 4, Particulate Matter from Industrial Processes

Note: This requirement is not federally or state enforceable.

Emission Limitation

- 1) Particulate matter shall not be emitted from EU0100 in excess of 22.86 lb/hr.
 - a) This emission rate was calculated using the following equation:
For process weight rates no greater than 60,000 lb/hr:
$$E = 4.1(P)^{0.67}$$
Where:
E = rate of emission in lb/hr
P = process weight rate in ton/hr
- 2) Particulate matter shall not be emitted from EU00110 and EU0120 in excess of 53.1 lb/hr. This emission rate was calculated using the following equation:
 - a) For process weight rates greater than 60,000 lb/hr:
$$E = 55.0(P)^{0.11} - 40$$
Where:
E = rate of emission in lb/hr
P = process weight rate in tons/hr
- 3) The concentration of particulate matter in the exhaust gases shall not exceed zero and three-tenths grain per standard cubic feet of exhaust gases.

Monitoring/Record Keeping/Reporting:

The operational limitations of Permit Condition (EU0100 though EU0120)-001 will ensure that these emission units will be in compliance with this regulation as long as the control equipment is operated properly. Calculations demonstrating compliance are in Attachment F. The permittee shall keep this attachment with this permit. No additional monitoring, record keeping or reporting is required for this permit condition.

EU0130 AND EU0140 – EMERGENCY EQUIPMENT			
Emission Unit	Description	Manufacturer /Model #	2004 EIQ Reference #
EU0130	Emergency Fire Pump: diesel powered stationary IC engine for pumping water through fire protection system in emergency situation; MHDR: 113 HP	NA	EP127
EU0140	Emergency DC Generator: emergency electrical generator for black startup situations and supplemental auxiliary power; MHDR: 33.5 HP	NA	EP159

PERMIT CONDITION EU0130-001
10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

Emission Limitation:

- 1) Emissions from any new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- 2) Stack gasses shall not contain more than thirty-five milligrams per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 3) 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.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³))	Annual arithmetic mean
	0.14 ppm (365 µg/m ³)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m ³	1-hour average not to be exceeded more than once in any 2 consecutive days

Monitoring/Record Keeping/Reporting:

The permittee will always be in compliance with this regulation. Calculations demonstrating compliance are in Attachment K. The permittee shall keep this attachment with this permit. No monitoring or reporting is required for this permit condition.

PERMIT CONDITION EU0140-001
10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

Emission Limitation:

- 1) Emissions from any existing source operation shall not contain more than two thousand parts per million by volume (2000 ppmv) of sulfur dioxide.
- 2) Stack gasses shall not contain more than seventy milligrams per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 3) 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(4) of August 30, 1996 version, 10 CSR 10-6.260(3)(B) of May 30, 2004 version & 10 CSR 10-6.010, Ambient Air Quality Standards]

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³))	Annual arithmetic mean
	0.14 ppm (365 µg/m ³)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days

Operational Limitation/Equipment Specifications:

The emission unit shall be limited to burning No. 2 fuel oil with a sulfur content not to exceed zero and one-tenth percent by weight as required by Plant Wide Permit Condition PW001.

Monitoring/Record Keeping:

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 3) All records shall be maintained for five years.

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

EU0150 – Haul Roads			
Emission Unit	Description	Manufacturer /Model #	EIQ Reference #
EU0150	Paved Haul Roads for propane-air peak shaving plant.	NA	EP255

PERMIT CONDITION EU0150-001
10 CSR 10-6.060 Construction Permits Required
Construction Permit 102006-006, Issued October 10, 2006

Emission Limitations/Operational Limitations:

James River Power Station shall control dust from the haul road(s) by using paved haul road(s). The installation shall periodically water and/or wash the paved portions of the affected areas such that no “appreciable visible emission” of particulate matter is allowed to occur from the surface of these paved road(s). [Special Condition 1]

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.

Springfield City Code Article XVI Breakdown of Equipment

In the event that emissions as a direct result of upset conditions or breakdown exceed any of the established limits, the permittee shall advise the city of Springfield Director of Health of such a breakdown and outline a corrective program acceptable to the director.

This requirement is not federally or state enforceable.

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
 - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
 - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
 - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
 - b) Yard waste, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
 - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
 - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
 - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
 - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
 - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and

- (4) In each instance, the twenty-one (21)-day burning period shall be determined by the director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department director; and
- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) James River Power Plant may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Installation Name fails to comply with the provisions or any condition of the open burning permit.
- a) In a non-attainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Record Keeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

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

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
- a) Name and location of installation;
- b) Name and telephone number of person responsible for the installation;
- c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
- d) Identity of the equipment causing the excess emissions;
- e) Time and duration of the period of excess emissions;

- f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the 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 fifteen 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 Section 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.
 - 6) Use Attachment L or equivalent approved by the director to record and submit written notification of Startup, Shutdown, and Malfunction events which result in excess emissions that exceed one hour. A facsimile of the notification is sufficient.

Springfield City Code Article III 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.

This requirement is not federally or state enforceable.

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.
- 4) The fee payments shall be due June 1 each year for emissions produced during the previous calendar year. The schedule is determined by rule and is subject to change by the regulatory process.

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 non-compliance 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. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-4.070 Restriction on 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 fifteen minutes apart within the period of one hour.

This requirement is not federally or state enforceable.

Springfield City Code Article X Control of Odors in the Ambient Air

No person shall emit odorous matter as to cause an objectionable odor on or adjacent to:

- 1) Residential, recreational, institutional, retail sales, hotel or educational premises.
- 2) Industrial premises when air containing odorous matter is diluted with twenty or more volumes of odor-free air; or
- 3) Premises other than those in bullets 1) and 2) above when air containing odorous matter is diluted with four or more volumes of odor-free air.

The previously mentioned requirement shall apply only to objectionable odors. An odor will be deemed objectionable when thirty percent or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy; the sample size to be at least twenty people or seventy-five percent of those exposed if fewer than twenty people are exposed. **This requirement is not federally or state enforceable.**

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 40 CFR 82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to 40 CFR 82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to 40 CFR 82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR 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 40 CFR 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 40 CFR 82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to 40 CFR 82.166. ("MVAC-like" appliance as defined at 40 CFR 82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f) Owners/operators of appliances normally containing fifty or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 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 Record Keeping and Reporting Requirements

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, Missouri 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 thirty days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit; this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

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

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

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

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

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

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

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

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

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

A Phase II permit (Missouri Department of Natural Resources project 2004-06-092, ORIS Code 2161) was issued to the permittee on December 7, 2007, with effective date from January 1, 2007, through December 31, 2011. Sulfur dioxide (SO₂) and nitrous oxides (NO_x) are referenced in this existing Title IV: Phase II Acid Rain Permit for the installation.

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 non-compliance 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 re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

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

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

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

None.

10 CSR 10-6.065(6)(C)1.J Emissions Trading

10 CSR 10-6.350 Emission Limitation and Emissions Trading of Oxides of Nitrogen applied to Boilers 3, 4 and 5 (EU0050-EU0070).

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 June 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's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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 non-compliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's, Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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 Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

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

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 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 David M. Fraley, Ph.D., Director - Environmental Affairs. The installation has provided the Missouri Department of Natural Resources with the appropriate supporting documentation designating David M. Fraley, Ph.D., Director - Environmental Affairs, as the current responsible official. In addition, the Board of Public Utilities has designated Dr. Fraley to be the Designated Representative and Mr. Daniel S. Hedrick, Environmental Analyst, to be the Alternate Designated Representative for the James River Power Station. Mr. Hedrick is authorized to sign and submit documentation on behalf of the responsible official. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the 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 thirty 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 re-opening may be stayed pending judicial review of that determination,

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

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

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

VI. Attachments

Attachments follow.

ATTACHMENT A
Fuel Oil Analysis Summary Report
 James River Power Station

This record keeping sheet or an equivalent form may be used for the record keeping requirements of Permit Condition PW001

Nitrogen Content		
Sulfur %, wt		
Specific Gravity		
Btu		
Gallons Delivered		
Date Sample Upon Delivery		
Sample ID		WTD. AVG.

ATTACHMENT C-2
Method 22 (Outdoor) Observation Log

This record keeping sheet or an equivalent form may be used for the record keeping requirements of 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*.

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 E
Method 9 Opacity Emissions Observations

This record keeping sheet or an equivalent form may be used for the record keeping requirements of 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*.

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

This attachment may be used to demonstrate that the listed emission units are in compliance with City of Springfield Code, Chapter 6, Article III, Division 4 - *Particulate Matter from Industrial Processes*.

EU0010 through EU0030

Allowable PM Emission Rate (E)

For process weights rates > 60,000 lb/hr:

$$E = 55.0(P)^{0.11} - 40$$

Where: E = rate of emission in lb/hr and P = process weight rate in ton/hr

PM Emission Rate Compliance

PM emission rate (lb/hr) = MHDR (ton/hr) x Emission Factor (lb/ton)

Emission Unit #	Emission Unit Description	Process Weight Rate (ton/hr)	PM Emission Factor (lb/ton)	Uncontrolled Emission Rate (lb/hr)	Control Efficiency (%)	Controlled Emission Rate (lb/hr)	Allowable Emission Rate (lb/hr)
EU0010	Coal Unloading (Belt 1A)	2400	0.02	48.00	n/a	n/a	89.48
EU0020	Coal Conveyors (Belts 2A, 3, and 4)	1800	0.02	36.00	n/a	n/a	85.44
EU0030	Sub-bituminous Coal Conveyors (Belts 1B and 2B)	3000	0.02	60.00	56	26.4	92.69
EU3500	Coal Crusher	720	0.02	14.4	n/a	n/a	73.41

1. PM emission factor from FIRE SCC #30501008
2. EU0020 consists of Belts 2A (600 tons/hr), 3 (600 tons/hr) and 4 (600 tons/hr) for a combined Process Weight Rate of 1800 tons/hr
3. EU0030 consists of Belts 1B (2400 tons/hr) and 2B (600 tons/hr) for a combined Process Weight Rate of 3000 tons/hr.

Conclusion: EU0010 through EU0035 are assumed to always be in compliance with City of Springfield Code, Chapter 6, Article III, Division 4.

EU0100 through EU0120

Allowable PM Emission Rate (E)

For process weight rates not greater than 60,000 lb/hr:

$$E = 4.1(P)^{0.67}$$

For process weight rates greater than 60,000 lb/hr:

$$E = 55(P)^{0.11} - 40$$

Where: E = rate of emission in lb/hr and P = process weight rate in ton/hr

ATTACHMENT F
Particulate Matter from Industrial Processes Compliance Demonstration
(con't)

PM Emission Rate Compliance

PM emission rate (lb/hr) = MHDR (ton/hr) x Emission Factor (lb/ton) x (1-Control Efficiency/100)

Emission Unit #	Emission Unit Description	Process Weight Rate (ton/hr)	PM Emission Factor (lb/ton)	Uncontrolled Emission Rate (lb/hr)	Over Control Efficiency (%)	Controlled Emission Rate (lb/hr)	Allowable Emission Rate (lb/hr)
EU0100	Dry Fly Ash Exhauster	13	3.14	48.00	99.9	0.04	22.86
EU0110	Fly Ash Silo Dry Unloading Spout	120	0.61	73.2	50	36.6	22.86
EU0120	Fly Ash Unloading (Paddle Mixer)	120	0.61	73.2	66	24.9	22.86

1. EU0100 PM emission factor from FIRE SCC #30501117
2. EU0110 and EU0120 PM emission factor from FIRE SCC #30501110

Conclusion: EU0100, EU0110 and EU0120 are in compliance with City of Springfield Code, Chapter 6, Article III, Division 4 when the control equipment is operated properly.

ATTACHMENT G
2001 Consent Agreement
Appendix I. Continuous Emission Measurement by Surrogate Monitoring

A. Purpose

Unlike Units 3, 4, 5, JRPS Units 1 and 2 are not equipped with continuous emission monitoring systems (CEMS). Therefore short-term compliance must be demonstrated by alternate methods. Since SO₂ emissions from this facility are primarily dependent on fuel characteristics, the emission rate should not vary significantly from unit to unit, *provided* that the fuel blend is consistent. This appendix establishes the means by which Unit 1 and 2 emissions may be predicted accurately using contemporaneous emissions data from one of the monitored units.

B. Monitoring Strategy

City Utilities will add channels to its existing CEMS data acquisition and handling system (DAHS) to record, calculate and report hourly emissions from Unit 1 and Unit 2. The raw data to populate these reporting channels will be derived from contemporaneous hourly emissions data from Unit 3. The Unit 3 data, expressed in pounds per million Btu heat input, will be adjusted for fuel mix differences, as described below. The resulting emission values for Units 1 and 2 will be used to determine compliance with the 1.5 pounds per million BTu limit on a 24-hour average basis. If Units 1 and/or 2 operate on a day when no contemporaneous Unit 3 data are available, the DAHS will switch to Unit 4 for its primary input.

C. Basis for Equivalence

For any given operating day, the SO₂ emission rate for Units 3 and 4 (the CEMS units) will be essentially equivalent to contemporaneous emission rates for Units 1 and 2 (the non-CEMS units) if all of the following conditions are satisfied:

1. The proportional blend of low-sulfur sub-bituminous and higher-sulfur bituminous coals charged to the bunkers of the CEMS and non-CEMS units are essentially equal (this will be verified by using the criteria in D.1.5);
2. The respective sulfur and calorific values of the sub-bituminous and bituminous coals are consistent from unit to unit;
3. The CEMS and non-CEMS units co-fire the same type and proportion of auxiliary fuels, such as natural gas; and,
4. There are no fundamental designs or operational differences between the boilers of the CEMS and non-CEMS units (such as fly ash sulfate retention) that would affect the conversion and subsequent emission of sulfur as SO₂.

In order to utilize monitoring data from the CEMS units to document compliance on the non-CEMS units, the Missouri Department of Natural Resources will apply a rebuttable presumption that all of these criteria are met for every operating day. However, City Utilities must document that the coal consistency criteria are met on a daily basis, must correct emissions data for differences in auxiliary fuel firing, and may be required to demonstrate the validity of criterion 4 under certain conditions. If, for any given day, the presumption is found invalid, then the CEMS units may not provide accurate surrogate emissions data. City Utilities must then employ other means (such as frequent fuel analysis) to document compliance with the 24-hour SO₂ emissions limits for Units 1 and 2.

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Appendix I. Continuous Emission Measurement by Surrogate Monitoring
(con't)

D. Equivalence Assurance

1. Coal blend equivalence

- 1.1 Fuel blend equivalence has the most direct bearing on SO₂ emissions comparisons between the CEMS and non-CEMS units. For the coal blend on Units 1 and 2 to be deemed equivalent to Unit 3 or 4, the respective weight ratios of sub-bituminous to total coal must agree to within 10%, except during start-up or shutdown.
- 1.2 The coal handling process at JRPS is described below. This description is included merely for the sake of clarifying the provisions that follow. This appendix does not propose to alter these fuel handling procedures, except as noted in paragraph 1.3, *et seq.*

The JRPS coal-handling system consists of equipment that unloads coal from rail cars, transfers it to an external storage area, and reclaims it later for use within the plant. The system is bifurcated to allow separate storage of bituminous and sub-bituminous coals. The separate coal streams are recombined in controlled proportions during the reclaim process. The system is illustrated in attached drawing I95-J-55 and described further below.

Typically, coal is unloaded from rail cars into an in-ground bunker and traverses four conveyor belts before entering the boiler. Belt No. 1 removes the coal from the unloading bunker and transfers the coal to the proper storage pile; 1A goes to the bituminous storage area and 1B to the sub-bituminous area. The coal may continue into the plant at this stage, if unloading happens to coincide with reclamation, or it may be transferred by a front-end loader to the appropriate pile for long-term storage. When coal is reclaimed from storage, the loader brings it back to the reclaim area and deposits it onto one of two "ready piles". These small piles are adjacent to dedicated in-ground bunkers. Belt No. 2 transfers the coal from the reclaim bunker hopper to the enclosed crusher building; 2A carries bituminous and 2B carries sub-bituminous coal. Importantly, the blend is established and controlled by the relative feeding rates from the reclaim hoppers. Highly accurate belt scales monitor and record the instantaneous feed rate and total weight of each type of coal transferred into the plant. Physical blending occurs during free fall in the crusher building and the system sees only a combined stream from this point forward. Belt No. 3 carries the blended coal to the fourth level of the power plant structure, still on the building exterior. The coal then transfers to Belt No. 4, which runs the length of the building on the interior of the fourth floor. Belt No. 4 is equipped with a tripping mechanism that deposits the blended coal into in-plant bunkers serving each steam unit. These bunkers are typically filled one to two times per operating day, depending on expected unit load.

A coal floor technician is responsible for moving the tripper device from one bunker to the next as coal is put up for the day. This technician also controls the feed rates, and therefore the blend rates, of the other belts in the system from a computer console on the fourth floor. Factors that influence blend ratio variability include: inherent non-homogeneity of coal deliveries and material stored on the piles; precision of the feeders on the 2A and 2B reclaim hoppers; and physical "clumping" caused by rainfall or the dust control sprays. In addition, while the reclaim belts are each equipped with highly accurate belt scales, there is no direct way to ascertain the tonnage stored in the in-plant silos on each unit.

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Appendix I. Continuous Emission Measurement by Surrogate Monitoring

City Utilities recently has installed a very precise weight belt feeder on the 2A (bituminous) coal conveyor to accompany the existing belt feeders on the 2B (sub-bituminous) coal conveyor. This will provide a more precisely controlled fuel blend going to all coal bunkers.

- 1.3 City Utilities will install instrumentation on the coal-loading conveyor (i.e., the No. 4 belt on the tripper floor) at the bunkers serving each unit to electronically identify which unit bunker is receiving blended coal at any given time.
- 1.4 Signal outputs from the above equipment will be tied into the coal system computer to provide computation, displays, and storage of the following parameters:
 - 1.4.1 Bituminous coal conveyance rate (2A belt), instantaneous tons per hour;
 - 1.4.2 Sub-bituminous coal feed rate (2B belt), instantaneous tons per hour;
 - 1.4.3 Ratio of sub-bituminous to total coal, instantaneous weight per cent;
 - 1.4.4 Integrated bunker-by-bunker bituminous coal throughput, tons per day;
 - 1.4.5 Integrated bunker-by-bunker sub-bituminous coal throughput, tons per day;
 - 1.4.6 Bunker-by-bunker daily weight ratio of sub-bituminous to total coal throughput, weight percent.
- 1.5 The coal blend for Units 1 and 2 shall be deemed equivalent to the coal blend for Units 3 and 4 when the following condition is satisfied:

$$1.00 - \left[\frac{[(M_{sub1.2}) / (M_{sub1.2} + M_{bit1.2})]}{[(M_{sub3.4.5}) / (M_{sub3.4.5} + M_{bit3.4.5})]} \right] \leq 0.10$$

In which:

M = Mass of coal fed to any unit day bunker

M_{sub1.2} = Mass of sub-bituminous coal fed to either Unit 1 or 2 day bunker (non-CEMS unit)

M_{sub3.4.5} = Mass of sub-bituminous coal fed to either Unit 3, 4 or 5 day bunker (CEMS unit)

M_{bit1.2} = Mass of bituminous coal fed to either Unit 1 or 2 day bunker (non-CEMS units)

M_{bit3.4.5} = Mass of sub-bituminous coal fed to either Unit 3, 4 or 5 day bunker (CEMS unit)

The term on the left-hand side of this inequality is understood to represent an absolute value (positive number).

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Appendix I. Continuous Emission Measurement by Surrogate Monitoring
(con't)

2. Homogeneity

2.1 The coal fed daily to the CEMS and non-CEMS units will be deemed homogenous with respect to SO₂ potential only if the loader operator reclaims coal from consistent general locations within the respective storage piles. For clarity, this means that the operator must build each “ready pile” (one for bituminous and one for sub-bituminous) from coal extracted from one general area of the storage pile. Alternatively, ready piles may consist entirely of newly unloaded coal that has never been taken to long-term storage. Even in this instance, however, the entire ready pile must be composed of new coal, and would probably represent the most homogenous case available. If it becomes necessary to mix freshly unloaded coal with previously stored coal in building a ready pile, the operator must use the loader bucket to homogenize the pile to the extent practicable.

3. Auxiliary fuel firing

3.1 Sulfur dioxide emissions are influenced significantly by the co-firing of fuels other than coal. Liquid and gaseous fuels have lower sulfur contents than coal and trend to have lower SO₂ emission potentials per unit of calorific value. All boilers at JRPS are capable of firing natural gas at up to 100% of rated capacity (during times of the year when gas is available at sufficient flow and pressure). City Utilities will account for differences in natural gas firing in the CEMS and non-CEMS units by measuring the fuel quantities and applying appropriate correction factors.

3.2 When gas is co-fired, the actual stack emissions from Units 1 and 2 would be calculated as:

$$E_{s,1,2} = (E_{s,3,4} - xE_{G,3,4}) \times \left[\frac{(1-z)}{(1-x)} \right] + zE_{G,1,2}$$

In which:

$E_{s,1,2}$ = The in-stack SO₂ emission rate for Unit 1 or 2,

$E_{s,3,4}$ = The in-stack SO₂ emission rate for Unit 3 or 4,

$E_{G,1,2}$ = The emission rate for Unit 1 or 2 when burning natural gas alone,

$E_{G,3,4}$ = The emission rate for Unit 3 or 4 when burning natural gas alone,

x = the decimal fraction of the total heat input to Unit 3 or 4 from natural gas, and

z = the decimal fraction of the total heat input to Unit 1 or 2 from natural gas.

This form is simplified considerable by the fact that $E_{G,1,2}$ are $E_{G,3,4}$ both approximately equal to 0.0006 pounds per million BTu. Therefore, the additive terms involving these variables multiplied by numbers less than one are insignificant in relation to the monitored emission rates or the 1.5 pounds per million BTu standard. Dropping these insignificant terms yields the corrective equation:

$$E_{s,1,2} = E_{s,3,4} \times \left[\frac{(1-z)}{1-x} \right]$$

City Utilities will use this simplified equation to correct all emissions data collected by the surrogate monitors.

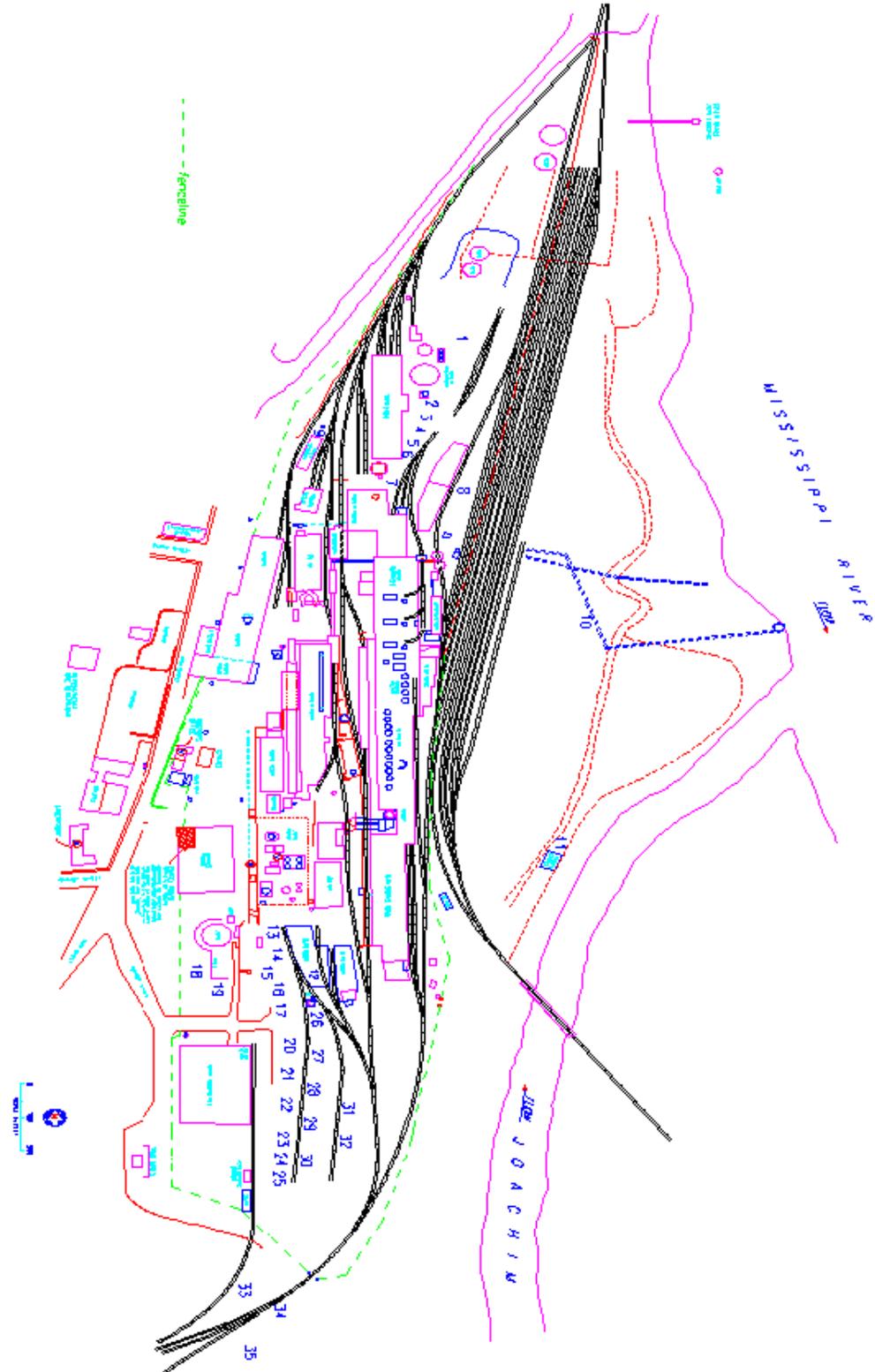
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(con't)

4. Design and Operational Differences

- 4.1 Any difference between the SO₂ emission rates on CEMS and non-CEMS units arising from design or operating considerations are bound to be small. This difference will not be deemed important unless and until the monitored/predicted emission rates on Unit 1 or 2 approaches the level of the standard.
- 4.2 If the non-CEMS unit emission rate ever exceeds 1.25 pounds per million BTu (on a 24-hour basis, exclusive of startup and shutdown), City Utilities will conduct a thirty-day demonstration project to assure the validity of the surrogate monitoring system. This will entail daily composite coal samples representing the day bunker on Unit 1 or 2. City Utilities will use the sulfur and calorific value results, together with mass balance equations found in USEPA's publication AP-42, to calculate a daily theoretical SO₂ emission rate. At the end of thirty days, City Utilities will evaluate the CEMS results against coal sample analysis (CSA) using the Relative Accuracy Test Audit (RATA) procedure in Appendix A of 40 CFR Part 75. For this RATA, the CSA calculated results, in units of the standard, will be considered the reference method (RM) data, d_i will be the difference between a daily RM value and the corresponding 24-hour average Unit 3 CEMS value, and n will equal 30. The RATA will be successful if the relative accuracy (RA) does not exceed 20%. In addition, City Utilities will perform the bias test found in Appendix A to ascertain whether a bias adjustment factor must be applied to surrogate monitoring data.
- 4.3 If CEMS and CSA data fail to show acceptable agreement, and the discrepancy persists after bias adjustment, City Utilities will repeat the thirty-day test using a portable certified SO₂ CEM system on Units 1 and 2 to collect RM data.
- 4.4 Failure of the instrumental RATA in paragraph 4.3 will indicate a systematic bias that is significant at emission levels near the standard. Beginning ninety (90) days after the failed RATA, City Utilities will not operate Unit 1 or 2 at an estimated emission rate above 1.25 pounds per million BTu unless the unit is equipped with an SO₂ and diluent gas CEMS meeting the performance specification in Appendix A of 40 CFR Part 75.

E. Reporting and record keeping

1. The quarterly excess emissions report will identify any day for which the coal blend percentage for Units 1 and 2 do not meet the 10% equivalence criterion. Surrogate monitoring may not be used for such days unless the data are adjusted for actual coal blend percentages and known coal quality parameters.
2. If coal is not used as a fuel in Unit 1 or Unit 2 on any day during the quarter, this will be noted on the quarterly report.
3. City Utilities will maintain records of daily coal blending ratios for each day bunker at JRPS. These records will be kept on site and made available for inspection by the Missouri Department of Natural Resources for a period of two years after collection.
4. City Utilities will maintain records of fuel usage in each unit, including continuous recordings of the 2A and 2B belt fuel feed rates, for a period of two years. Data will be made available to employees or representative of the Missouri Department of Natural Resources upon request.



Attachment H



Missouri Department of Natural Resources
Air Pollution Control Program

TITLE IV: ACID RAIN PERMIT

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

Installation Name: James River, **ORIS Code:** 2161
Project Number: 2004-06-092, **Permit Number:** OP2007-067
Unit IDs: 3,4, and 5
Effective Dates: January 1, 2007 through December 31, 2011

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources (MDNR), Air Pollution Control Program (APCP), Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions set forth in this application.

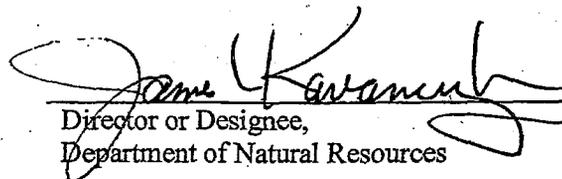
The number of allowances actually held by an affected source in a unit account may differ from the number allocated by the United States Environmental Protection Agency. Pursuant to 40 CFR 72.84, *Automatic permit amendment*, this does not necessitate a revision to any unit SO₂ allowance allocations identified in this permit.

Pursuant to 40 CFR Part 76, MDNR APCP approves the Phase II NO_x Compliance Plan submitted for these units, effective for calendar years 2007 through 2011. In addition to complying with these NO_x limits, these units shall comply with all other applicable requirements of 40 CFR Part 76, including the requirement to reapply for a NO_x compliance plan and requirements covering excess emissions.

This acid rain permit is effective for the five-year period shown above, per 40 CFR 72.69, *Issuance and effective date of acid rain permits*. The designated representative must submit an application for renewal of this permit no later than June 30, 2011, per 40 CFR 72.30, *Requirement to apply*, and in conjunction with the operating permit renewal application.

DEC 7, 2007

Date



Director or Designee,
Department of Natural Resources

JAMES RIVER
Plant Name (from Step 1)

Acid Rain - Page 2

STEP 3

Read the
standard
requirements

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

JAMES RIVER
Plant Name (from Step 1)

Acid Rain - Page 3

STEP 3,
Cont'd.

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

Excess Emissions Requirements

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

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

JAMES RIVER
Plant Name (from Step 1)

Step 3,
Cont'd.

Liability. Cont'd.

- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

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

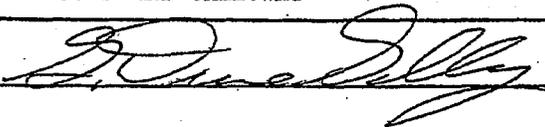
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date

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

Name	G. DUANE GALLOWAY	
Signature		Date 6/23/04



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Compliance Plan

Page of

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

This submission is: New Revised

STEP 1
Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name	JAMES RIVER	MO State	2161 ORIS Code
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STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID#	ID#	ID#	ID#	ID#	ID#
3	4	5			
DBW	DBW	DBW			
Type	Type	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO _x Averaging Plan (include NO _x Averaging form)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO _x Averaging (check the NO _x Averaging Plan box and include NO _x Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

JAMES RIVER

Plant Name (from Step 1)

NO_x Compliance - Page 2
 Page of

STEP 2, cont'd.

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

- | | | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|
| (m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| (p) Repowering extension plan approved or under review | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

Standard Requirements

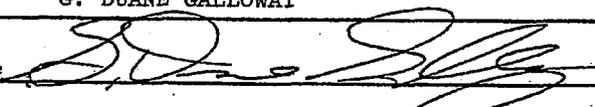
General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO_x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.
Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

6. Certification

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

Name G. DUANE GALLOWAY	
Signature 	Date 6/27/02



United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Averaging Plan

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

This submission is: New Revised

Page 1
Page of

STEP 1

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

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
JAMES RIVER	MO	3	0.50	0.55	2856000
JAMES RIVER	MO	4	0.50	0.55	3880800
JAMES RIVER	MO	5	0.50	0.60	7123200
SOUTHWEST	MO	1	0.50	0.40	13557600

STEP 2

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

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.49

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.50

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

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

$$\leq$$

$$\leq$$

Where,

- R_{Li} = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;
- R_i = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;
- HI_i = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;
- n = Number of units in the averaging plan

JAMES RIVER
Plant Name (from Step 1)

NO_x Averaging - Page 2

STEP 3

Mark one of the two options and enter dates.

This plan is effective for calendar year 2005 through calendar year 2009 unless notification to terminate the plan is given.

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

STEP 4

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

Special Provisions

Emission Limitations

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

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

Liability

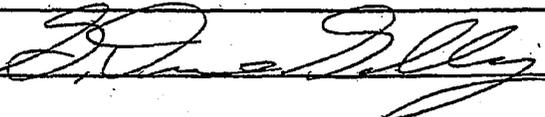
The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

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

Certification

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

Name	G. DUANE GALLOWAY	
Signature		Date <u>6/23/09</u>

ATTACHMENT J
10 CSR 10-6.350 Compliance Demonstration

This attachment may be used to demonstrate that EU0080 and EU0090 are in compliance with 10 CSR 10-6.350, *Emission Limitations and Emission Trading of Oxides of Nitrogen* when the units comply with Permit Condition (EU0080 and EU0090)-001 based on Construction Permit 0391-002.

Natural Gas Combustion Limits:

Construction Permit 0391-002's NO_x emission limit = 42 ppm_v corrected to 15% oxygen;
10 CSR 10-6.350's NO_x emission limit = 0.35 lb/MMBtu

Conversion from 42 ppm_v to lb/MMBtu:

$$E = C_d F_d \frac{20.9}{(20.9 - \%O_{2d})} \quad [\text{Eq. 19.1 of 40 CFR Part 60, app A-7, Method 19}]$$

Where: E = Pollutant emission rate, lb/MMBtu

C_d = Pollutant concentration, dry basis, lb/scf

F_d = Volumes of combustion components per unit of heat content, scf/MMBtu

%O_{2d} = Concentration of oxygen on a dry basis, respectively, percent.

Find C_d = Pollutant concentration, dry basis, lb/scf:

Convert from 42 ppm_v to lb/scf:

Conversion factor = 1.194 x 10⁻⁷ [Table 19-1 of 40 CFR Part 60, app A-7, Method 19]

$$C_d = 42 \text{ ppm}_v \times 1.194 \times 10^{-7} = 5.01 \times 10^{-6} \text{ lb/scf}$$

Find F_d = Volumes of combustion components per unit of heat content, dscf/MMBtu:

$$F_d = 8,710 \text{ dscf/MMBtu} \quad [\text{Table 19-2 of 40 CFR Part 60, appendix A-7, Method 19}]$$

Calculate E in lb/MMBtu:

$$E = (5.01 \times 10^{-6})(8,719) \frac{20.9}{(20.9 - 15)} = 0.15 \text{ lb/MMBtu} < 0.35 \text{ lb/MMBtu}$$

No. 2 Fuel Oil Combustion Limits:

Construction Permit 0391-002's NO_x emission limit = 65 ppm_v corrected to 15% oxygen
10 CSR 10-6.350's NO_x emission limit = 0.35 lb/MMBtu

Conversion from 65 ppm_v to lb/MMBtu:

$$E = C_d F_d \frac{20.9}{(20.9 - \%O_{2d})} \quad [\text{Eq. 19.1 of 40 CFR Part 60, app A-7, Method 19}]$$

Where: E = Pollutant emission rate, lb/MMBtu

C_d = Pollutant concentration, dry basis, lb/scf

F_d = Volumes of combustion components per unit of heat content, scf/MMBtu

%O_{2d} = Concentration of oxygen on a dry basis, respectively, percent.

Find C_d = Pollutant concentration, dry basis, lb/scf:

Convert from 65 ppm_v to lb/scf:

Conversion factor = 1.194 x 10⁻⁷ [Table 19-1 of 40 CFR Part 60, app A-7, Method 19]

$$C_d = 65 \text{ ppm}_v \times 1.194 \times 10^{-7} = 7.76 \times 10^{-6} \text{ lb/scf}$$

Find F_d = Volumes of combustion components per unit of heat content, dscf/MMBtu:

$$F_d = 9,190 \text{ dscf/MMBtu} \quad [\text{Table 19-2 of 40 CFR Part 60, appendix A-7, Method 19}]$$

Calculate E in lb/MMBtu:

$$E = (7.76 \times 10^{-6})(9,190) \frac{20.9}{(20.9 - 15)} = 0.25 \text{ lb/MMBtu} < 0.35 \text{ lb/MMBtu}$$

ATTACHMENT K
10 CSR 10-6.260 Compliance Demonstration

This attachment may be used to demonstrate that EU0130 and EU0140 are always in compliance with 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

Emergency Fire Pump (EU0130) Diesel-fired

General Equation

ppmv SO₂ = SO₂ Emission Factor (lb/MMBtu) ÷ F factor (wscf/MMBtu) ÷ Conversion Factor (lb/scf)

- 1) The SO₂ emission factor diesel engines < 600 HP = 0.29 lb/MMBtu (EPA AP-42 Table 3.3-1)
- 2) The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil the F factor is 10,320 wscf/MMBtu (Part 60 Appendix A Method 19 Table 19-2)
- 3) Conversion factor for lb/scf to ppm_v is 1.660E-7 lb/scf per ppm (Part 60 Appendix A Method 19 Table 19-1)

Compliance Demonstration

$$ppmv SO_2 = \left(0.29 \frac{lb}{MMBtu} \right) \left(\frac{MMBtu}{10,320 ft^3} \right) \left(\frac{ppmw}{1.660E^{-7} lb / scf} \right) = 169 ppmv \ll 500 ppm_v$$

Emergency DC Generator (EU0140) Gasoline-fired

General Equation

ppmv SO₂ = SO₂ Emission Factor (lb/MMBtu) ÷ F factor (wscf/MMBtu) ÷ Conversion Factor (lb/scf)

- 1) The SO₂ emission factor gasoline engines = 0.084 lb/MMBtu (EPA AP-42 Table 3.3-1)
- 2) The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil the F factor is 10,320 wscf/MMBtu (Part 60 Appendix A Method 19 Table 19-2)
- 3) Conversion factor for lb/scf to ppm is 1.660E-7 lb/scf per ppm (Part 60 Appendix A Method 19 Table 19-1)

Compliance Demonstration

$$ppmv SO_2 = \left(0.084 \frac{lb}{MMBtu} \right) \left(\frac{MMBtu}{10,320 ft^3} \right) \left(\frac{ppmw}{1.660E^{-7} lb / scf} \right) = 49 ppmv \ll 500 ppm_v$$

ATTACHMENT L

Excess Emissions Notification Form
CONTINUOUS EMISSIONS MONITORING EXCEEDANCE REPORT
 Pursuant to 10 CSR 10-6.050, *Startup, Shutdown and Malfunction* and
 40 CFR 60.7(c)(2), *Notification and Record Keeping* – FAX: 573-751-2706

Report Date:			
Source Name:	James River Power Station	FIPS/Plant No.:	077-0005
Source Address:	5701 South Kissick Road, Springfield, MO 65804		
Emission Point:		Pollutant(s) Monitored (limit):	
Responsible Person:		Phone No.:	
Discovered by:			

Date(s) of Excess Emissions								
Date of Discovery								
Total Source Operation Time (minutes)								
Reason for Excess Emissions	Code	Min.	Code	Min.	Code	Min.	Code	Min.
Startup/Shutdown								
Control Equipment Problems								
Process Problems								
Other Known Excess Emissions								
Unknown Excess Emissions								
Fuel Problems								
Cleaning; Soot-Blowing								
Percent Operating Time Above Standard								

Date(s)	Code	Description of Event	Corrective Action Measures

Date(s) of Monitor Downtime								
Date of Discovery								
Total Source Operation Time (minutes)								
Reason for Monitor Downtime	Code	Min.	Code	Min.	Code	Min.	Code	Min.
CEM Equipment Malfunction								
Non-CEM Equipment Malfunction								
Calibration (QA/QC)								
Other Known CEM Downtime								
Unknown CEM Downtime								
Percent Operating Time Above Standard								

Date(s)	Code	Description of Event	Corrective Action Measures

(Signature)

ATTACHMENT M
 James River Power Station
 Permit No. OP2008-055
 CONTINUOUS EMISSION MONITOR QUARTERLY REPORT
CEM Excess Emissions Summary

Source Name: City Utilities of Springfield – James River Power Station
County Plant Number: 26 077 00005
Reporting Quarter:
Due Date of Report:
Reporting Under: MO Rule 10 CSR 10-6.220(4)(A)

Emission Point:

VE-199 Unit 1&2 EP-04/EP-05 Opacity (40%)	0015 VE-199 Unit 3 EP-06 Opacity (40%)	0971 VE-199 Unit 4 EP-07 Opacity (40%)	0016 VE-199 Unit 5 EP-08 Opacity (40%)
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Pollutant Monitored (Limit):

Total Source Operation per Emission Point:

REASON FOR EXCESS EMISSIONS

Total Duration: minutes

Startup/Shutdown (5/8)
 Control Equipment Problems (1)
 Process Problem (3)
 Other Known Causes (Excess Emission) (7)
 Unknown Cause (4)
 Fuel Problem (2)
 Cleaning/Soot Blowing (6)
 Percent Operating Time Above Standard
 Comments on Types of Problems:

REASON FOR CEMS DOWNTIME

Total Duration: minutes

Monitor Equipment Malfunction (01)
 Non-monitor Equipment Malfunction (02)
 Quality Assurance (03)
 Other Known Cause (Monitor Malfunction) (04)
 Unknown Cause (Monitor Malfunction) (05)
 Percent Operating Monitor Downtime
 Comments on Monitor Problems:

Reported by: _____
Position Title: _____
Phone: _____

**CONTINUOUS EMISSIONS MONITORING QUARTERLY REPORT
EXCESS EMISSIONS REPORT – VISIBLE EMISSIONS**

DATE: _____

SOURCE NAME: City Utilities – James River Power Station

REPORTING QUARTER:

EMISSION POINT: No. 1, 2, 3, 4 or 5 Boiler - No. 1&2, 3, 4, or 5 Opacity Monitor, EP-4&5, EP-6, EP-7, EP-8

PARAMETER MONITORED (LIMIT): Opacity (40%) – Units 1 and 2, (40%) – Units 3-5

<u>EXCEEDANCE START</u>	<u>EXCEEDANCE END</u>	<u>REASON CODE</u>
<u>DATE</u> <u>TIME</u> <u>MINUTES</u>	<u>MAGNITUDE</u> <u>DATE</u> <u>TIME</u>	

SUM EXCESS EMISSIONS: _____ minutes

SUM EXCL. STARTUP/SHUTDOWN: _____ minutes

Reported by: _____

Position Title: _____

Phone: _____

**CONTINUOUS EMISSIONS MONITORING QUARTERLY REPORT
MONITOR DOWNTIME REPORT**

DATE: _____

SOURCE NAME: City Utilities – James River Power Station

REPORTING QUARTER:

EMISSION POINT: No. 1, 2, 3, 4 or 5 Boiler - No. 1&2, 3, 4, or 5 Opacity Monitor, EP-4&5, EP-6, EP-7, EP-8

PARAMETER MONITORED (LIMIT): Opacity (40%) – Units 1 and 2, (40%) – Units 3-5

DOWNTIME START TOTAL DOWNTIME END
DATE TIME MINUTES DATE TIME REASON CODE

TOTAL DOWNTIME:

minutes

Reported by: _____

Position Title: _____

Phone: _____

ATTACHMENT N
James River Power Station
 Permit No. OP2008-055

CONTINUOUS EMISSION MONITOR QUARTERLY REPORT
Coal Blend Differential

Date: _____

Source Name: City Utilities of Springfield – James River Power Station
County Plant Number: 26 077 00005
Reporting Quarter:
Due Date of Report:
Reporting Under: 2001 Consent Agreement

Emission Point:	Unit 1 EP-04	Unit 2 EP-05	Unit 3 EP-06	Unit 4 EP-07	Unit 5 EP-08
Pollutant Monitored (Limit):	SO ₂ (1.5)	SO ₂ (1.5)	SO ₂ (1.5)	SO ₂ (1.5)	SO ₂ (2.0)
Total Source Operation per Emission Point:					

Total Duration: minutes

<u>Coal Blend Differential >10%:</u>				
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Comments:

Certification Statement:

I hereby certify that the emissions data collected and reported herein for Units 1 and/or 2 are representative for the actual emissions from said units. For every boiler operating day the period, the sulfur-emitting characteristics of coal introduced to Units 1 and 2 were essentially equivalent to the corresponding characteristics for the surrogate CEMS-equipped unit, unless noted otherwise in this report. The criteria defining equivalence of coal quality, coal blend percentages, and consistency within the storage pile, as described in Appendix I of the 2001 Consent Agreement between City Utilities and the Missouri Department of Natural Resources, were met for this quarter. This certification is based on my personal inquiry of persons responsible for this data, and over whom I have supervisory authority.

Signed: _____ Date: _____

Director – James River Power Station

CONTINUOUS EMISSION MONITOR QUARTERLY REPORT

Exceedance Summary

Source Name: City Utilities of Springfield – James River Power Station
County Plant Number: 26 077 00005
Reporting Quarter:
Due Date of Report:
Reporting Under: 2001 Consent Agreement

Emission Point:

Pollutant Monitored (Limit):

Unit 1 EP-04 SO ₂ (1.5)	Unit 2 EP-05 SO ₂ (1.5)	Unit 3 EP-06 SO ₂ (1.5)	Unit 4 EP-07 SO ₂ (1.5)	Unit 5 EP-08 SO ₂ (2.0)

Total Source Operation per Emission Point:

REASON FOR EXCESS EMISSIONS:

Total Duration: Minutes

Startup/Shutdown (5/8)
 Control Equipment Failure (1)
 Process Problem (3)
 Other Known Causes (Excess Emission) (7)
 Unknown Cause (4)
 Fuel Problem (2)
 Cleaning/Soot Blowing (6)
 Percent Operating Time Above Standard

Comments:

SO₂ Alarm Limit Exceeded (1.25 lb/MBtu):

Total Duration: Minutes

Startup/Shutdown (5/8)
 Control Equipment Failure (1)
 Process Problem (3)
 Other Known Causes (Excess Emission) (7)
 Unknown Cause (4)
 Fuel Problem (2)
 Cleaning/Soot Blowing (6)
 Percent Operating Time Above Standard

Comments:

Certification Statement:

I hereby certify that the emissions data collected and reported herein for Units 1 and/or 2 are representative for the actual emissions from said units. For every boiler operating day the period, the sulfur-emitting characteristics of coal introduced to Units 1 and 2 were essentially equivalent to the corresponding characteristics for the surrogate CEMS-equipped unit, unless noted otherwise in this report. The criteria defining equivalence of coal quality, coal blend percentages, and consistency within the storage pile, as described in Appendix I of the 2001 Consent Agreement between City Utilities and MDNR, were met for this quarter. This certification is based on my personal inquiry of persons responsible for this data, and over whom I have supervisory authority.

Signed: _____ Date: _____

Director – James River Power Station

CONTINUOUS EMISSION MONITOR QUARTERLY REPORT
CEM Downtime Summary

Date: _____

Source Name: City Utilities of Springfield – James River Power Station
County Plant Number: 26 077 00005
Reporting Quarter:
Due Date of Report:
Reporting Under: 2001 Consent Agreement

Emission Point:	Unit 1 EP-04 SO ₂ (1.5)	Unit 2 EP-05 SO ₂ (1.5)	Unit 3 EP-06 SO ₂ (1.5)	Unit 4 EP-07 SO ₂ (1.5)	Unit 5 EP-08 SO ₂ (2.0)
Pollutant Monitored (Limit):					
Total Source Operation per Emission Point:					

<u>REASON FOR CEM DOWNTIME:</u>	<u>Total Duration:</u>	<u>Minutes</u>
Monitor Equipment Malfunction (1)		
Non-Monitor Equipment Malfunction (2)		
Quality Assurance (3)		
Other Known Monitor Downtime (4)		
Unknown Cause (5)		

Percent Downtime

Comments:

Certification Statement:

I hereby certify that the emissions data collected and reported herein for Units 1 and/or 2 are representative for the actual emissions from said units. For every boiler operating day the period, the sulfur-emitting characteristics of coal introduced to Units 1 and 2 were essentially equivalent to the corresponding characteristics for the surrogate CEMS-equipped unit, unless noted otherwise in this report. The criteria defining equivalence of coal quality, coal blend percentages, and consistency within the storage pile, as described in Appendix I of the 2001 Consent Agreement between City Utilities and MDNR, were met for this quarter. This certification is based on my personal inquiry of persons responsible for this data, and over whom I have supervisory authority.

Signed: _____ Date: _____

Director – James River Power Station

**CONTINUOUS EMISSIONS MONITORING QUARTERLY REPORT
COAL BLEND DIFFERENTIAL FORM**

DATE: _____

SOURCE NAME: City Utilities – James River Power Station
REPORTING QUARTER:
EMISSION POINT: No. 1 or 2 Boiler - No. 3 or 4 SO₂ Monitor, EP-4, EP-5
PARAMETER MONITORED (LIMIT): SO₂ (1.5 lb/MBtu)

Part II:
COAL BLEND DIFFERENTIAL BETWEEN UNIT 1 & UNIT 3 OR UNIT 4 >10%

<u>DOWNTIME START</u>		<u>TOTAL</u>	<u>DOWNTIME END</u>		<u>REASON CODE</u>
<u>DATE</u>	<u>TIME</u>	<u>MINUTES</u>	<u>DATE</u>	<u>TIME</u>	

TOTAL DOWNTIME: _____ minutes

Reported by: _____

Position Title: _____

Phone: _____

EXCESS EMISSIONS FORM

DATE: _____

SOURCE NAME: City Utilities – James River Power Station
REPORTING QUARTER:
EMISSION POINT: No. 1 or 2 Boiler - No. 3 or 4 SO₂ Monitor, EP-4, EP-5
PARAMETER MONITORED (LIMIT): SO₂ (1.5 lb/MBtu)

Part I:
POLLUTANT MONITORED (LIMIT): SO₂ (1.5 lb/MBtu)

<u>DATE</u>	<u>START TIME</u>	<u>END TIME</u>	<u>TOTAL MINUTES</u>	<u>MAGNITUDE</u>	<u>REASON CODE</u>
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SUM EXCESS EMISSIONS: _____ minutes
SUM EXCL. STARTUP/SHUTDOWN: _____ minutes

Part II:
POLLUTANT MONITORED (LIMIT): SO₂ (1.25 lb/MBtu)

<u>DATE</u>	<u>START TIME</u>	<u>END TIME</u>	<u>TOTAL MINUTES</u>	<u>MAGNITUDE</u>	<u>REASON CODE</u>
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SUM EXCESS EMISSIONS: _____ minutes
SUM EXCL. STARTUP/SHUTDOWN: _____ minutes

Reported by: _____

Position Title: _____

Phone: _____

**CONTINUOUS EMISSIONS MONITORING QUARTERLY REPORT
SO₂ MONITOR DOWNTIME REPORT**

DATE: _____

SOURCE NAME: City Utilities – James River Power Station

REPORTING QUARTER:

EMISSION POINT: No. 1, 2 or 3 Boiler - No. 3 or 4 SO₂ Monitor, EP-4, EP-5, EP-6 or EP-7

PARAMETER MONITORED (LIMIT): SO₂ (1.5 lb/MBtu)

Part I:

CEMS DOWNTIME:

<u>DOWNTIME START</u> <u>DATE</u>	<u>TIME</u>	<u>TOTAL</u> <u>MINUTES</u>	<u>DOWNTIME END</u> <u>DATE</u>	<u>TIME</u>	<u>REASON CODE</u>	<u>COMMENT</u>
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TOTAL DOWNTIME:

minutes

Reported by: _____

Position Title: _____

Phone: _____

**CONTINUOUS EMISSIONS MONITORING QUARTERLY REPORT
EXCESS EMISSIONS FORM**

DATE: _____

SOURCE NAME: City Utilities – James River Power Station

REPORTING QUARTER:

EMISSION POINT: No. 3, 4, or 5 Boiler - No. 3, 4, or 5 SO₂ Monitor, EP-6, EP-7, EP-8

PARAMETER MONITORED (LIMIT): SO₂ (1.5 lb/MBtu) SO₂ (2.0 lb/MBtu) – Unit 5

<u>DATE</u>	<u>START TIME</u>	<u>END TIME</u>	<u>TOTAL MINUTES</u>	<u>MAGNITUDE</u>	<u>REASON CODE</u>
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SUM EXCESS EMISSIONS: _____ minutes

SUM EXCL. STARTUP/SHUTDOWN: _____ minutes

Reported by: _____

Position Title: _____

Phone: _____

**CONTINUOUS EMISSIONS MONITORING QUARTERLY REPORT
SO₂ MONITOR DOWNTIME REPORT**

DATE: _____

SOURCE NAME: City Utilities – James River Power Station

REPORTING QUARTER:

EMISSION POINT: No. 4, or 5 Boiler - No. 4 or 5 SO₂ Monitor, EP-7, EP-8

PARAMETER MONITORED (LIMIT): SO₂ (1.5 lb/MBtu) SO₂ (2.0 lb/MBtu) – Unit 5

Part I:

CEMS DOWNTIME:

<u>DOWNTIME START</u> <u>DATE</u>	<u>TIME</u>	<u>TOTAL</u> <u>MINUTES</u>	<u>DOWNTIME END</u> <u>DATE</u>	<u>TIME</u>	<u>REASON CODE</u>	<u>COMMENT</u>
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TOTAL DOWNTIME:

minutes

Reported by: _____

Position Title: _____

Phone: _____

**Attachment O
 James River Power Station
 Permit No. OP2008-055**

Date: _____

CONTINUOUS EMISSION MONITOR QUARTERLY REPORT

Source Name: City Utilities of Springfield – James River Power Station
 FIPS CNTY & SOURCE #s: 26 077 00005
 Reporting Quarter: _____
 Date EER Postmarked: _____
 Due Date of Report _____
 Total Source Operation per Emission Point: _____ On GT-1 _____ On GT-2

	<u>Total duration (hours)</u>	
	<u>GT-1</u>	<u>GT-2</u>
Turbine #:	<u>EP-11</u>	<u>EP-12</u>
Emission Point:	<u>NO_x</u>	<u>NO_x</u>
Pollutant Monitored:		

REASON FOR EXCESS EMISSIONS

Startup/Shutdown (5/8)		
Cleaning/Soot Blowing (6)	NA	NA
Unknown Cause (4)		
Control Equipment Failure (1)		
Process Problem (3)		
Fuel Problem (2)		
Other Known Causes (Excess Emission) (7)		
Percent Operating Time Above Standard		
Comments on Types of Problems:		

REASON FOR MONITOR DOWNTIME

	<u>Total duration (hours)</u>
Monitor Equipment Malfunction (01)	
Non-monitor Equipment Malfunction (02)	
Quality Assurance (03)	
Other Known Cause (Monitor Malfunction) (04)	
Unknown Cause (Monitor Malfunction) (05)	
Percent Operating Time Monitor was Down	
Comments:	

**CONTINUOUS EMISSIONS MONITORING QUARTERLY REPORT
NO_x MONITORING SYSTEM DOWNTIME**

SOURCE NAME: City Utilities – James River Power Station

DATE: _____

REPORTING QUARTER:

EMISSION POINT: Combustion Turbine No. 1 or 2

POLLUTANT MONITORED (LIMIT): NO_x

<u>DOWNTIME START</u> <u>DATE</u>	<u>TOTAL</u> <u>MINUTE</u>	<u>DOWNTIME END</u> <u>DATE</u>	<u>REASON CODE</u>	<u>Comment(s)</u>
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TOTAL DOWNTIME

Reported by: _____

Position Title: _____

SUPPLEMENTAL EXCESS EMISSIONS DATA
JAMES RIVER POWER STATION
COMBUSTION TURBINE

DATE	PERIOD ENDING	ENGINE NUMBER	HOURLY AVERAGE WATER: FUEL RATIO	HOURLY AVERAGE WATER: FUEL RATIO	HOURLY AVERAGE FUEL CONSUMPTION	UNIT LOAD	AMBIENT TEMP (°F)	NOTE
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GAS TURBINE NO. 1
(EU0080: EP-11)

GAS TURBINE NO. 2
(EU0090: EP-12)

Reported By:

CERTIFICATE OF COMPLIANCE

JAMES POWER STATION
 APCP PERMIT 0391-002

Date: _____

	1 ST MONTH OF QUARTER		2 ND MONTH OF QUARTER		3 RD MONTH OF QUARTER	
	<u>GT-1</u>	<u>GT-2</u>	<u>GT-1</u>	<u>GT-2</u>	<u>GT-1</u>	<u>GT-2</u>
<u>Natural Gas:</u> Hours of Operation: Emergency Hours: MCF Natural Gas: <u>Fuel Oil</u> Hours of Operation: Gallons Fuel Oil: Percent Sulfur: Tons SO ₂ : <u>Rolling 12-Month Period</u> Normal Hours: Emergency Hours: Total Hours Operation: MCF Natural Gas: Gallons Fuel Oil: Tons SO ₂ :						

Reported By: _____

Title: _____