

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

www.dnr.mo.gov

AUG 15 2007

Mr. Michael McArthur  
Facility Operation Manager  
Fulton State Hospital  
600 East Fifth Street  
Fulton, MO 65251

Re: Fulton State Hospital  
Installation ID: 027-0021  
Permit Number: **OP2007-040**

Dear Mr. McArthur:

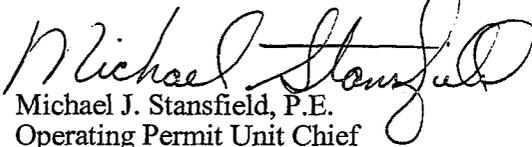
Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations, cited in this document, is necessary for continued compliance. It is very important you read and understand the requirements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

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please contact Don Murphy with the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or telephone (573) 751-4817. Thank you for your time and consideration.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS: dmk

Enclosures

c: Ms. Tamara Freeman, U.S. EPA Region VII  
Northeast Regional Office  
PAMS File: 2003-12-041



**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 here in.

**Operating Permit Number:** OP2007-040  
**Expiration Date:** AUG 14 2012  
**Installation ID:** 027-0021  
**Project Number:** 2003-12-041

**Installation Name and Address**

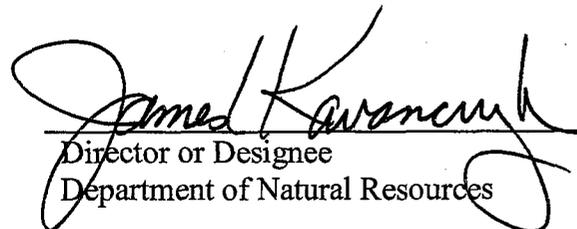
Fulton State Hospital  
600 East Fifth Street  
Fulton, MO 65251  
Callaway County

**Installation Description:**

Fulton State Hospital is a psychiatric hospital in Fulton, Missouri, which operates it's own heating plant. The plant has a total of four boilers. The boilers are dual fuel fired having the capacity to burn either natural gas or #2 fuel oil.

AUG 15 2007

Effective Date

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

## Table of Contents

|   |           |
|---|-----------|
| <b>I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING.....</b> | <b>2</b>  |
| EMISSION UNITS WITH LIMITATIONS .....                         | 2         |
| EMISSION UNITS WITHOUT LIMITATIONS .....                      | 2         |
| DOCUMENTS INCORPORATED BY REFERENCE.....                      | 2         |
| <b>II. PLANT WIDE EMISSION LIMITATIONS.....</b>               | <b>3</b>  |
| <b>III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS.....</b>  | <b>4</b>  |
| EU0010 THROUGH EU0040 – BOILERS AND EMERGENCY GENERATOR ..... | 4         |
| Permit Condition EU0010-001 THROUGH EU0020-001 .....          | 4         |
| 10 CSR 10-6.260.....  | 4         |
| Permit Condition EU0010-002 THROUGH EU0020-002 .....          | 5         |
| 10 CSR 10-3.060.....  | 5         |
| Permit Condition EU0010-003 through EU0020-003 .....          | 5         |
| 10 CSR 10-6.220.....  | 5         |
| Permit Condition EU0030-001 through EU0050-001 .....          | 6         |
| 10 CSR 10-6.060.....  | 6         |
| MDNR Construction Permit #0599-019.....                       | 6         |
| Permit Condition EU0030-002 Through EU0040-002 .....          | 7         |
| 10 CSR 10-6.070.....  | 7         |
| 40 CFR Part 60 Subpart Dc.....                                | 7         |
| Permit Condition EU0050-002 .....                             | 8         |
| 10 CSR 10-6.260.....  | 8         |
| <b>IV. CORE PERMIT REQUIREMENTS.....</b>                      | <b>10</b> |
| <b>V. GENERAL PERMIT REQUIREMENTS .....</b>                   | <b>16</b> |
| <b>VI. ATTACHMENTS .....</b>                                  | <b>22</b> |
| ATTACHMENT A .....  | 23        |
| ATTACHMENT B1 .....   | 24        |
| ATTACHMENT B2 .....   | 25        |
| ATTACHMENT C .....  | 26        |
| ATTACHMENT D.....   | 27        |
| ATTACHMENT E.....   | 28        |
| ATTACHMENT F.....   | 29        |

## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

Fulton State Hospital is a psychiatric hospital in Fulton, Missouri, which operates it's own heating plant. The plant has a total of four boilers. The boilers are dual fuel fired having the capacity to burn either natural gas or #2 fuel oil.

| Reported Air Pollutant Emissions, tons per year |  |  |  |  |                            |              |                                       |
|---|--|--|--|--|----------------------------|--------------|---------------------------------------|
| Year  | Particulate Matter<br>≤ Ten Microns<br>(PM-10) | Sulfur<br>Oxides<br>(SO <sub>x</sub> ) | Nitrogen<br>Oxides<br>(NO <sub>x</sub> ) | Volatile Organic<br>Compounds<br>(VOC) | Carbon<br>Monoxide<br>(CO) | Lead<br>(Pb) | Hazardous<br>Air Pollutants<br>(HAPs) |
| 2005  | 0.59   | 0.05                                   | 7.79                                     | 0.72                                   | 6.55                       | 0.00         | 0.00                                  |
| 2004  | 0.31   | 0.41                                   | 7.98                                     | 0.93                                   | 6.51                       | 0.00         | 0.00                                  |
| 2003  | 0.61   | 0.05                                   | 8.08                                     | 0.89                                   | 6.79                       | 0.00         | 0.00                                  |
| 2002  | 0.58   | 0.04                                   | 7.83                                     | 0.87                                   | 6.57                       | 0.00         | 0.00                                  |
| 2001  | 0.57   | 0.09                                   | 8.05                                     | 0.42                                   | 6.39                       | 0.00         | 0.00                                  |

### EMISSION UNITS WITH LIMITATIONS

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

| <u>Emission Unit #</u> | <u>Description of Emission Unit</u>                                |
|------------------------|--|
| EP-2                   | Boiler #3 - 64 MMBtu/hr Dual Fired ( Natural Gas or #2 Fuel Oil)   |
| EP-3                   | Boiler #4 - 90 MMBtu/hr Dual Fired ( Natural Gas or #2 Fuel Oil)   |
| EP-11                  | Boiler #6 - 32.7 MMBtu/hr Dual Fired ( Natural Gas or #2 Fuel Oil) |
| EP-12                  | Boiler #7 - 32.7 MMBtu/hr Dual Fired ( Natural Gas or #2 Fuel Oil) |
| EP-13                  | 350 kW Emergency Generator- Diesel Engine Powered.                 |

### EMISSION UNITS WITHOUT LIMITATIONS

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

#### Description of Emission Source

5,000 gallon unleaded Gasoline Storage Tank  
 5,000 gallon #2 fuel oil storage tank  
 15,000 Gallon #2 fuel oil storage tank

### DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1.) MDNR Construction Permit #0599-019

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

None.

### III. Emission Unit Specific Emission Limitations

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

| EU0010 Through EU0040 – Boilers and Emergency Generator |   |                      |
|---|---|----------------------|
| Emission Unit   | Description   | 2005 EIQ Reference # |
| EU0010  | Boiler #3 64 MMBtu/hr Dual Fired ( Natural Gas or #2 Fuel Oil)(1960)    | EP-02                |
| EU0020  | Boiler #4 90 MMBtu/hr Dual Fired ( Natural Gas or #2 Fuel Oil)(1953)    | EP-03                |
| EU0030  | Boiler #6 32.7 MMBtu/hr Dual Fired ( Natural Gas or #2 Fuel Oil)(1999)  | EP-11                |
| EU0040  | Boiler #7 32.7 MMBtu/hr Dual Fired ( Natural Gas or #2 Fuel Oil) (1999) | EP-12                |
| EU0050  | 350 kW Emergency Generator- Diesel Engine Powered.(1999)                | EP-13                |

#### Permit Conditions EU0010-001 and EU0020-001

10 CSR 10-6.260

#### Restriction of Emission of Sulfur Compounds

##### Emission Limitation:

- 1) No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight (8) pounds of sulfur dioxide per MMBTU actual heat input averaged on any consecutive three hour time period.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

| Pollutant                                       | Concentration by Volume*          | Remarks  |
|---|-----------------------------------|--|
| Sulfur Dioxide (SO <sub>2</sub> )               | 0.03 ppm (80 µg/m <sup>3</sup> )  | Annual arithmetic mean   |
|   | 0.14 ppm (365 µg/m <sup>3</sup> ) | 24-hour average not to be exceeded more than once per year                   |
|   | 0.5 ppm (1300 µg/m <sup>3</sup> ) | 3-hour average not to be exceeded more than once per year                    |
| Hydrogen Sulfide (H <sub>2</sub> S)             | 0.05 ppm (70 µg/m <sup>3</sup> )  | ½-hour average not to be exceeded over 2 times per year                      |
|   | 0.03 ppm (42 µg/m <sup>3</sup> )  | 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 µg/m <sup>3</sup>              | 24-hour average not to be exceeded more than once in any 90 consecutive days |

\* Concentration by Volume is given in both parts per million (ppm) and micrograms per cubic meter (µg/m<sup>3</sup>)

##### Operational Limitation/Equipment Specification:

- 1) Natural gas usage in these units shall be limited to pipeline grade natural gas only.

- 2) Fuel oil usage for these units shall be limited to burning fuel oil #2 or fuel oil containing 0.5 weight percent sulfur or less.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 3) All records shall be maintained for a minimum of five (5) years.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

**Permit Conditions EU0010-002 and EU0020-002**

10 CSR 10-3.060

**Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating**

**Emission Limitation:**

- 1) The permittee shall not emit particulate matter in excess of 0.352 pounds per MMBtu of heat input.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10 6.065(6)(C)1.C.(III).

**Permit Conditions EU0010-003 and EU0020-003**

10 CSR 10-6.220

**Restriction of Emissions of Visible Air Contaminants**

**Emission Limitation:**

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

**Monitoring:**

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit 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 consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two- (2) weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment B1 or B2), 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 C)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment D)
- 4) Attachments B1 or B2, C and D contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 6) All records shall be maintained for five years.

**Reporting:**

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

**Permit Conditions EU0030-001 through EU0050-001**

10 CSR 10-6.060

**Construction Permits Required**

MDNR Construction Permit #0599-019

**Emission Limitation:**

Fulton State Hospital shall emit into the atmosphere less than 40 tons of sulfur oxides (SO<sub>x</sub>) from the proposed equipment (EP11, EP12, and EP13) in any consecutive 12-month rolling average.

**Monitoring/Recordkeeping:**

Fulton State Hospital shall maintain the monthly and the sum of the most recent consecutive 12-month records of the SO<sub>x</sub> emissions from the proposed equipment (EP11, EP12, and EP13). Fulton State Hospital shall use Attachment "E", Monthly SO<sub>x</sub> Compliance Tracking Record, or an equivalent form to demonstrate compliance with Special Condition No. 1. These records shall be maintained on-site for five (5) years and shall be made available for inspection to the Missouri Department of Natural Resources (MDNR) personnel upon request.

**Reporting:**

Fulton State Hospital shall report to the Air Pollution Control Program's (APCP) Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which Monthly SO<sub>x</sub> Compliance Tracking Records (Special Condition No. 2) indicate that the source exceeds the emission limitation of Special Condition No. 1

**Permit Conditions EU0030-002 Through EU0040-002**

10 CSR 10-6.070

**New Source Performance Regulations**

40 CFR Part 60 Subpart Dc

**Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

**Emission Limitations:**

- 1) The permittee shall not combust oil in EU0030 or EU0040 that contains greater than 0.5 weight percent sulfur. [§60.42c(d)]
- 2) The permittee has elected to demonstrate compliance with the fuel oil sulfur limits based on a certification from the fuel supplier. [§60.42c(h)(1)]
- 3) The fuel oil sulfur limit applies at all times, including periods of startup, shutdown, and malfunction. [§60.42c(i)]

**Monitoring:**

The monitoring requirements of §60.46c do not apply to facilities where the owner or operator demonstrates compliance with the SO<sub>2</sub> standards based on fuel supplier certification. Therefore, there are no further monitoring requirements. [§60.46c(e)]

**Recordkeeping/Reporting:**

- 1) The permittee shall keep records and submit reports as required including the following information, as applicable: [§60.48c(e)]
  - a) Calendar dates covered in the reporting period. [§60.48c(e)(1)]
  - b) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under §60.48c(f)(1). [§60.48c(e)(11)]
    - i) Fuel supplier certification for distillate oil shall include the following information: [§60.48c(f)(1)]
      1. The name of the oil supplier; and [§60.48c(f)(1)(i)]
      2. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c. [§60.48c(f)(1)(ii)]

- c) In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. [§60.48c(e)(11)]
- 2) The permittee shall record and maintain records of the amounts of each fuel combusted during each day. [§60.48c(g)]
- 3) All records shall be maintained for five years and shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 4) The reporting period for the reports required under subpart Dc is each six-month period. All reports shall be submitted to the MDNR and shall be postmarked by the 30th day following the end of the reporting period. [§60.48c(i)]
- 5) The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by Section IV of this permit.

**Permit Condition EU0050-002**

10 CSR 10-6.260

**Restriction of Emission of Sulfur Compounds**

**Emission Limitation:**

- 1) No person shall cause or permit the emission into the atmosphere gases containing more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide or more than thirty-five milligrams per cubic meter (35 mg/cubic meter) of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three (3)-hour time period.
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

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

\* Concentration by Volume is given in both parts per million (ppm) and micrograms per cubic meter (µg/m<sup>3</sup>)

**Operational Limitation/Equipment Specification:**

- 1) EU0050 shall be limited to burning fuel oil #2 or fuel oil containing 0.5 weight percent sulfur or less.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 3) All records shall be maintained for a minimum of five (5) years.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program 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 requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

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

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

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

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

**10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months.

[10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

[10 CSR 10-6.065(6)(C)3.B]

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

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.
- 3) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

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

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

**10 CSR 10-6.150 Circumvention**

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

**10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

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

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

#### **10 CSR 10-3.030 Open Burning Restrictions**

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

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

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

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

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

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

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

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

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

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

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

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

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

## V. General Permit Requirements

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

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

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

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

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

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

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

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

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

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

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

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

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the

permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

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

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

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

None

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

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;

- b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

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

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

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

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

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

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

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
  - b) The permit shield shall not apply to these changes.

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

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any

change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

- c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
- d) The permit shield shall not apply to these changes.

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

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

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

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources 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) 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) 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 draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## **VI. Attachments**

Attachments follow.

## ATTACHMENT A

### 10 CSR 10-3.060 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-3.060, *Restriction of Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*.

| Emission Unit ID #          | MHDR (MMBtu/hr) | 2005 EIQ Reference # |
|-----------------------------|-----------------|----------------------|
| EU0010                      | 64              | EP-02                |
| EU0020                      | 90              | EP-03                |
| EU0030                      | 32.7            | EP-11                |
| EU0040                      | 32.7            | EP-12                |
| <b>Total Heat Input (Q)</b> | 219.4           |                      |

Allowable PM emission limitation for existing indirect heating source having an intermediate capacity between 10 MMBtu and 10,000 MMBtu:

$$E = 0.9(Q)^{-0.174} = 0.9(219.4)^{-0.174} = 0.35 \text{ lb/MMBtu}$$

| Emission Unit ID # | Fuel        | Emission Factor             | Source            | Conversion Factors              | Emission Factor (lb/MMBtu) | Emission Limit (lb/MMBtu) | Is EU in compliance? |
|--------------------|-------------|-----------------------------|-------------------|---------------------------------|----------------------------|---------------------------|----------------------|
| EU0010             | natural gas | 7.6 lb /10 <sup>6</sup> scf | AP-42 Table 1.4-2 | 1050 MMBtu /10 <sup>6</sup> scf | 0.007                      | 0.35                      | YES                  |
|                    | fuel oil #2 | 2 lb /10 <sup>3</sup> gal   | AP-42 Table 1.3-1 | 140 MMBtu /10 <sup>3</sup> gal  | 0.014                      | 0.35                      | YES                  |
| EU0020             | natural gas | 7.6 lb/10 <sup>6</sup> scf  | AP-42 Table 1.4-2 | 1050 MMBtu /10 <sup>6</sup> scf | 0.007                      | 0.35                      | YES                  |
|                    | fuel oil #2 | 2 lb /10 <sup>3</sup> gal   | AP-42 Table 1.3-1 | 140 MMBtu /10 <sup>3</sup> gal  | 0.014                      | 0.35                      | YES                  |







**Attachment D**

| Method 9 Opacity Emission Observations |                             |
|--|-----------------------------|
| Company                                | Observer                    |
| Location                               | Observer Certification Date |
| Date                                   | Emission Unit               |
| Time                                   | Control Device              |

| Hour | Min. | Seconds |    |    |    | Steam Plume (check if applicable) |          | Comments |
|------|------|---------|----|----|----|-----------------------------------|----------|----------|
|      |      | 0       | 15 | 30 | 45 | Attached                          | Detached |          |
|      | 0    |         |    |    |    |                                   |          |          |
|      | 1    |         |    |    |    |                                   |          |          |
|      | 2    |         |    |    |    |                                   |          |          |
|      | 3    |         |    |    |    |                                   |          |          |
|      | 4    |         |    |    |    |                                   |          |          |
|      | 5    |         |    |    |    |                                   |          |          |
|      | 6    |         |    |    |    |                                   |          |          |
|      | 7    |         |    |    |    |                                   |          |          |
|      | 8    |         |    |    |    |                                   |          |          |
|      | 9    |         |    |    |    |                                   |          |          |
|      | 10   |         |    |    |    |                                   |          |          |
|      | 11   |         |    |    |    |                                   |          |          |
|      | 12   |         |    |    |    |                                   |          |          |
|      | 13   |         |    |    |    |                                   |          |          |
|      | 14   |         |    |    |    |                                   |          |          |
|      | 15   |         |    |    |    |                                   |          |          |
|      | 16   |         |    |    |    |                                   |          |          |
|      | 17   |         |    |    |    |                                   |          |          |
|      | 18   |         |    |    |    |                                   |          |          |

| SUMMARY OF AVERAGE OPACITY |       |     |         |         |
|----------------------------|-------|-----|---------|---------|
| Set Number                 | Time  |     | Opacity |         |
|                            | Start | End | Sum     | Average |
|                            |       |     |         |         |
|                            |       |     |         |         |
|                            |       |     |         |         |

Readings ranged from \_\_\_\_\_ to \_\_\_\_\_ % opacity.

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

YES NO Signature of Observer



**Attachment F**  
**10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds**  
**Compliance Demonstration**

The following table demonstrates that the limits of **10 CSR 10-6.260(3)(A)** are met at all times by the boilers when burning natural gas or Fuel oil No.#2.

| Emission Unit   | Emission Unit Description |             | <sup>1</sup> Calculated Maximum SO <sub>2</sub> Emissions | SO <sub>2</sub> Emissions Limit | <sup>1</sup> Calculated Maximum SO <sub>3</sub> Emissions | SO <sub>3</sub> Emissions Limit |
|---|---------------------------|-------------|---|---------------------------------|---|---------------------------------|
| EU0010<br>EU0020  | Boiler #3<br>Boiler #4    | Fuel Oil #2 | 133 ppmv  | 500 ppmv                        | 11.08 mg/m <sup>3</sup>                                   | 35 mg/m <sup>3</sup>            |
| EU0010<br>EU0020  | Boiler #3<br>Boiler #4    | Natural Gas | 153 ppmv  | 500 ppmv                        | <sup>2</sup> Insignificant                                | 35 mg/m <sup>3</sup>            |
| EU0050  | Emergency Generator       | Fuel Oil #2 | 76 ppmv   | 500 ppmv                        | <sup>3</sup> Insignificant                                | 35 mg/m <sup>3</sup>            |
| <sup>1</sup> The supporting calculations and further detail can be found in the Statement of Basis  |                           |             |   |                                 |   |                                 |
| <sup>2</sup> AP-42 has no emission factor for SO <sub>3</sub> in Table 1.4-2, as the natural gas emission factor for SO <sub>2</sub> is based on 100% fuel sulfur conversion to SO <sub>2</sub> .   |                           |             |   |                                 |   |                                 |
| <sup>3</sup> Section 3.3.3.5 of AP-42 (10/96), states that for internal combustion engines, the sulfur in the fuel is essentially completely oxidized to SO <sub>2</sub> , therefore the unit will always be in compliance with this SO <sub>3</sub> limit. |                           |             |   |                                 |   |                                 |

For the Dual Fired Boilers Nos. #3 (EU0010) and #4 (EU0020), the following table demonstrates that the units will always be in compliance with **10 CSR 10-6.260(3)(C)A** when burning natural gas or fuel oil with a maximum sulfur content limited to 0.5% by weight.

| Emission Unit   | Emission Unit Description |             | SO <sub>2</sub> Emission Factor <sup>1</sup> (lb/MMBtu) | SO <sub>2</sub> Emissions (lb/MMBtu) | SO <sub>2</sub> Limit (lb/MMBtu) | Compliance Status |
|---|---------------------------|-------------|---|--------------------------------------|----------------------------------|-------------------|
| EU0010<br>EU0020  | Boiler #3<br>Boiler #4    | Fuel Oil #2 | 0.51<br>AP42 Tbl 1.3-1 (09/98)                          | 0.51                                 | 8.0                              | In Compliance     |
| EU0010<br>EU0020  | Boiler #3<br>Boiler #4    | Natural Gas | 0.0006<br>AP42 Tbl 1.4-2 (07/98)                        | 0.0006                               | 8.0                              | In Compliance     |
| <sup>1</sup> SO <sub>2</sub> emission factor converted 71 lb/10 <sup>3</sup> gal to lb/MMBtu by dividing by 140 MMBtu/10 <sup>3</sup> gal for Diesel Fuel.<br>SO <sub>2</sub> emission factor converted 0.6 lb/10 <sup>6</sup> scf to lb/MMBtu by dividing by 1020 MMBtu/10 <sup>6</sup> scf for Natural Gas. |                           |             |   |                                      |                                  |                   |

## 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 March 19, 2003; revised December 12, 2003;
- 2) Previous Part 70 Operating Permit Application, dated June 23, 1996;
- 3) 2005 EIQ internet submittal dated March 27, 2006; and
- 4) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 5) MDNR Construction Permit Number 0979-037
- 6) Part 70 Operating Permit #P027-0021-0001, issued December 4, 1998

| Current Emission Points and Respective Status |                             |                |   |
|---|-----------------------------|----------------|---|
| 2005 EIQ<br>Emission<br>Point No.             | Point Description           | Status         | Comment   |
| 01  | Boiler #5                   | Decommissioned | See comment below for EP-06 through EP-10   |
| 02  | Boiler #3                   | Operational    | 64 MMBTU/Hr unit (1960)   |
| 03  | Boiler #4                   | Operational    | 90 MMBTU/Hr unit (1953)   |
| 04  | Gasoline                    | Operational    | 5000 gallon -Unleaded Gasoline Storage Tank   |
| 05  | Diesel                      | Operational    | 3000 gallon #2 fuel oil storage tank<br>15,000 gallon #2 fuel oil storage tank  |
| 06  | Ash Handling                | Decommissioned | In 1995, Fulton State Hospital quit burning coal. The installation has no more coal on-site and has abandoned the use of Boiler #5 due to the current condition of the piece of equipment. The installation has decommissioned Boiler #5 as well as associated equipment (Emission Points 6-10). Fulton State Hospital has no future plans for using coal as a fuel source in the future. |
| 07  | Ash Loadout                 |                |   |
| 08  | Coal Receiving              |                |   |
| 09  | Coal Storage                |                |   |
| 10  | Coal Conveying and Transfer |                |   |
| 11  | Boiler #6                   | Operational    | 32.7 MMBTU/Hr unit permitted in CP# 0599-019  |
| 12  | Boiler #7                   | Operational    | 32.7 MMBTU/Hr unit permitted in CP# 0599-019  |
| 13  | Emergency Generator         | Operational    | 350 KW RICE that was permitted in CP#0519, but was installed in 1999 according to 2005 EIQ  |

### 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.

### 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:

MDNR Construction Permit Number 0979-037;

The condition requiring the removal of Boilers 1 and 2 was not included in this permit because Fulton State Hospital has abandoned the use of all three coal boilers (Boilers #1, #2 and #5). Fulton State Hospital has no more coal on-site and the installation quit burning coal in 1995. Fulton State Hospital does not use Boiler #5 anymore due to its age.

MDNR Construction Permit #0599-019:

Emission point numbers referenced in Special Conditions #1 and #2 were changed from (EP1, EP2, and EP3) to (EP11, EP12, and EP13) to reflect the permitted equipment as reported in the 2005 EIQ submittal.

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

40 CFR 60, Subpart Kb *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commences After July 23, 1984*. The gasoline and diesel fuel storage tanks are all under the applicable volume (< 75 m<sup>3</sup> (19,800gallon)).

40 CFR 63 Subpart Dc applies each to steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr).

| Emission Point No # | Part 70 Emission Unit | Point Description | Description                                  |
|---------------------|-----------------------|-------------------|--|
| 02                  | EU0010                | Boiler #3         | 64 MMBTU/Hr unit (1960)                      |
| 03                  | EU0020                | Boiler #4         | 90 MMBTU/Hr unit (1953)                      |
| 11                  | EU0030                | Boiler #6         | 32.7 MMBTU/Hr unit permitted in CP# 0599-019 |
| 12                  | EU0040                | Boiler #7         | 32.7 MMBTU/Hr unit permitted in CP# 0599-019 |

Of the boilers at this facility, only the boilers EU0030 and EU0040 are subject because of the dates constructed.

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

40 CFR 63 Subpart ZZZZ does not apply to the Emergency Generator (EP-13) because the facility is not a major source of HAPS.

40 CFR 63 Subpart DDDDD does not apply to the boilers because the facility is not a major source of HAPS.

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

“None.”

**Compliance Assurance Monitoring (CAM) Applicability**

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

**Other Regulatory Determinations**

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

Emission units EU0030 and EU0040-004 are subject to 40 CFR 60 Subpart Dc and therefor exempt from this rule by 10 CSR 10-3.060(3)(E). However, indirect heat input values from sources that are subject to New Source Performance Standards were used in the calculation of the installation’s total heat input (Q) to demonstrate compliance in Attachment A of this permit.

10 CSR 10-6.260 - *Restriction of Emission of Sulfur Compounds*

Emission units EU0030 and EU0040-004 are subject to 40 CFR 60 Subpart Dc and therefor exempt from this rule by 10 CSR 10-6.260 (1)(A), which provides an exemption for emission sources subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070 - *New Source Performance Regulations*.

| 10 CSR 10-6.260 |                           | Rule Section Applicability |             |             |
|-----------------|---------------------------|----------------------------|-------------|-------------|
| Emission Unit   | Emission Unit Description | 6.260(3)(A)                | 6.260(3)(B) | 6.260(3)(C) |
| EU0010          | Boiler #3                 | Yes                        | Yes         | Yes         |
| EU0020          | Boiler #4                 | Yes                        | Yes         | Yes         |
| EU0030          | Exempt per 6.260(1)(A)(1) |                            |             |             |
| EU0040          |                           |                            |             |             |
| EU0050          | Emergency Generator       | Yes                        | Yes         | No          |

Supporting Calculations for Attachment F - 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds Compliance Demonstration*

SO<sub>2</sub> 500 ppmv limit

For the Emergency Generator (EU0050);

The SO<sub>2</sub> emission factor for diesel engines < 600 HP, EF = 0.29 lb/MMBtu (AP-42 Table 3.3-1)

$$\text{ppmv } SO_2 = \left( \frac{0.29 \text{ lb}}{\text{MMBtu}} \right) \times \left( \frac{\text{MMBtu}}{10,320 \text{ wscf}} \right) \times \left( \frac{\text{ppmw}}{1.667 E^{-7} \text{ lb / scf}} \right) \times \left( \frac{0.45 \text{ ppmv}}{\text{ppmw}} \right) = 76 \text{ ppmv}$$

Dual Fired Boilers Nos. #3 (EU0010) and #4 (EU0020);

For maximum SO<sub>2</sub> emissions from natural gas combustion in the boilers (ppmv):

$EF_{SO_2,NG}$  = SO<sub>2</sub> emission factor (lbs/MMBtu) = (0.6 lbs/10<sup>6</sup> scf)/(1020 MMBtu/10<sup>6</sup> scf) = 5.88E-4 lb/MMBtu (AP-42 Table 1.4-2(7/98))

$$\text{ppmv } SO_2 = \left( \frac{5.88 E^{-4} \text{ lb}}{\text{MMBtu}} \right) \times \left( \frac{\text{MMBtu}}{10,610 \text{ wscf}} \right) \times \left( \frac{\text{ppmw}}{1.667 E^{-7} \text{ lb / scf}} \right) \times \left( \frac{0.45 \text{ ppmv}}{\text{ppmw}} \right) = 153.3 \text{ ppmv}$$

For maximum SO<sub>2</sub> emissions from Fuel Oil #2 combustion in the boilers (ppmv):

$EF_{SO_2,OIL}$  = Fuel Oil #2 SO<sub>2</sub> emission factor (71 lbs/10<sup>3</sup> gal)/(140 MMBtu/10<sup>3</sup> gal) = 0.507 lbs/MMBtu (AP-42 Table 1.3-1(9/98))

$$\text{ppmv } SO_2 = \left( \frac{0.507 \text{ lb}}{\text{MMBtu}} \right) \times \left( \frac{\text{MMBtu}}{10,320 \text{ wscf}} \right) \times \left( \frac{\text{ppmw}}{1.667 E^{-7} \text{ lb / scf}} \right) \times \left( \frac{0.45 \text{ ppmv}}{\text{ppmw}} \right) = 133.18 \text{ ppmv}$$

SO<sub>3</sub> (35-mg/m<sup>3</sup>) Limit - For maximum SO<sub>3</sub> emissions from Fuel Oil #2 combustion in the boilers (mg/m<sup>3</sup>);

$EF_{SO_3,OIL}$  = Fuel Oil #2 SO<sub>3</sub> emission factor = (1 lbs/10<sup>3</sup> gal)/(140 MMBtu/10<sup>3</sup> gal) = 7.14E-03 lbs/MMBtu (AP-42 Table 1.3-1(9/98))

$$SO_3 \left( \frac{\text{mg}}{\text{m}^3} \right) = \left( \frac{7.14 E^{-03} \text{ lb}}{\text{MMBtu}} \right) \times \left( \frac{\text{MMBtu}}{10,320 \text{ wscf}} \right) \times \left( 1.603 \times 10^7 \frac{\text{mg} \cdot \text{ft}^3}{\text{lb} \cdot \text{m}^3} \right) = 11.08 \frac{\text{mg}}{\text{m}^3} SO_3$$

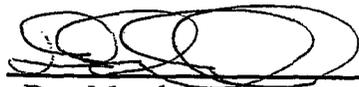
**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

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:



---

Don Murphy  
Environmental Engineer