



Missouri Department of Natural Resources  
Air Pollution Control Program

## PART 70 PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act, the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

**Operating Permit Number:** OP2011-035  
**Expiration Date:** JUL 19 2016  
**Installation ID:** 151-0002  
**Project Number:** 2005-06-060

**Installation Name and Address**

Central Electric Power Cooperative - Chamois  
9321 Hwy 100  
Chamois, MO 65024  
Osage County

**Parent Company's Name and Address**

Central Electric Power Cooperative  
2106 Jefferson Street, P.O. Box 269  
Jefferson City, MO 65102

**Installation Description:**

The Chamois Power Plant is a coal-fired steam electric generation facility located in Chamois Missouri. The major operations at the plant consist of one (1) 18 MW coal-fired stoker unit, one (1) 55 MW coal-fired cyclone unit, one (1) heating boiler, coal unloading, conveying and preparation operations and ash handling operations.

JUL 20 2011

Effective Date

Director or Designee

Department of Natural Resources

## Table of Contents

<b>I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING .....</b>	<b>4</b>
INSTALLATION DESCRIPTION.....	4
EMISSION UNITS WITH LIMITATIONS .....	4
EMISSION UNITS WITHOUT LIMITATIONS .....	4
DOCUMENTS INCORPORATED BY REFERENCE.....	5
<b>II. PLANT WIDE EMISSION LIMITATIONS.....</b>	<b>6</b>
<b>III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .....</b>	<b>7</b>
EU0010 – UNIT 1 .....	7
PERMIT CONDITION EU0010-001.....	7
10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating	7
40 CFR Part 64 Compliance Assurance Monitoring.....	7
PERMIT CONDITION EU0010-002.....	9
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants .....	9
PERMIT CONDITION EU0010-003.....	10
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds.....	10
EU0020 – UNIT 2 .....	11
PERMIT CONDITION EU0020-001.....	11
10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating	11
40 CFR Part 64 Compliance Assurance Monitoring.....	11
PERMIT CONDITION EU0020-002.....	14
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants .....	14
PERMIT CONDITION EU0020-003.....	15
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds.....	15
PERMIT CONDITION EU0020-004.....	16
10 CSR 10-6.270 Acid Rain Source Permits Required.....	16
PERMIT CONDITION EU0020-005.....	17
10 CSR 10-6.362 Clean Air Interstate Rule Annual NO <sub>x</sub> Trading Program.....	17
10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO <sub>x</sub> Trading Program .....	17
10 CSR 10-6.366 Clean Air Interstate Rule Seasonal SO <sub>x</sub> Trading Program.....	17
EU0030 – HEATING BOILER .....	17
PERMIT CONDITION EU0030-001.....	17
10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating	17
PERMIT CONDITION EU0030-002.....	18
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants .....	18
PERMIT CONDITION EU0030-003.....	18
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds.....	18
EU0040 – COAL/COKE CONVEYING (RAIL COAL TO STORAGE PILE) .....	19
EU0050 – COAL/COKE CONVEYING (COAL TO UNIT 1) .....	19
EU0060 – COAL/COKE CONVEYING (CRUSHED COAL TO UNIT 2) .....	19
PERMIT CONDITION (EU0040 through EU0060)-001 .....	19
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants .....	19
EU0070 – COAL CRUSHERS .....	20
PERMIT CONDITION (EU0070)-001 .....	20
10 CSR 10-6.070 New Source Performance Regulations.....	20
40 CFR Part 60 Subpart A General Provisions and Subpart Y Standards of Performance for Coal Preparation and Processing Plants	20
.....	20
<b>IV. CORE PERMIT REQUIREMENTS .....</b>	<b>22</b>
<b>V. GENERAL PERMIT REQUIREMENTS .....</b>	<b>30</b>
<b>VI. ATTACHMENTS .....</b>	<b>36</b>

ATTACHMENT A.....	37
Compliance Assurance Monitoring (CAM) Protocol for Particulate Mass Emissions.....	37
ATTACHMENT B.....	48
Opacity Summary Report .....	48
ATTACHMENT C.....	52
Method 9 Opacity Emissions Observations .....	52
ATTACHMENT D.....	53
SO <sub>2</sub> Emission Summary Report.....	53
ATTACHMENT E.....	57
TITLE IV: ACID RAIN PERMIT.....	57
ATTACHMENT F.....	62
TITLE V: Clean Air Interstate Rule Permit.....	62
ATTACHMENT G.....	67
10 CSR 10-3.060 Compliance Demonstration.....	67
ATTACHMENT H.....	68
Opacity Emission Observations.....	68
ATTACHMENT I.....	69
Inspection/Maintenance/Repair/Malfunction Log .....	69
ATTACHMENT J.....	70
Fugitive Emission Observations .....	70

## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

The Chamois Power Plant is a coal-fired steam electric generation facility located in Chamois Missouri. The major operations at the plant consist of one (1) 18 MW coal-fired stoker unit, one (1) 55 MW coal-fired cyclone unit, one (1) heating boiler, coal unloading, conveying and preparation operations and ash handling operations.

Reported Air Pollutant Emissions, tons per year								
Year	Particulate Matter ≤ Ten Microns (PM-10)	Particulate Matter ≤ 2.5 Microns (PM-2.5)	Sulfur Oxides (SO <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2009	108.36	96.62	2727.85	2136.65	14.78	69.79	0.05	30.4
2008	265.97	247.69	5038.04	2409.01	15.53	78.38	0.07	75.9
2007	34.5	9.67	6043.95	2650.08	17.64	89.68	0.08	90.96
2006	32.54	12.55	5962.53	2432.37	16.47	83.99	0.07	145.13
2005	30.2	11.59	5507.59	2131.38	12.83	67.28	0.02	137.77

### EMISSION UNITS WITH LIMITATIONS

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

Emission Unit #	Description of Emission Unit	2008 EIQ ID #
EU0010	Unit 1	EP-03
EU0020	Unit 2	EP-04
EU0030	Heating Boiler	EP-05
EU0040	Coal/Coke Conveying (Rail Coal to Storage Pile)	EP-01
EU0050	Coal/Coke Conveying (Coal to Unit 1)	EP-01
EU0060	Coal/Coke Conveying (Crushed Coal to Unit 2)	EP-01
EU0070	Coal Crusher 1	EP-02
EU0080	Coal Crusher 2	EP-02

### EMISSION UNITS WITHOUT LIMITATIONS

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

Description of Emission Source	2008 EIQ ID #
Coal/coke unloading, rail and truck	FE-01
Coal conveying and transfer	FE-02
Coal/coke storage pile	FE-03
Fly ash haul road	FE-04
Fly ash loading	FE-05
Fly ash unloading	FE-06
One 55-gallon unleaded gasoline storage tank	IA-01
One 30-gallon portable parts washer	IA-02
One 300-gallon fuel oil storage tank	IA-03
One 165-gallon caustic and water tank mix	IA-04
One 4,000-gallon sulfuric acid tank	IA-05

Hydrogen gas cylinder	IA-06
Small portable gasoline pumps for maintenance activities	IA-07
Turbine tank vents	IA-08
Transformer oil in transformer	IA-09
6 - 8 portable diesel space heaters	IA-10
Acetylene cylinders used in maintenance activities	IA-11
Soot blowing air compressor oil tanks and vents	IA-12
Asbestos abatement activities assoc. with the repair/replacement of equipment	IA-13
One 15,000-gallon fuel oil storage tank	IA-14
One 3,000-gallon spare oil storage tank	IA-15
Seal oil vacuum pump discharge vent	IA-16
One 5,000-gallon sulfuric acid tank	IA-17
Iron injection system	IA-18
One 500-gallon fuel oil storage tank	IA-19

**DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

- 1) Compliance Assurance Monitoring (CAM) Protocol for Particulate Mass Emissions
- 2) Acid Rain Permit
- 3) Clean Air Interstate Rule (CAIR) Permit

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

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

None

### III. Emission Unit Specific Emission Limitations

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

EU0010 – UNIT 1			
Emission Unit	Description	Manufacturer/ Model #	2008 EIQ Reference #
EU0010	Unit 1: 18 MW pulverized coal-fired boiler; 220 MMBtu/hr; secondary fuel - fuel oil grades 1 and 2; equipped with electrostatic precipitator; unit put into service 1953	Riley/ Stoker	EP-03

<p style="text-align: center;"><b>PERMIT CONDITION EU0010-001</b> 10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating 40 CFR Part 64 Compliance Assurance Monitoring</p>
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**Emission Limitation:**

The permittee shall not emit particulate matter from Unit 1 (EU0010) in excess of 0.28 pounds per million BTU of heat input.

**Monitoring:**

- 1) The permittee is subject to the CAM plan contained in Attachment A.
- 2) *CAM Compliance Indicator:* The permittee shall maintain a Continuous Opacity Monitoring System (COMS) for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere from the stack of Unit 1 (EU0010) in accordance with 40 CFR Part 60 Appendix B Performance Specification 1. Opacity measurements shall be the primary indicator of compliance with the PM emission limitation.
- 3) The permittee shall perform daily zero and calibration drift checks, periodic cleaning of optical surfaces and other QA/QC checks as specified in 40 CFR Part 60 Appendix B Performance Specification 1.
- 4) *CAM Compliance Indicator Range:* An excursion and its associated averaging time shall be as specified in the CAM Plan:
  - a) An excursion is defined as measured stack opacity greater than 14 percent for Unit 1 (EU0010), based on a three-hour block average, excluding scheduled maintenance periods and those events defined as startup, shutdown or malfunction. An excursion triggers a reporting requirement.
  - b) Corrective action (or an assessment to determine if corrective action is necessary) must be initiated when measured stack opacity is greater than 14 percent, based on a one-hour block average (average of 1 minute data from minutes :00 - :59 for each hour), excluding scheduled maintenance periods and those events defined as start-up, shutdown or malfunction. By default, hourly averages derived from fewer than 31 valid data points (i.e. minute averages) will not be included in the generation of any calculable one (1)-hour or three (3)-hour block average. Corrective action does not trigger a reporting requirement.
- 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. [§64.7(b)]
- 6) *Continued Operation:* Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation at all times that fuel is

being combusted in Unit 1 (EU0010) and/or a fan is being operated. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§64.7(c)]

- 7) *Response to Exceedances*: The permittee shall follow the following procedure in response to excursions or exceedances. [§64.7(d)]
  - a) Upon detecting an excursion or exceedance, the permittee shall restore operation of the Unit 1 (EU0010) (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 start-up, 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 start-up 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. [§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. [§64.7(d)(2)]

**Recordkeeping:**

- 1) The permittee shall maintain records of all six-minute opacity values used to obtain valid one-hour averages and three-hour block averages except during periods of start-up, shutdown or malfunction.
- 2) The permittee shall maintain records of daily zero and calibration drift checks, periodic cleaning of optical surfaces and other QA/QC checks as specified in 40 CFR Part 60 Appendix B Performance Specification 1.
- 3) Attachment B or an equivalent recordkeeping sheet shall be used to provide the calculated data and to record all opacity exceedances, duration of exceedance event, reason for the exceedance, any corrective action taken, monitor downtime events, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.
- 4) The permittee shall maintain records of any Method 9 test performed. Attachment C or an equivalent recordkeeping form shall be used to provide Method 9 Visual Observation log records.
- 5) The permittee shall maintain a record of all stack testing conducted.
- 6) *General CAM Recordkeeping Requirements*: The permittee shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [§64.9(b)(1)]
- 7) Instead of paper records, 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 recordkeeping requirements. [§64.9(b)(2)]
- 8) All records shall be maintained for five (5) years.

- 9) 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) *General CAM Reporting Requirements:* The permittee shall submit semi-annual monitoring certified by a responsible official 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, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III). The report shall include, at a minimum, the following information, as applicable: [§64.9(a)(1)]
- a) All instances of deviations from permit requirements must be clearly identified; [§70.6(a)(3)(iii)(A)]
  - 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; [§70.6(a)(3)(iii)(B)]
  - 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; [§64.9(a)(2)(i)]
  - 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 [§64.9(a)(2)(ii)]
  - e) A description of the actions taken to implement a QIP as specified in §64.8, but only after it is determined that the permittee has failed to meet the obligation of properly operating and maintaining the source. 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. [§64.9(a)(2)(iii)]
- 2) *Documentation of need for improved monitoring:* If the permittee identifies a failure to achieve compliance with the permit condition 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 Air Pollution Control Program and, if necessary, submit a proposed modification to the part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [§64.7(e)]
- 3) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any deviations/exceedance of this permit condition.

<p style="text-align: center;"><b>PERMIT CONDITION EU0010-002</b></p>
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<p style="text-align: center;">10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants</p>
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**Emission Limitation:**

- 1) No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 40 percent.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than one (1) six (6)-minute period in any sixty (60) minutes, air contaminants with an opacity up to 60 percent.

**Monitoring/Recordkeeping/Reporting:**

The operation of the Continuous Opacity Monitoring System (COMS) established in Permit Condition EU0010-001 will ensure compliance with the opacity limitation and the associated monitoring, recordkeeping and reporting requirements of this rule. There are no further monitoring, recordkeeping or reporting requirements.

**PERMIT CONDITION EU0010-003**  
 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

- 1) The permittee shall limit the average sulfur emissions into the atmosphere to 6.7 pounds of sulfur dioxide per million Btus of actual heat input averaged on any consecutive three (3)-hour basis.
- 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 <sub>2</sub> )	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 <sub>2</sub> 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 <sub>2</sub> SO <sub>4</sub> )	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

**Operation Limitation:**

When burning fuel oil, the emission unit shall be limited when burning fuel oil with a sulfur content in the fuel oil of no more than 0.5 percent by weight sulfur.

**Monitoring:**

- 1) The permittee shall monitor the throughput of coal and conduct weekly composite analysis of coal as fired to the boiler from samples taken daily to determine the sulfur content. A monthly average sulfur content composition of coal analysis shall be determined according to appropriate ASTM test methods
- 2) The heating value of the fuel shall be determined as specified in 10 CSR 10-6.040(2) and the actual heat input shall be determined by multiplying the heating value of the fuel by the amount of fuel burned.
- 3) A daily SO<sub>2</sub> emissions historical calculation shall be conducted based on historical data and analyses performed, in order to verify compliance with 10 CSR 10-6.260. The sulfur content and the heating value of the coal as determined above and the amount of coal burned shall be used to calculate the historical daily SO<sub>2</sub> emissions to verify compliance with 10 CSR 10- 6.260. If this cannot be accomplished then compliance to the emission limitations shall be determined by source testing and shall be accomplished as specified in 10 CSR 10-6.030(6). Other methods approved by the staff director in advance may be used.

**Recordkeeping:**

- 1) The permittee shall maintain an accurate record of the following:
  - a) Records of all stack tests conducted.
  - b) The throughput and sulfur content of coal as fired (from the weekly composite analysis).
  - c) Records of the fuel type used verifying the sulfur content less than 0.5 percent by weight when the unit is consuming fuel oil. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5 percent by weight will be acceptable. If this cannot be accomplished then compliance to the emission limitations shall be determined by source testing and shall be accomplished as specified in 10 CSR 10-6.030(6). Other methods approved by the staff director in advance may be used. Records of the analyses of the percent sulfur content by weight of the fuel oil burned from samples taken shall be kept.
  - d) SO<sub>2</sub> emissions historical calculation records for daily emission totals taken when the unit is in operation shall be kept.
- 2) All records shall be maintained for five (5) years.
- 3) 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 furnish the Director such data as may reasonably require to determine whether compliance is being met.
- 2) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of 10 CSR 10-6.260 demonstrated by the appropriate recordkeeping forms.

<b>EU0020 – UNIT 2</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2008 EIQ Reference #</b>
EU0020	Unit 2: 55 MW coal-fired cyclone boiler; 550 MMBtu/hr; secondary fuel - fuel oil grades 1 and 2; equipped with electrostatic precipitator; unit put into service 1960	Babcock & Wilcox	EP-04

<b>PERMIT CONDITION EU0020-001</b> 10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating 40 CFR Part 64 Compliance Assurance Monitoring
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**Emission Limitation:**

The permittee shall not emit particulate matter from Unit 2 (EU0020) in excess of 0.28 pounds per million BTU of heat input.

**Monitoring:**

- 1) The permittee is subject to the CAM plan contained in Attachment A.
- 2) *CAM Compliance Indicator:* The permittee shall maintain a Continuous Opacity Monitoring System (COMS) for measuring and recording the opacity of emissions (in percent opacity) discharged to the atmosphere from the stack of Unit 2 (EU0020) in accordance with 40 CFR Part 60 Appendix B Performance Specification 1. Opacity measurements shall be the primary indicator of compliance with the PM emission limitation.

- 3) The permittee shall perform daily zero and calibration drift checks, periodic cleaning of optical surfaces and other QA/QC checks as specified in 40 CFR Part 60 Appendix B Performance Specification 1.
- 4) *CAM Compliance Indicator Range*: An excursion and its associated averaging time shall be as specified in the CAM Plan:
  - a) An excursion is defined as measured stack opacity greater than 14 percent for Unit 2 (EU0020), based on a three-hour block average, excluding scheduled maintenance periods and those events defined as start-up, shutdown or malfunction. An excursion triggers a reporting requirement.
  - b) Corrective action (or an assessment to determine if corrective action is necessary) must be initiated when measured stack opacity is greater than 14 percent, based on a one-hour block average (average of 1 minute data from minutes :00 - :59 for each hour), excluding scheduled maintenance periods and those events defined as start-up, shutdown or malfunction. By default, hourly averages derived from fewer than 31 valid data points (i.e. minute averages) will not be included in the generation of any calculable one (1)-hour or three (3)-hour block average. Corrective action does not trigger a reporting requirement.
- 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. [§64.7(b)]
- 6) *Continued Operation*: Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that fuel is being combusted in Unit 2 (EU0020) and/or a fan is being operated. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of Part 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§64.7(c)]
- 7) *Response to Exceedances*: The permittee shall follow the following procedure in response to excursions or exceedances. [§64.7(d)]
  - a) Upon detecting an excursion or exceedance, the permittee shall restore operation of the Unit 2 (EU0020) (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 start-up, 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 start-up or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. [§64.7(d)(1)]
  - b) Determination of whether the permittee has used acceptable procedures in response to an excursion 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. [§64.7(d)(2)]

**Recordkeeping:**

- 1) The permittee shall maintain records of all 6-minute average opacity values used to obtain valid 1-hour averages and 3-hour block averages except during periods of start-up, shutdown or malfunction.

- 2) The permittee shall maintain records of daily zero and calibration drift checks, periodic cleaning of optical surfaces and other QA/QC checks as specified in 40 CFR Part 60 Appendix B Performance Specification 1.
- 3) Attachment B or an equivalent recordkeeping sheet shall be used to provide the calculated data and to record all opacity exceedances duration of exceedance event, reason for the exceedance, any corrective action taken, monitor downtime events, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.
- 4) The permittee shall maintain records of any Method 9 test performed. Attachment C or an equivalent recordkeeping form shall be used to provide Method 9 Visual Observation log records.
- 5) The permittee shall maintain a record of all stack testing conducted.
- 6) *General CAM Recordkeeping Requirements:* The permittee shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [§64.9(b)(1)]
- 7) Instead of paper records, 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 recordkeeping requirements. [§64.9(b)(2)]
- 8) All records shall be maintained for five (5) years.
- 9) 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) *General Reporting Requirements:* The permittee shall submit semi-annual monitoring certified by the 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; [§70.6(a)(3)(iii)(A)]
  - 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; [§70.6(a)(3)(iii)(B)]
  - 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; [§64.9(a)(2)(i)]
  - 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 [§64.9(a)(2)(ii)]
  - e) A description of the actions taken to implement a QIP as specified in §64.8, but only after it is determined that the permittee has failed to meet the obligation of properly operating and maintaining the source. 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. [§64.9(a)(2)(iii)]
- 2) *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 Air Pollution Control Program and, if necessary, submit a proposed modification to the Part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [§64.7(e)]

- 3) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any deviations/exceedance of this permit condition.

**PERMIT CONDITION EU0020-002**

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

**Note:**

The operation of the Continuous Opacity Monitoring System (COMS) established in Permit Condition EU0020-001 will ensure compliance with the opacity limit. Additional monitoring, recordkeeping and reporting requirements established by this rule for units with a maximum heat input rate greater than 250 MMBtu/hr are listed below.

**Emission Limitation:**

- 1) No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 40 percent.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than one (1) six (6)-minute period in any sixty (60) minutes, air contaminants with an opacity up to 60 percent.

**Monitoring:**

- 1) Source operating time includes any time fuel is being combusted in the boiler and/or a fan is being operated that would eject particulate emissions from the stack.
- 2) Cycling times include the total time a monitoring system requires to sample, analyze and record an emission measurement. Continuous monitoring systems for measuring opacity shall complete a minimum of one (1) cycle of operation (sampling, analyzing and data recording) for each successive ten (10)-second period.
- 3) All COMS shall be certified by the Director after review and acceptance of a demonstration of conformance with 40 CFR Part 60, Appendix B, Performance Specification 1.

**Recordkeeping:**

- 1) All COMS shall be subject to audits conducted by the Department, and all COMS records shall be made available upon request to Department personnel.
- 2) Owners or operators of affected sources shall maintain a file (hard copy or electronic version) of the following information for a minimum of five (5) years from the date the data was collected:
  - a) All information reported in the quarterly summaries; and
  - b) All six (6)-minute opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records.

**Reporting:**

- 1) Owners or operators of sources required to install COMS shall submit a quarterly written report to the Director. All quarterly reports shall be postmarked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data:
  - 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 (6)-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) 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, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

**PERMIT CONDITION EU0020-003**  
 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

- 1) The permittee shall limit the average sulfur emissions into the atmosphere to 6.7 pounds of sulfur dioxide per million Btus of actual heat input averaged on any consecutive three (3)-hour basis.
- 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 <sub>2</sub> )	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 <sub>2</sub> 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 <sub>2</sub> SO <sub>4</sub> )	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

**Monitoring:**

- 1) The permittee shall maintain and operate a continuous emission monitoring system (CEMS) in accordance with all the requirements of 40 CFR Part 60 to monitor the SO<sub>2</sub> emission rate (lb/MMBtu).
- 2) The permittee shall ensure that each CEMS meets the equipment, installation, and performance specifications in Appendix A to 40 CFR Part 60; and is maintained according to the quality assurance and quality control procedures in Appendix B to 40 CFR Part 60.
- 3) The permittee shall ensure that the CEMS is in operation and monitoring unit emissions at all times that the affected unit (EU0020) 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.

**Recordkeeping:**

- 1) The permittee shall maintain a record of the SO<sub>2</sub> emission rate in lb/MMBtu of actual heat input averaged over three consecutive hours.
- 2) The permittee shall maintain a record of all data collected by the CEMS necessary to convert the monitoring data to the applicable emission rate.

- 3) The permittee shall maintain a record of daily calibrations, maintenance and quality assurance checks per the QA/QC program.
- 4) Attachment D or an equivalent recordkeeping sheet shall be used to provide the calculated data and to record all SO<sub>2</sub> exceedances, duration of exceedance event, reason for the exceedance, any corrective action taken, monitor downtime events, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.
- 5) The permittee shall maintain a record of all stack testing conducted.
- 6) All records shall be maintained for five (5) years.
- 7) 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 submit quarterly reports which include the following information:
  - a) Record of exceedances of the sulfur SO<sub>2</sub> emission rate set forth in this rule as recorded by the CEMS. If any exceedances were recorded, the day and length of time the emission unit exceeded the limitations set forth in this rule. A detailed explanation of why the plant was in exceedance and corrective action taken by Chamois Power Plant to bring the emission unit back into the limitations set forth in this rule.
  - b) Record of when CEMS was inoperative, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative. The report shall give a reason why the monitor was down, the duration of the downtime event, and provide the percent total operating period the monitor experienced downtime. The report shall distinguish between those downtime events that were due to QA/QC activities and those events that occurred for other reasons.
  - c) If no excess emissions occurred within the quarter and the CEMS was not inoperative, repaired, or adjusted, that information shall be included in the report.
- 2) All quarterly reports shall be postmarked by the thirtieth (30) day following the end of each calendar quarter.
- 3) The permittee shall report to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any deviations/exceedance of this permit condition.

**PERMIT CONDITION EU0020-004**

10 CSR 10-6.270 Acid Rain Source Permits Required

**Emission Limitation:**

The permittee shall obtain an Acid Rain Permit for Unit 2 (EU0020) pursuant to Title IV of the Clean Air Act. A Phase II permit (Missouri Department of Natural Resources project 2010-03-024, ORIS Code 2169 is being issued to the permittee in conjunction with this Title V permit. Sulfur dioxide (SO<sub>2</sub>) and nitrous oxides (NO<sub>x</sub>) are referenced in this existing Title IV: Phase II Acid Rain Permit for the installation. (See Attachment E)

**Monitoring/Recordkeeping:**

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. Unless otherwise requested by the Missouri Department of Natural Resources,

submission of these reports through electronic media provided by EPA shall demonstrate compliance with the monitoring, recordkeeping, and reporting of this condition.

**PERMIT CONDITION EU0020-005**

10 CSR 10-6.362 Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program  
10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program  
10 CSR 10-6.366 Clean Air Interstate Rule Seasonal SO<sub>x</sub> Trading Program

**Emission Limitation:**

The permittee shall obtain a CAIR Source Permit for Unit 2 (EU0020). A CAIR Permit (Missouri Department of Natural Resources project 2007-07-091, ORIS Code 2169) is being issued to the permittee in conjunction with this Title V permit. (See Attachment F)

**Monitoring/Recordkeeping:**

The permittee shall retain the most current CAIR 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 permittee shall report any deviations of this permit condition to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

<b>EU0030 –HEATING BOILER</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/ Model #</b>	<b>2008 EIQ Reference #</b>
EU0030	Heating Boiler: 6.695 MMBtu/hr boiler; fuel oil-fired; unit put into service 1968	Continental	EP-05

**PERMIT CONDITION EU0030-001**

10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

**Emission Limitation:**

The permittee shall not emit particulate matter from Heating Boiler (EU0030) in excess of 0.28 pounds per million BTU of heat input.

**Operation Limitation:**

This emission unit shall be limited to burning fuel oil with a sulfur content of 0.5 percent by weight or less.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain on the premises of the installation calculations demonstrating compliance with this rule. (See Attachment G)
- 2) These calculations shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

**Reporting:**

The permittee shall report any deviations of this permit condition to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

**PERMIT CONDITION 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 to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 40 percent.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than one (1) six (6)-minute period in any sixty (60) minutes, air contaminants with an opacity up to 60 percent. [10 CSR 10-6.220(3)(B)]

**Monitoring/Recordkeeping/Reporting:**

As detailed in Core Permit Requirements.

**PERMIT CONDITION EU0030-003**

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

- 1) The permittee shall limit the average sulfur emissions into the atmosphere to 6.7 pounds of sulfur dioxide per million Btus of actual heat input averaged on any consecutive three (3)-hour basis.
- 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 <sub>2</sub> )	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 <sub>2</sub> 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 <sub>2</sub> SO <sub>4</sub> )	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:**

The emission unit shall be limited to burning fuel oil with a sulfur content of 0.5 percent by weight or less.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel oil used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) All records shall be maintained for the most recent five (5) years. They must be maintained onsite 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 their verbal request and presentation of identification

**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, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

<b>EU0040 – COAL/COKE CONVEYING (RAIL COAL TO STORAGE PILE)</b> <b>EU0050 – COAL/COKE CONVEYING (COAL TO UNIT 1)</b> <b>EU0060 – COAL/COKE CONVEYING (CRUSHED COAL TO UNIT 2)</b>			
Emission Unit	Description	Manufacturer/ Model #	2008 EIQ Reference #
EU0040	Coal/Coke Conveying (Rail Coal to Storage Pile): MHDR 280 tons/hr; controlled with chemical spray and fabric filter; originally constructed 1953; modified 1960; new dust collectors and wet dust suppression system was installed in 1999	Fairfield Eng. Co & McNally Pittsburg	EP-01
EU0050	Coal/Coke Conveying (Coal to Unit 1): MHDR 200 tons/hr; controlled with chemical spray and fabric filter; originally constructed 1953; modified 1960; new dust collectors and wet dust suppression system was installed in 1999	Fairfield Eng. Co & McNally Pittsburg	EP-01
EU0060	Coal/Coke Conveying (Crushed Coal to Unit 2): MHDR 180 tons/hr; controlled with chemical spray and fabric filter; originally constructed 1960-63; new dust collectors and wet dust suppression system was installed in 1999	Fairfield Eng. Co & McNally Pittsburg	EP-01

**PERMIT CONDITION (EU0040 through EU0060)-001**  
 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

**Emission Limitation:**

- 1) No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 40 percent.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than one (1) six (6)-minute period in any sixty (60) minutes, air contaminants with an opacity up to 60 percent.

**Monitoring/Recordkeeping/Reporting:**

As detailed in Core Permit Requirements.

<b>EU0070 – COAL CRUSHERS</b>			
Emission Unit	Description	Manufacturer/ Model #	2008 EIQ Reference #
EU0070	Coal Crushers 1 and 2: reversible hammermill; MHDR 200 tons/hr combined or 100 tons/hr each; controlled with fabric filter and chemical spray; construction date 1960; modification date 1999	Pennsylvania Crusher Corp./SXCAG	EP-02

**PERMIT CONDITION (EU0070)-001**  
10 CSR 10-6.070 New Source Performance Regulations  
40 CFR Part 60 Subpart A General Provisions and Subpart Y Standards of Performance for Coal Preparation and Processing Plants

**Emission Limitation:**

The permittee shall not cause to be discharged into the atmosphere from the Coal Crushers (EU0070 and EU0080), gases which exhibit 20 percent opacity or greater. [§60.254(a)]

**Monitoring:**

- 1) The permittee shall conduct opacity readings on these emission units 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 source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two (2) weeks for a period of eight (8) 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) Note: Permit renewal or modification does not require the installation to revert to the weekly/bi-weekly opacity-monitoring schedule. If the permittee is currently performing monthly monitoring it may continue unless a violation is noted. The installation will only revert to weekly monitoring when a violation has been noted.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment H), 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 I)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)

- 4) Attachments C, H and I contain logs including these recordkeeping requirements. These logs, or equivalent forms created by the permittee, must be used to certify compliance with this requirement.
- 5) All records shall be maintained for five (5) years.
- 6) 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, MO 65102, no later than ten (10) days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

## IV. Core Permit Requirements

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

### **10 CSR 10-6.045 Open Burning Requirements**

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
  - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on 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) Central Electric Power Cooperative - Chamois 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 Central Electric Power Cooperative - Chamois fails to comply with the provisions or any condition of the open burning permit.
  - a) In a nonattainment area, as defined in 10 CSR 10-6.020, 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 Recordkeeping. 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 notify the Director in writing prior to any maintenance, start-up or shutdown activity which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the

release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.

- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the Paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

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

#### **10 CSR 10-6.065 Operating Permits**

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

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

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

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

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) annually.
- 2) The permittee may be required by the Director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.

- 5) The permittee shall complete required reports on state supplied EIQ forms or in a form satisfactory to the Director and the reports shall be submitted to the Director by the date prescribed in this rule following the end of each reporting period. [note: the emissions filing date is March 1 for paper filers and April 1 for MOEIS filers. The payment is due by June 1.]
- 6) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 7) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

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

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

#### **10 CSR 10-6.150 Circumvention**

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

#### **10 CSR 10-6.170**

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

##### **Emission Limitation:**

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

##### **Monitoring:**

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

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks.
- 2) Should no violation of this regulation be observed during this period then-

- a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
- b) If a violation is noted, monitoring reverts to weekly.
- c) Should no violation of this regulation be observed during this period then-
  - i) The permittee may observe once per month.
  - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.
- 4) Permit renewal or modification does not require the installation to revert to the weekly/bi-weekly opacity-monitoring schedule. If the permittee is currently performing semi-annual monitoring it may continue unless a violation is noted. The installation will only revert to weekly monitoring when a violation has been noted.

**Recordkeeping:**

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

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

**10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

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

**10 CSR 10-6.165 Restriction of Emission of Odors**

**This requirement is not federally enforceable.**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

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

**Emission Limitation:**

No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions in excess of the limits specified by this rule. This permit will contain the opacity limits identified (10, 20 or 40 percent) for the specific emission units.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on each emission unit using the procedures contained in U.S. EPA Test Method 22. The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required. For emission units with visible emissions

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

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

Note: Permit renewal or modification does not require the installation to revert to the weekly/bi-weekly opacity-monitoring schedule. If the permittee is currently performing semi-annual monitoring it may continue unless a violation is noted. The installation will only revert to weekly monitoring when a violation has been noted.

**Recordkeeping:**

The permittee shall maintain records of all observation results using Attachment H (or its equivalent), noting:

- 1) Whether any air emissions (except for water vapor) were visible from the emission units;
- 2) All emission units from which visible emissions occurred;
- 3) Whether the visible emissions were normal for the process;
- 4) The permittee shall maintain records of any equipment malfunctions, using Attachment I (or its equivalent), which may contribute to visible emissions; and,
- 5) The permittee shall maintain records of all U.S. EPA Method 9 opacity tests performed, using Attachment C (or its equivalent).

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

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

**Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a Class I or Class II substance is stored or transported, all products containing a Class I substance, and all products directly manufactured with a Class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.

- c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
- d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a Class I or Class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

#### **10 CSR 10-6.280 Compliance Monitoring Usage**

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a) Applicable monitoring or testing methods, cited in:
  - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
  - ii) 10 CSR 10-6.040, "Reference Methods";
  - iii) 10 CSR 10-6.070, "New Source Performance Standards";
  - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
- b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

## V. General Permit Requirements

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

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

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

### **10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements**

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or 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 Title IV acid rain permit is being issued in conjunction with this Title V Part 70 operating permit.

#### **10 CSR 10-6.065(6)(C)1.F Severability Clause**

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

#### **10 CSR 10-6.065(6)(C)1.G General Requirements**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit

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

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

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

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

None.

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

Unit 2 of Central Electric Power Cooperative – Chamois is subject to the Clean Air Interstate Rule (CAIR), which was issued by the EPA to provide states with a cap and trading system to reduce nitrogen oxides and sulfur dioxide. CAIR provides an interstate solution to emissions that drift from across state boundaries. The CAIR permit is Attachment F.

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

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and

- b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

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

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

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

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice

must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 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, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 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 Robert Gillette, Plant Manager. On March 24, 2006, the Air Pollution Control Program was informed that Tim Backes, Plant Manager is now the responsible official. In addition to Mr. Backes, the Designated Representative and Alternate Designated Representative under Title IV of the Act may also certify information submitted on behalf of the facility. This information is submitted and updated per the requirements of Title IV and is accessible by the Air Pollution Control Program.

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

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

This permit may be reopened for cause if:

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

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

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

## **VI. Attachments**

Attachments follow.

## **Attachment A**

### Compliance Assurance Monitoring (CAM) Protocol for Particulate Mass Emissions Chamois Power Plant

#### I. Background

##### A. Emissions Units

Permit Identification/

Description:

Emission Unit # EU0010: 220 mmBtu/hr coal-fired boiler

Emission Unit # EU0020: 550 mmBtu/hr coal-fired boiler

Facility:

Chamois Power Plant

Chamois, Missouri

##### B. Applicable Regulation, Emissions Limit, and Monitoring Requirements

Regulations:

10 CSR 10-3.060 (Units 1 and 2)

Particulate Matter

Emissions Limit:

0.28 lb/mmBtu<sup>13</sup> (Units 1 and 2)

Current Monitoring

Requirements:

None

##### C. Control Technologies

Electrostatic precipitator (each unit)

#### II. Monitoring Approach

The key elements of the monitoring approach for both units (including the indicators to be monitored, indicator ranges, and performance criteria) are presented in Table 1.

<sup>13</sup> Limit is based on total, filterable particulate.

CAM Protocol for Particulate Mass Emissions (continued)

**Table B-1. Monitoring Approach for Units 1 and 2**

<b>Chamois Power Plant – CAM Monitoring Approach</b>		
<b>Particulate Matter (PM) Compliance Indicator</b>		
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 3%. An excursion is defined as a measured stack opacity greater than 14 percent, based on a three-hour block average, excluding scheduled maintenance periods and those events defined as start-up, shutdown or malfunction. A 3-hour average opacity greater than 14% 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 3%. An excursion is defined as a measured stack opacity greater than 14 percent, based on a three-hour block average, excluding scheduled maintenance periods and those events defined as start-up, shutdown or malfunction. A 3-hour average opacity greater than 14% 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.	
<b>Performance Criteria</b>		
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 semi-annual basis in the Semi-annual Monitoring Report for the Part 70 Operating Permit.

## MONITORING APPROACH JUSTIFICATION

### I. Background

#### Source Description

Chamois Power Plant (Chamois is located in Chamois, Missouri. Unit 1 is a 18 MW (220 mmBtu/hr) wall-fired pulverized coal boiler originally put into service in 1953. Unit 2 is a 55 MW cyclone boiler rated at 550 mmBtu/hr that was installed in 1960. Both boilers discharge through separate, dedicated stacks. Unit 1 burns Illinois basin bituminous coal. Unit 2 burns a Western sub-bituminous coal, Illinois basin bituminous coal, and petroleum coke.

Particulate emissions from each boiler are controlled by an electrostatic precipitator (ESP), located downstream of the air preheater (“cold-side”). Each has a four field ESP, with each field serviced by a single Transformer-Rectifier (T-R) set with the exception of the inlet field on Unit 2, which is divided into two T-R sections. Neither unit has ESP bypass capability.

#### Emissions Limits

Both boilers are subject to a SIP limit (Missouri Code of State Regulations, 10 CSR 10-3.060) for total, filterable particulate matter (PM). The PM emissions limit for each unit is a calculated value based on the combined heat input of all fuel burning units at the plant. Both units have a PM emissions limit of 0.28 lb/mmBtu, excluding periods of start-up, shutdown, and malfunction. There is no direct, continuous PM monitoring requirement on either of the units.

Unit 2 is also subject to the opacity monitoring requirements of 40 CFR 75, §75.14(a) and is equipped with a Continuous Opacity Monitoring System (COMS) located on the unit stack. Both units are also subject to a SIP limit of 40 percent for opacity emissions (Missouri Code of State Regulations, 10 CSR 10-6.220), excluding periods of start-up, shutdown, and malfunction. Unit 1 is not subject to any opacity monitoring requirements although an ASTM D6216-98 and PS-1 compliant opacity monitor has been installed on the unit.

### II. Rationale for Selection of Performance Indicators and Indicator Ranges

The purpose of this section is to provide technical justification in support of a compliance assurance monitoring protocol based on opacity known as ‘test and cap’. Under the ‘test and cap’ monitoring approach, stack opacity is used as the primary indicator of compliance for PM emissions. Particulate testing is conducted to determine the opacity/mass relationship for the affected unit. This relationship is then used to select an opacity trigger value, such that as long as the opacity is maintained at or below this value during normal boiler operation, the unit will also operate below the permit limit for PM emissions.

### CAM Protocol for Particulate Mass Emissions (continued)

The COMS will be used as the primary indicator for each unit at Chamois. The selected indicator range that defines an excursion for Units 1 and 2 will be 14 percent opacity, based on a three-hour average, excluding start-up, shutdown, and malfunction events. Central believes that these are appropriate indicator ranges, based on the correlation test results, allowing for an approximate 10 percent margin of compliance with the PM limit for each unit.<sup>14</sup> All excursions will be documented and reported on a unit-basis including the associated corrective action.

Corrective action will be initiated when the stack opacity exceeds 14 percent, based on a one-hour average, excluding start-up, shutdown and malfunction events. There will first be an evaluation of the occurrence to determine whether action is required to correct the situation, and if so, what action is most likely to prevent an excursion. One-hour opacity averages of 14 percent that initiate corrective action do not have to be reported.

#### Validation of Test and Cap Monitoring Approach

Developing an accurate correlation between opacity and PM is difficult because of the variability in the process factors that affect the particle properties and size distribution. For CAM, however, it is sufficient that the indicator and emission rate are related so as to provide a reasonable assurance of compliance.

As shown in the following equation, the physics of the opacity meter are based on Lambert's Law, which can be expressed mathematically by the following equation:

$$O = 1 - e^{-\frac{S_{avg} m_{avg} x}{4}}$$

Where:  $O$  = opacity of flue gas

$S_{avg}$  = specific surface area of the particles ( $m^2/g$ )

$m_{avg}$  = particulate mass concentration ( $g/Nm^3$ )

$x$  = optical path length (m)

For a coal-fired boiler under normal load that is equipped with an ESP operating, the particle size distribution and specific surface area of the particles will remain relatively similar. This means that any change in opacity, as a first-order approximation, will be directly proportional to the mass concentration.<sup>15</sup> Therefore, while opacity is not a direct measurement of PM, it can be used as a surrogate. If opacity is increasing, it can be reasonably expected that the PM concentration is also increasing.

Central Electric notes that the use of opacity as a CAM indicator for PM is considered presumptively acceptable under §64.3(d) of the Rule, provided there is sufficient data to show that this indicator range is appropriate. That is, the opacity indicator range must demonstrate a reasonable assurance of compliance with the underlying PM standard. Section 64.3(d)(3)(ii) states that if an affected unit also has an opacity limit, that limit

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<sup>14</sup> The indicator opacity values were calculated using the curve fit equations developed from the CAM test data and a PM emission rate of 0.252 lb/mmBtu.

<sup>15</sup> Parker, K.R, Applied Electrostatic Precipitation

CAM Protocol for Particulate Mass Emissions (continued)

may be used as the indicator range for compliance with the PM standard if the requirements 64.3(a) are still met.<sup>16</sup>

Validation of Indicator Ranges

PM emissions tests were conducted at the stack of each unit to validate the selection of the monitoring approach and indicator range. The objective of the testing was to derive the opacity/mass relationship for each unit and show that while opacity is maintained at a given opacity level, both units also demonstrate a reasonable assurance of compliance with the PM limits. Testing was conducted on both units during May 10-12, 2005. Additional details on the results of the particulate testing can be found in the final test report.<sup>17</sup>

The test program was designed to simulate boiler and control device operation under the normal or “baseline” operating condition and under two additional conditions that simulated varying degrees of control device failure. The most common types of ESP failure (or cause of reduced performance) are either grounded fields or close clearances. In order to simulate these conditions, each ESP was “de-tuned” by reducing or eliminating power to selected portions of the precipitator. This effectively increased the PM loading and opacity at the stack. These “de-tuned” tests included a “high-level” test, where the stack opacity was well above to the PM limit, and a “mid-level” test where the stack PM emissions were approximately halfway between the high-level test and the normal operating level.

For each test, boilers were operated at normal full load. This represents the highest level of PM emissions and will produce conservative indicator ranges under the proposed CAM approach. Each test consisted of at least three runs using EPA Reference Method 17. Boiler and ESP operating data were also taken to demonstrate stable, normal load operation during each test.

*Unit 1 Results*

Table B-2 shows a summary of the test results for Unit 1. For the baseline condition, the data show an opacity of 3 percent and a PM emission rate of 0.072 lb/mmBtu. This suggests that Unit 1 operates at about a quarter of the PM limit during normal operation.

Test Condition	Stack Opacity <sup>18</sup>	Total PM Emissions [lb/mmBtu]
Baseline	3	0.072
ESP “De-tuned” (Mid)	15	0.270
ESP “De-tuned” (High)	25	0.502

**Table B-2. Unit 1 CAM Test Results**

<sup>16</sup> This is the proposed monitoring approach for Units 1 and 2.

<sup>17</sup> CAM Particulate Emissions Testing, Chamois Units 1 and 2, RMB Consulting & Research, 5/26/05.

<sup>18</sup> Stack opacity has been adjusted for calibration error.

CAM Protocol for Particulate Mass Emissions (continued)

For the “de-tuned” tests, Unit 1 boiler was operating under steady, normal load and the ESP power levels were reduced to simulate control device failure. For the “mid-level” condition, the data show an opacity of 15 percent and a total PM emission rate of 0.270 lb/mmBtu. For the “high-level” condition, the data show an opacity of 25 percent and a PM emission rate of 0.502 lb/mmBtu.

Figure B-1 shows the opacity/unit mass relationship for Unit 1 including the baseline and de-tuned operating conditions. The relationship is based on a linear curve fit with chi-square goodness of fit ( $r^2$ ) results of 0.997. The high-level test results demonstrate that a CAM opacity indicator range of 14 percent (based on a three-hour average) for Unit 1 would allow for an approximate 10 percent margin of compliance with the PM limit.

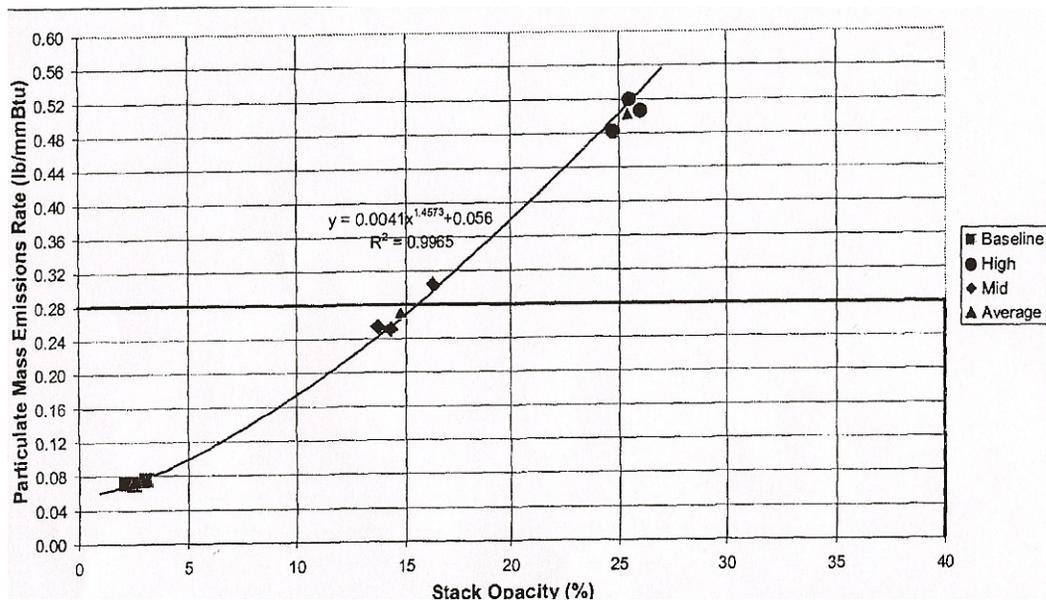


Figure B-1. Unit 1 Opacity Mass Relationship (lb/mmBtu)

CAM Protocol for Particulate Mass Emissions (continued)

*Unit 2 Results*

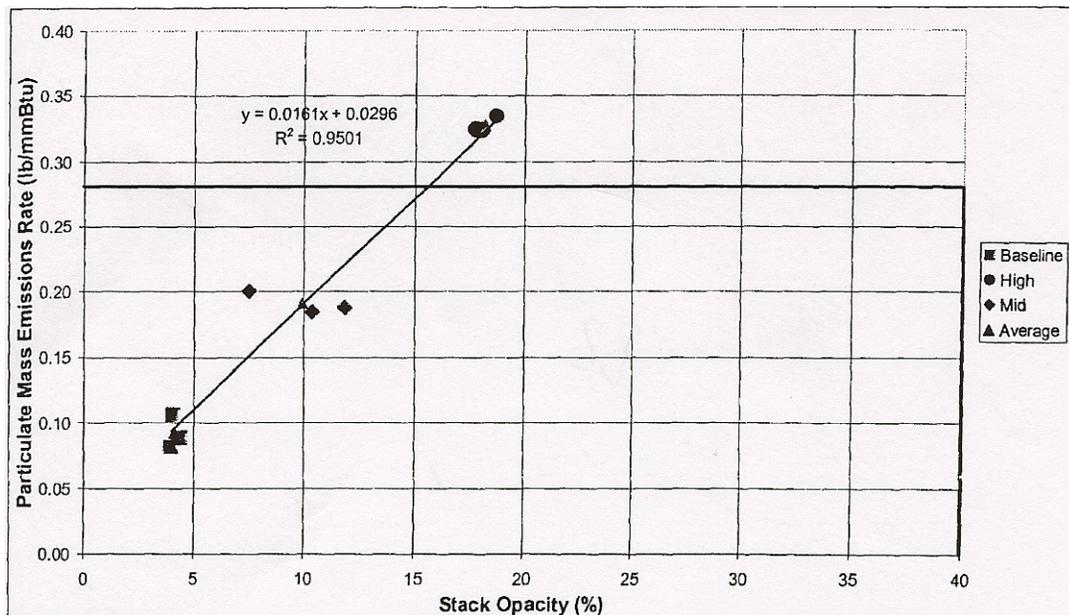
Table B-3 shows a summary of the test results for Unit 2. For the baseline condition, the data show an opacity of 4 percent and a PM emission rate of 0.092 lb/mmBtu. This suggests that Unit 2 operates at less than a third of the PM limit during normal operation.

Test Condition	Stack Opacity <sup>19</sup>	Total PM Emissions [lb/mmBtu]
Baseline	4	0.092
ESP “De-tuned” (Mid)	10	0.190
ESP “De-tuned” (High)	18	0.327

**Table B-3. Unit 2 CAM Test Results**

For the “de-tuned” tests, Unit 2 boiler was operating under steady, normal load and the ESP power levels were reduced to simulate control device failure. For the “mid-level” condition, the data show an opacity of 10 percent and a PM emission rate of 0.190 lb/mmBtu. For the “high-level” condition, the data show an opacity of 18 percent and a PM emission rate of 0.327 lb/mmBtu.

Figure B-2 shows the opacity/unit mass relationship for Unit 2 including the baseline and de-tuned operating conditions. The relationship is based on a linear curve fit with chi-square goodness of fit ( $r^2$ ) result of 0.95. The high-level test results demonstrate that a CAM opacity indicator range of 14 percent (based on a three-hour average) for Unit 2 would allow for an approximate 10 percent margin of compliance with the PM limit.



**Figure B-2. Unit 2 Opacity Mass Relationship (lb/mmBtu)**

<sup>19</sup> Stack opacity has been adjusted for calibration error

CAM Protocol for Particulate Mass Emissions (continued)

*Data Qualifications*

All reported opacities have been adjusted based on the COMS daily calibration error results conducted on each day of testing, respectively, to account for any bias in the systems. Central Electric notes that this additional correction had negligible effect on the reported opacities.

Data exclusion was limited to cases where a clear, sound engineering judgment could be made. Invalid opacity data was excluded for one minute during Run 1 and 21 minutes during Run 2 of the baseline test on Unit 1. The invalid data, which are shown in Table B-4, were due to interference of the opacity measurement path by the reference method gaseous concentration sampling probe. The “sagging” of the probe into the opacity measurement path was identified during the second run and care was taken to resolve the issue.

Run 1	Opacity (%)	Run 2	Opacity (%)	Run 3	Opacity (%)
...		...		...	
9:24	2.18	10:48	3.02	12:34	1.59
9:25	2.49	10:49	2.15	12:35	2.10
9:26	1.91	10:50	2.07	12:36	1.80
9:27	1.76	10:51	40.34*	12:37	2.27
9:28	1.91	10:52	95.72*	12:38	1.96
9:29	17.65*	10:53	95.72*	12:39	1.67
9:30	2.99	10:54	95.66*	12:40	1.61
9:31	2.22	10:55	92.26*	12:41	2.13
9:32	5.00	10:56	69.63*	12:42	1.49
9:33	2.62	10:57	70.53*	12:43	2.44
9:34	2.13	10:58	74.58*	12:44	1.64
9:35	2.48	10:59	94.70*	12:45	1.40
9:36	2.94	11:00	95.83*	12:46	1.37
9:37	2.46	11:01	95.32*	12:47	2.87
9:38	2.25	11:02	95.11*	12:48	1.82
9:39	2.33	11:03	85.83*	12:49	1.40
9:40	3.02	11:04	40.58*	12:50	1.60
9:41	2.69	11:05	34.14*	12:51	1.58
9:42	2.05	11:06	19.86*	12:52	1.63
9:43	2.39	11:07	9.31*	12:53	1.84
9:44	2.72	11:08	9.98*	12:54	1.76
9:45	2.22	11:09	10.57*	12:55	1.73
9:46	1.96	11:10	16.84*	12:56	1.49
9:47	2.71	11:11	36.30*	12:57	1.71
9:48	5.00	11:12	1.68	12:58	1.68
9:49	2.39	11:13	1.67	12:59	2.93
...		...		...	
Average	2.81	Average	2.26	Average	1.89

\* Invalidated Data

**Table B-4. Partial Unit 1 Baseline Opacity Data Showing Invalidated Data Periods**

## CAM Protocol for Particulate Mass Emissions (continued)

### Validation of Averaging Periods

The CAM Rule does not provide specific averaging periods to be used in the development of monitoring approaches. However, according to §64.3(d)(3)(i), monitoring approaches using COMS must “allow for the reporting of exceedances (or excursions if applicable to a COMS used to assure compliance with a particulate matter standard), consistent with any period for reporting of exceedances in an underlying requirement.” This implies that the appropriate averaging period is the averaging period of the underlying emissions standard.

While the Chamois operating permit does not specifically include averaging periods for the PM limits, Central Electric relies on additional EPA guidance to address this issue. According to EPA, in the absence of a specific emissions averaging period, the default averaging period is the time required to complete the appropriate compliance test.<sup>20,21,22</sup>

While Units 1 and 2 are not required to conduct periodic compliance tests for PM, both units must demonstrate initial compliance with the state PM limit according to the sampling methods outlined in 10 CSR 10-6.030(5). This section of the state code defers to the New Source Performance Standards (NSPS) sampling methods for PM. According to Section 60.8(f) of the general NSPS guidance, a compliance test is defined as three runs of the applicable reference method using run times specified in the applicable subpart. The minimum run time specified in the NSPS for utility boilers is 60 minutes using Reference Method 5 or Reference Method 17. Therefore, the appropriate averaging time for the PM limit (and the COMS averaging time for CAM) is three hours. This represents the average of three one-hour test runs. Central Electric also notes that initial compliance for Units 1 and 2 was based on the average of three (3) one-hour test runs.

The CAM Rule implies that the indicator range and averaging period should be the same for both an excursion and corrective action. However, the monitoring approach for the units at Chamois specifies a one-hour averaging period for corrective action and a three-hour averaging period for an excursion. The one-hour averaging period for corrective action is more conservative. Using a shorter averaging period for corrective action will enable Chamois personnel to address potential control device problems before they become excursions.

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<sup>20</sup> “... The EPA does note, however, that the operator of a source subject to the Title V operating permits program which is concerned about the possibility of the CE revisions resulting in enforcement based on an improper averaging time could include an averaging time as part of its permit application to clarify what averaging time applies in cases where the applicable emission limit does not specify an averaging time. Note, however, that in the absence clearly specified averaging time, the time for conducting the reference method test is generally the averaging time for compliance, “ - Credible Evidence Rule Revisions, Response to Comments, Section 4.1.2, Pages 57-58.

<sup>21</sup> “...The Agency believes the position that it has taken in the past, that the period over which data from test method sampling runs are averaged may generally be used as an appropriate period over which to average other data may serve as credible evidence ... - Credible Evidence Rule Revisions, Response to Comments, Section 4.1.2.1, Page 60.

<sup>22</sup> “...In general, the relevant time period is the averaging period of the applicable requirement ... If an applicable rule requires a demonstration of compliance through the average of three 1-hour test runs, the relevant time period is 3 hours ...” - Title V Monitoring Technical Reference Manual (Draft), Section 3.2.

CAM Protocol for Particulate Mass Emissions (continued)

Conclusions

According to §64.4(b), the use of a COMS to demonstrate a reasonable assurance of compliance with a PM standard is considered “presumptively acceptable” for CAM. Presumptively acceptable monitoring approaches are considered by EPA to be acceptable for CAM and do not require additional justification. Furthermore, Central Electric believes that the test data convincingly demonstrate that the proposed monitoring approach and the selected indicator ranges meet the design requirements of §64.3. The selected indicator range for an excursion of 14 percent opacity will be sufficient to demonstrate a reasonable assurance of compliance with the PM emissions limit during normal boiler operation and the one-hour corrective action trigger will allow Central Electric to proactively respond to opacity variation.

**Attachment B**  
 Opacity Summary Report

**PART I. INSTALLATION INFORMATION**

Name of Company: Chamois Power Plant	Report Period:
Address: Highway 100 East	Cer./CEA: (date) (Hr)
Chamois, MO 65024	Emission Limit:
Manufacturer/Model Number:	
Stack/Process:	Emission Point:
	Pollution Monitored:
CDs CNTY & SOURCE #'s:	

Total Source Operating Time in Report Period: (Min)

PART II. CAUSE OF EXCESS EMISSIONS (EE)	Duration of EE (Min )	Percent of Operating Time
A. Air Pollution Control Equipment Failure (01)		
B. Fuel Problem (02)		
C. Process Problem (03)		
D. Unknown Cause (Excess Emission) (04)		
E. Start-up (05)		
F. Soot Blowing (06)		
G. Other Known Causes (Excess Emission) (07)		
H. Shutdown (08)		
I. Total (A + B + ...E)		
Part III CAUSES OF CEMS DOWNTIME	Downtime (Min )	Percent of Operating Time
A. Monitor Equipment Malfunction (01)		
B. Non-monitor Equipment Malfunction (02)		
C. Quality Assurance (03)		
D. Other Known Cause (Monitor Malfunction) (04)		
E. Unknown Cause (Monitor Malfunction) (05)		
F. Total (A + B + ...E)		

Note: Percent Operating Time = [{EE (min ) or Downtime (min )} / Total Operating Time] x 100

EXCESS OPAC EMISSION SUMMARY

Source: Chamois Power Plant-Central Electric Cooperative Quarter: \_\_\_\_\_ Year: \_\_\_\_\_

Source of Emissions: \_\_\_\_\_

The following information is reported in total time for the entire quarter identified above.

Excess Emission Duration \_\_\_\_\_ (hours)

If duration is other than zero, submit Visible Emission form.

Monitoring System Downtime Due to Quality Assurance \_\_\_\_\_ (hours)

If downtime, not including zero and span calibrations, is other than zero, submit downtime system Downtime form.

Monitoring System Downtime Excluding Downtime Due to Quality Assurance

\_\_\_\_\_ (hours)

Source Operating Time

\_\_\_\_\_ (hours)

Reported by \_\_\_\_\_

Position Title \_\_\_\_\_

EXCESS EMISSION SUMMARY – VISIBLE EMISSIONS

Source: Chamois Power Plant Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Magnitude</u>	<u>Reason Message</u>
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EXCESS EMISSION SUMMARY – OPAC MONITORING SYSTEM DOWNTIME

Source: Chamois Power Plant Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Duration (D-H-M)</u>	<u>Reason Message</u>
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**Attachment C**

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 D**  
**SO<sub>2</sub> Emission Summary Report**

**PART I. INSTALLATION INFORMATION**

Name of Company:	Chamois Power Plant	Report Period:	
Address:	Highway 100 East	Cer./CEA: (date)	(Hr)
	Chamois, MO 65024	Emission Limit:	
Manufacturer/Model Number:		Emission Point:	
Stack/Process:		Pollutant Monitored:	SO <sub>2</sub> #RAVG
CDs CNTY & SOURCE #'s:			

Total Source Operating Time in Report Period: \_\_\_\_\_ (hrs)

PART II. CAUSE OF EXCESS EMISSIONS (EE)	Duration of EE (Hrs )	Percent of Operating Time
A. Air Pollution Control Equipment Failure (01)		
B. Fuel Problem (02)		
C. Process Problem (03)		
D. Unknown Cause (Excess Emission) (04)		
E. Start-up (05)		
F. Soot Blowing (06)		
G. Other Known Causes (Excess Emission) (07)		
H. Shutdown (08)		
I. Total (A + B + ...E)		
Part III CAUSES OF CEMS DOWNTIME	Downtime (Hrs )	Percent of Operating Time
A. Monitor Equipment Malfunction (01)		
B. Non-monitor Equipment Malfunction (02)		
C. Quality Assurance (03)		
D. Other Known Cause (Monitor Malfunction) (04)		
E. Unknown Cause (Monitor Malfunction) (05)		
F. Total (A + B + ...E)		

Note: Percent Operating Time = [{EE (hrs ) or Downtime (hrs )} / Total Operating Time] x 100

EXCESS SO2 #RAVG EMISSION REPORT

Source: Chamois Power Plant

Quarter: \_\_\_\_\_ Year: \_\_\_\_\_

Source of Emissions: \_\_\_\_\_

The following information is reported in total time for the entire quarter identified above.

Excess Emission Duration \_\_\_\_\_ (hours)

If duration is other than zero, submit SO2 #RAVG emission form.

Monitoring System Downtime Due to Quality Assurance \_\_\_\_\_  
(hours)

If downtime, not including zero and span calibrations, is other than zero, submit downtime system Downtime form.

Monitoring System Downtime Excluding Downtime Due to Quality Assurance \_\_\_\_\_ (hours)

Source Operating Time \_\_\_\_\_ (hours)

Reported by \_\_\_\_\_

Position Title \_\_\_\_\_

EXCESS EMISSION SUMMARY – SO<sub>2</sub> #RAVG

Source: Chamois Power Plant Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Magnitude</u>	<u>Reason Message</u>
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EXCESS EMISSION SUMMARY – SO<sub>2</sub> #RAVG MONITORING SYSTEM DOWNTIME

Source: Chamois Power Plant Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Duration (hr)</u>	<u>Reason Message</u>
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**Attachment E**  
**TITLE IV: ACID RAIN PERMIT**

**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:** The Central Electric Power Cooperative - Chamois Power Plant  
**ORIS Code:** 2169  
**Project Number:** 2010-03-024, **Permit Number:** OP2011-035  
**Unit IDs:** 2  
**Effective Dates:** JUL 20 2011 through JUL 19 2016

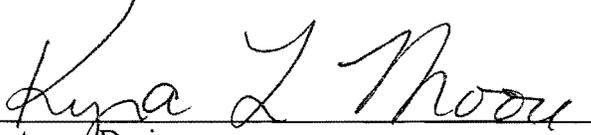
The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources (MDNR), Air Pollution Control Program (APCP), Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions 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 SO<sub>2</sub> allowance allocations identified in this permit.

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, in conjunction with the operating permit renewal application.

JUL 20 2011

Date

  
\_\_\_\_\_  
Director or Designee,  
Department of Natural Resources



Plant Name (from Step 1) Chamois Power Plant

**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.

Chamois Power Plant Plant Name (from Step 1)
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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.

Chamois Power Plant Plant Name (from Step 1)
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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<sub>x</sub> 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**

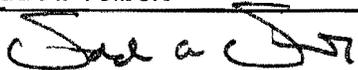
- No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the 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 Todd A. Tolbert	
Signature 	Date January 26, 2009

**Attachment F**  
TITLE V: Clean Air Interstate Rule Permit

# TITLE V: CLEAN AIR INTERSTATE RULE (CAIR) PERMIT

In accordance with Title V of the Clean Air Act and Missouri State Rules 10 CSR 10-6.362, *Clean Air Interstate Rule Annual Nox Trading Program*, 10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program*, and 10 CSR 10-6.366, *Clean Air Interstate Rule SO<sub>x</sub> Trading Program*, the State of Missouri issues this CAIR Permit.

**Installation Name:** The Central Electric Power Cooperative - Chamois Power Plant  
**ORIS Code:** 2169  
**Project Number:** 2007-07-091, **Permit Number:** OP2011-035  
**Unit IDs:** 2  
**Effective Dates:** JUL 20 2011 through JUL 19 2016

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources' Air Pollution Control Program, 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.

This CAIR Permit applies only to unit 2 of Central Electric Power Cooperative - Chamois Power Plant.

This CAIR permit is effective for the dates shown above. The designated representative must submit an application for renewal of this permit in conjunction with the operating permit renewal application.

JUL 20 2011

Date

  
\_\_\_\_\_  
Director or Designee,  
Department of Natural Resources



Chamois Power Plant  
Plant Name (from Step 1)

CAIR Permit Application  
Page 2

STEP 3,  
continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) with the CAIR NO<sub>x</sub> emissions limitation, CAIR SO<sub>2</sub> emissions limitation, and CAIR NO<sub>x</sub> Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO<sub>x</sub> unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.

(4) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

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

(6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO<sub>x</sub> unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

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

(3) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.

(4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO<sub>2</sub> unit.

Nitrogen oxides ozone season emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO<sub>x</sub> Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3) or (7) and for each control period thereafter.

(3) A CAIR NO<sub>x</sub> Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> Ozone Season allowance was allocated.

(4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

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

Chamois Power Plant  
Plant Name (from Step 1)

CAIR Permit Application  
Page 3

STEP 3,  
continued

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

(6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Excess emissions requirements.

If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under §96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

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

If a CAIR SO<sub>2</sub> source emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under §96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

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

If a CAIR NO<sub>x</sub> Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and

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

(e) Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

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

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

Chamois Power Plant  
Plant Name (from Step 1)

CAIR Permit Application  
Page 4

STEP 3,  
continued

(f) Liability.

(1) Each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> Ozone Season units (as applicable) at the source.

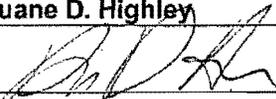
(3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

(g) Effect on Other Authorities.

No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) or CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

**Certification**

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

Name <b>Duane D. Highley</b>	
Signature 	Date June 27, 2007

**Attachment G**  
 10 CSR 10-3.060 Compliance Demonstration

This attachment may be used to demonstrate that Heating Boiler (EU0030) complies with 10 CSR 10-3.060, *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*, which is incorporated into Permit Condition EU0030-001, as long as the emission unit is limited to fuel oil.

The PM emission limit is based on whether the emission unit is new or existing. In the outstate Missouri area, existing is defined as being installed or under construction on February 24, 1971. Heating Boiler (EU0030) was installed in 1968, so it is an existing unit for the purposes on this regulation.

The PM emission limit is also based on the total heat input rate, in MMBtu/hr, of all heating units at the installation (Q). The heating sources at the facility and their respective heat input are as follows:

EU ID #	EU Description	Heat Input (MMBtu/hr)
EU0010	Unit 1	220
EU0020	Unit 2	550
EU0030	Heating Boiler	6.695
Installation's Total Heat Input (Q)		776.695

Allowable Emission Rate (E) for Existing Sources

$$E = 0.90Q^{-0.174}$$

Where

E = maximum allowable PM emission rate in lb/MMBtu of heat input, rounded to two decimal places

Q = the installation's total heat input in millions of Btu/hr

$$E = 0.90(776.695)^{-0.174}$$

$$E = 0.28 \text{ lb/MMBtu}$$

Potential Emission Rate (PTE)

PM emission factor for fuel oil grades 1 and 2

Filterable PM = 2.0 lb/10<sup>3</sup> gal

[US EPA database WebFIRE Factor for SCC 10200501]

Condensable PM = 1.3 lb/10<sup>3</sup> gal

[US EPA database WebFIRE Factor for SCC 10200501]

Total = 3.3 lb/10<sup>3</sup> gal

Heating value of fuel oil = 140 MMBtu/10<sup>3</sup> gal

[US EPA document AP-42 Chapter 1.3]

Potential Emission for fuel oil grades 1 and 2 = (3.3 lb/10<sup>3</sup> gal)/(140 MMBtu/10<sup>3</sup> gal) = 0.024 lb/MMBtu

Since the uncontrolled potential to emit rate of 0.024 lb/MMBtu is well below the allowable emission rate of 0.28 lb/MMBtu, the unit is in compliance.







## STATEMENT OF BASIS

### Permit Reference Documents

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

- 1) Part 70 Operating Permit Application, received June 20, 2005;
- 2) 2008 Emissions Inventory Questionnaire, received May 28, 2009; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

### Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

- 10 CSR 10-6.362, *Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program*,
- 10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program*,
- 10 CSR 10-6.366, *Clean Air Interstate Rule SO<sub>x</sub> Trading Program*

These rules were not created at the time the operating permit application was submitted; however, it has been determined that these rules are applicable to the installation.

### Other Air Regulations Determined Not to Apply to the Operating Permit

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

- 10 CSR 10-6.100, *Alternate Emission Limits*

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

### Construction Permit Revisions

The following revisions were made to construction permits for this installation:

Missouri Department of Natural Resources Construction Permit 1198-019 authorized the change to low sulfur coal for Unit 2.

There were no revisions to this construction permit.

Missouri Department of Natural Resources Construction Permit 092006-002 authorized the permittee to temporarily burn corncobs as a biomass fuel.

This construction permit was a temporary permit with an expiration date of March 15, 2007.

Therefore, this construction permit is not included in the operating permit.

Missouri Department of Natural Resources Construction Permit 052008-001 authorized the permittee to temporarily burn biomass fuel.

This construction permit was a temporary permit with an expiration date of May 1, 2009. Therefore, this construction permit is not included in the operating permit.

Missouri Department of Natural Resources Construction Permit 092009-008 authorized the permittee to temporarily burn 20,000 tons of biofuel.

This construction permit was a temporary permit with an expiration date of December 31, 2009. Therefore, this construction permit is not included in the operating permit.

**New Source Performance Standards (NSPS) Applicability**

40 CFR Part 60 Subpart D, *Standards of Performance for Fossil-Fired Steam Generators for which Construction is Commenced after August 17, 1971*

40 CFR Part 60 Subpart Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978*

40 CFR Part 60 Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*

40 CFR Part 60 Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

These rules do not apply to Unit 1 (EU0010), Unit 2 (EU0020) or Heating Boiler (EU0030) because these emission units were constructed prior to the rules' applicability dates.

40 CFR Part 60 Subpart K, *Standards of Performance for Storage Vessels for Petroleum Liquids For Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior To May 19, 1978*

40 CFR Part 60 Subpart Ka, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*

40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984*

These rules do not apply to the installation because all of the fuel oil storage tanks are less than 20,000-gallons each.

40 CFR Part 60 Subpart Y, *Standards of Performance for Coal Preparation Plants*

This rule applies to the Coal Crushers (EU0070 and EU0080). These emission units were manufactured in 1998, which is after the October 24, 1974 applicability date, and are "coal processing equipment".

This rule does not apply to the following "coal conveying equipment" because they were constructed and/or modified prior to the rule's applicability date.

EU ID#	Description
EU0040	Coal/Coke Conveying (Rail Coal to Storage Pile): constructed 1953; modified 1960
EU0050	Coal/Coke Conveying (Coal to Unit 1): constructed 1953; modified 1960
EU0060	Coal/Coke Conveying (Crushed Coal to Unit 2): constructed 1960-63

None of the other NSPS standards applies.

**Maximum Achievable Control Technology (MACT) Applicability**

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

On May 18, 2011, EPA announced that it will stay the effective date of this rule for an undetermined period (the effective date in the rule was originally May 20, 2011) in order to allow it to seek

additional public input. When EPA issues this rule as final, affected units at this installation will be required to comply with the revised rule; this permit may be reopened at that time to incorporate the revised rule. Until such time as the rule is issued as final, this standard is treated as if it is not yet been promulgated.

None of the other MACT standards applies.

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

None

### **Compliance Assurance Monitoring (CAM) Applicability**

Unit 1 (EU0010) and Unit 2 (EU0020) meet the applicability criteria for 40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*, because these units each have the uncontrolled potential to emit PM<sub>10</sub> above the major source threshold levels and utilize control devices to comply with an applicable regulation or standard.

The permittee submitted a Compliance Assurance Monitoring plan with the renewal permit application on June 20, 2005. The approved conditions of the Compliance Assurance Monitoring plan have been incorporated into Permit Condition EU0010-001 and Permit Condition EU0020-001.

### **Greenhouse Gas Emissions**

This installation is a major source for greenhouse gases. Major stationary sources are required by the Clean Air Act (CAA) to obtain Part 70 operating permits. While Part 70 permits generally do not establish new emissions limits, they consolidate applicable requirements, as defined in Missouri State Regulations 10 CSR 10-6.020(2)(A)23, into a comprehensive air permit. At the time of permit issuance, there were no applicable GHG requirements for this source.

Note that this source is subject to the Greenhouse Gas Reporting Rule. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at this time. In addition, Missouri regulations do not require the installation to report CO<sub>2</sub> emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO<sub>2</sub> emissions were not included within this permit. The applicant is required to report the data directly to EPA. The public may obtain CO<sub>2</sub> emissions data for this installation by visiting EPA's Clean Air Markets website at: <http://camddataandmaps.epa.gov/gdm/index.cfm>.

### **Other Regulatory Determinations**

10 CSR 10-3.060, *Restriction of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*

This rule applies to Unit 1 (EU0010), Unit 2 (EU0020) and Heating Boiler (EU0030). The PM emission limit is based on whether the emission unit is new or existing. In the outstate Missouri area, existing is defined as being installed or under construction on February 24, 1971. Each of the emission units was put into service prior to 1971, so they are existing units for the purposes of this regulation. The PM emission limit is also based on the total heat input rate, in MMBtu/hr, of all heating units at the installation (Q). The heating sources at the facility and their respective heat input are as follows:

EU ID #	EU Description	Heat Input (MMBtu/hr)
EU0010	Unit 1	220
EU0020	Unit 2	550
EU0030	Heating Boiler	6.695
Installation's Total Heat Input (Q)		776.695

Allowable Emission Rate (E) for Existing Sources

$$E = 0.90Q^{-0.174}$$

Where E = maximum allowable PM emission rate in lb/MMBtu of heat input, rounded to two decimal places

Q = the installation's total heat input in millions of Btu/hr

$$E = 0.90(776.695)^{-0.174}$$

$$E = 0.28 \text{ lb/MMBtu}$$

The permittee performed a three (3) hour particulate (PM) stack test on Unit 1 (EU0010) and Unit 2 (EU0020) on May 10-12, 2005. The units were at full load and their control devices (ESP) were at full power. The test results demonstrated that Unit 1 (EU0010) and Unit 2 (EU0020) are in compliance with recorded PM emission rates of 0.072 lb/MMBtu and 0.092 lb/MMBtu, respectively. Calculations demonstrating that Heating Boiler (EU0030) is in compliance with the emission limit are contained in Attachment G.

In addition to the emission limitation, Unit 2 (EU0020) is subject to the Continuous Opacity Monitoring Systems (COMS) General Requirements in 10 CSR 10-6.220(3)(H) and the Reporting and Recordkeeping Requirements in 10 CSR 10-6.220(4) because the unit has a maximum heat input rate greater than 250 MMBtu/hr (10 CSR 10-6.22(3)(E).1).

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

This rule does not apply to the Coal Crushers 1 and 2 (EU0070) because according to paragraph (1)(H), emission sources regulated by 10 CSR 10-6.070 are exempt.

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

This rule does not apply to Unit 1 (EU0010) because the unit does not serve a generator with a nameplate capacity greater than 25 MWe nor is the unit listed in Table 1, 2 or 3 of 40 CFR 73.10(a).

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

This rule does not apply to Unit 1 (EU0010) because the unit does not serve a generator with a nameplate capacity greater than 25 MWe.

This rule applies to Unit 2 (EU0020); however, according to paragraph (1)(F) of the rule, the requirements of Section (3), (4), and (5) of this rule will not apply to any entity or source subject to and implementing the requirements of 10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program*.

10 CSR 10-6.360, *Control of NO<sub>x</sub> Emissions from Electric Generating Units and Non-Electric Generating Boilers*

This rule does not apply to this installation because the installation is located in Osage county, which is not an affected county.

- 10 CSR 10-6.362, *Clean Air Interstate Rule Annual NO<sub>x</sub> Trading Program*,
- 10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NO<sub>x</sub> Trading Program*,
- 10 CSR 10-6.366, *Clean Air Interstate Rule SO<sub>x</sub> Trading Program*, and

These rules do not apply to the Unit 1 (EU0010) because the unit does not serve a generator with a nameplate capacity greater than 25 MWe.

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

This rule established a model cap and trade program as a means of reducing national Hg emissions from coal fired electric utilities. However, Subpart HHHH was vacated in its entirety by the Court of Appeals for the District of Columbia Circuit on February 8, 2008.

- 10 CSR 10-6.400, *Restriction of Emissions of Particulate Matter from Industrial Processes*

This rule does not apply to the following emission units because according to paragraph (1)(B)(13) of the rule, the grinding, crushing, and conveying operations at a power plant are exempt.

EU ID #	Description of Emission Unit	2008 EIQ ID #
EU0040	Coal/Coke Conveying (Rail Coal to Storage Pile)	EP-01
EU0050	Coal/Coke Conveying (Coal to Unit 1)	EP-01
EU0060	Coal/Coke Conveying (Crushed Coal to Unit 2)	EP-01
EU0070	Coal Crusher 1	EP-02
EU0080	Coal Crusher 2	EP-02

This rule does not apply to the following emissions because according to paragraph (1)(B)(7) of the rule, fugitive emissions are exempt.

Description of Emission Unit	2008 EIQ ID #
Coal/coke unloading, rail and truck	FE-01
Coal conveying transfer	FE-02
Coal/coke storage pile	FE-03
Fly ash loading	FE-05
Fly ash unloading	FE-06

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

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation, which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

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Tandi Edelman  
Environmental Engineer

CERTIFIED MAIL: 70093410000190189091  
RETURN RECEIPT REQUESTED

Mr. Tim Backes  
Central Electric Power Cooperative - Chamois  
9321 Highway 100  
Chamois, MO 65024

Re: Central Electric Power Cooperative - Chamois , 151-0002  
Permit Number: **OP2011-035**

Dear Mr. Backes:

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

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

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

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:tek

Enclosures

c: Northeast Regional Office  
PAMS File: 2005-06-060