



# INTERMEDIATE STATE 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.

**Intermediate Operating Permit Number:** OP2014-014  
**Expiration Date:** APR 03 2020  
**Installation ID:** 189-1101  
**Project Number:** 2012-01-074

**Installation Name and Address**

St. Lukes Hospital  
232 Woods Mill Road  
Chesterfield, MO 63017  
St. Louis County

**Parent Company's Name and Address**

St. Lukes Hospital  
232 Woods Mill Road  
Chesterfield, MO 63017

**Installation Description:**

St. Luke's Hospital is a 493 bed general medical and surgical hospital located in Chesterfield, Missouri. The facility has two 65.5 MMBtu dual fired boilers, seven emergency generators, and two ethylene oxide sterilizers. This installation is major for Nitrogen Oxides (NO<sub>x</sub>) and Sulfur Oxides (SO<sub>x</sub>). However the facility has accepted voluntary facility wide limitations of 100 tons NO<sub>x</sub> per year demonstrated through monthly tracking and a maximum fuel sulfur limit of 0.15 % by weight demonstrated through fuel receipts for SO<sub>x</sub> emission limitation.

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Operating Permit Unit

Director or Designee  
Department of Natural Resources

APR 03 2015

Effective Date

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

St. Luke's Hospital is a 493 bed general medical and surgical hospital located in Chesterfield, Missouri. The facility has two 65.5 MMBtu dual fired boilers, seven emergency generators, and two ethylene oxide sterilizers. This installation is major for Nitrogen oxides (NO<sub>x</sub>) and Sulfur Oxides (SO<sub>x</sub>). However the facility has accepted voluntary facility wide limitations of 100 tons NO<sub>x</sub> per year demonstrated through monthly tracking and a maximum fuel sulfur limit of 0.15 % by weight demonstrated through fuel receipts for SO<sub>x</sub> emission limitation.

Reported Air Pollutant Emissions, tons per year					
Pollutants	2012	2011	2010	2009	2008
Particulate Matter $\leq$ Ten Microns (PM <sub>10</sub> )	0.13	0.13	0.12	0.12	0.13
Particulate Matter $\leq$ 2.5 Microns (PM <sub>2.5</sub> )	0.13	0.13	0.12	0.12	0.13
Sulfur Oxides (SO <sub>x</sub> )	0.51	0.51	0.07	0.07	0.58
Nitrogen Oxides (NO <sub>x</sub> )	6.43	6.43	6.13	6.13	6.34
Volatile Organic Compounds(VOC)	0.35	0.13	0.34	0.34	0.34
Carbon Monoxide (CO)	5.32	5.32	5.14	5.14	5.24
Lead (Pb)	0.00	0.00	0.00	0.00	0.00
Hazardous Air Pollutants (HAPs)	0.00	0.22	0.22	0.22	0.00
Ammonia (NH <sub>3</sub> )	0.04	0.04	0.03	0.03	0.04

### EMISSION UNITS WITH LIMITATIONS

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

Emission Unit #	Description of Emission Unit
EP-1	2 Ethylene Oxide Sterilizers
EP-2	Boiler #1 (1975) Fuel Oil #2/Natural Gas fired (65.5 MMBtu)
EP-3	Boiler #2 (1975) Fuel Oil #2/Natural Gas fired (65.5 MMBtu)
PP-1	Power Plant #1, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-2	Power Plant #2, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-3	Power Plant #3, Detroit Diesel, Diesel Fuel, 1000 hp. (1982)
PP-4	Power Plant #4, Spectrum Detroit Diesel, Diesel Fuel, 1550 hp. (2003)
EMOB	Spectrum Detroit Diesel, Diesel Fuel, 910 hp. (2003)
NMOB	Magna One Detroit Diesel, Diesel Fuel, 411 hp. (1986)
DOC	Diesel Emergency Generator, 500 Kw Caterpillar, 670.5 hp. (2005)

### 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

- 3 UST fuel oil storage tanks
- 2-20 k gal UST fuel oil for PP1-PP-4
- 5000 gallon AST- Fuel oil tank for EMOB
- 310 gallon fuel oil tank for DOC

**DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

None.

## 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 on the date of permit issuance.

### PERMIT CONDITION PW001

10 CSR 10-6.065(5)(C)2. Voluntary Limitation(s)

#### **Emission Limitation:**

This installation shall emit less than 100 tons of Nitrogen Oxides (NOx) in any 12 month rolling period.

#### **Monitoring/Recordkeeping:**

- 1.) The permittee shall calculate and record facility-wide emissions of NOx on a rolling 12-month basis.
- 2.) Attachment A (or equivalent) will be used to demonstrate compliance with the 100 ton/year NOx limit.
- 3.) These records shall be made immediately available for inspection to the Department of Natural Resources personnel upon request.
- 4.) These records shall be kept on-site 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 (10) days after records indicate an exceedance of the 100 ton/year NOx limit.
- 2.) The permittee shall report any deviations/exceedances of this permit condition using the 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(5)(A).

### PERMIT CONDITION PW002

10 CSR 10-6.065(5)(C)2. Voluntary Limitation(s)  
10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds*

#### **Operational Limitation/Equipment Specifications:**

All fuel oil usage in boilers or emergency generators at this facility shall be limited to fuels with a sulfur content of no more than 0.15 % sulfur by weight.

#### **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 five years.
- 4.) Attachment E shows compliance with this permit condition.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the 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).

### 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. Citations for the source of the requirements are provided directly following the permit condition. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

<b>PERMIT CONDITION 1</b>	
10 CSR 10-6.075 <i>Maximum Achievable Control Technology Regulations</i>	
40 CFR 63 Part Subpart WWWW— <i>National Emission Standards for Hospital Ethylene Oxide Sterilizers</i>	
<b>Ethylene Oxide Sterilizers</b>	
EIQ Reference #	Description
EP-1	Two (2) Ethylene Oxide Sterilizers

**Operational Limitations:**

The permittee must sterilize full loads of items having a common aeration time, except under medically necessary circumstances, as that term is defined in §63.10448. [[§63.10390](#)]

**Monitoring:**

For each sterilization unit not equipped with an air pollution control device, the permittee must demonstrate continuous compliance with the management practice standard in §63.10390 by recording the date and time of each sterilization cycle, whether each sterilization cycle contains a full load of items, and if not, a statement from a hospital central services staff, a hospital administrator, or a physician that it was medically necessary. [[§63.10420](#)]

**Recordkeeping:**

- 1.) The Permittee must keep the following records [[§63.10432](#)];
  - a.) A copy of the Initial Notification of Compliance Status that you submitted to comply with this subpart.
  - b.) Records required by §63.10420 for each sterilization unit not equipped with an air pollution control device.
- 2.) The records must be in a form suitable and readily available for expeditious review. [[§63.10434\(a\)](#)]
- 3.) The Permittee must keep each record for five years following the date of each record. [[§63.10434\(b\)](#)]
- 4.) The Permittee must keep each record onsite for at least two years after the date of each record. The facility may keep the records offsite for the remaining three years. [[§63.10434\(c\)](#)]

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the 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(5)(A).

<b>PERMIT CONDITION 2</b>	
<i>10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants</i>	
<b>Dual Fired Boilers</b>	
EQ Reference #	Description (Installation Date)
EP-2	Boiler #1, Natural Gas and Diesel fired , 65.5 MMBtu (1975)
EP-3	Boiler #2, Natural Gas and Diesel fired, 65.5 MMBtu (1975)

**Emission Limitation:**

- 1.) The permittee shall not cause or permit emissions to be discharged into the atmosphere from any new source any visible emissions with an opacity greater than 20%. [10 CSR 10-6.220(3)(A)]
- 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 40%. [10 CSR 10-6.220(3)(B)]

**Monitoring:**

- 1.) The permittee shall conduct a visual emission observation on this emission unit once a month 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 were 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.) Should a violation be observed, monitoring frequency will progress in the following manner:
  - a.) Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after the date of the initial violation. Should no violation of this regulation be observed during this period, then,
  - b.) Observations must be made once every two weeks for a period of eight (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.
- 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 B), noting:
  - a.) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b.) All emission units from which visible emissions occurred, and
  - c.) Whether the visible emissions were normal for the process.
- 2.) The permittee shall maintain records of any equipment malfunctions. (see Attachment D)
- 3.) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment C)
- 4.) Attachments B, C and D contain example logs to assist in compliance with 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 in the annual compliance certification, as required by Section IV of this permit.

<b>PERMIT CONDITION 3</b>	
10 CSR 10-6.075 <i>Maximum Achievable Control Technology Regulations</i> 40 CFR Part 63, Subpart JJJJJ— <i>National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources</i>	
<b>Dual Fired Boilers</b>	
EQ Reference #	Description (Installation Date)
EP-2	Boiler #1, Natural Gas and Diesel fired , 65.5 MMBtu (1975)
EP-3	Boiler #2, Natural Gas and Diesel fired, 65.5 MMBtu (1975)
<ul style="list-style-type: none"><li>• Classification: Existing gas fired boilers at an area source for HAP.</li><li>• <i>Gas-fired</i> boiler includes any boiler that burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.</li><li>• <i>Fuel Switching</i>: Exceedance of the 48 hour annual fuel oil usage limitation is considered a <b><i>fuel switch</i></b> under MACT JJJJJ. At the time of exceedance, the unit would be then classified as an existing liquid fuel boiler subject to the emission limits and work practice standards of MACT JJJJJ per §63.11194(e).</li></ul>	

**Operational Limitations:**

Fuel oil usage for periodic testing shall not exceed a combined total of 48 hours during any calendar year.

**Recordkeeping:**

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

**Reporting Requirements**

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

<b>PERMIT CONDITION 4</b>	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart ZZZZ – <i>National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>	
<b>Emergency Generators</b>	
EIQ Reference #	Description (Installation Date)
PP-1	Power Plant #1, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-2	Power Plant #2, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-3	Power Plant #3, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-4	Power Plant #4, Spectrum Detroit Diesel, Diesel Fuel, 1550 hp. (2003)
EMOB	EMOB, Spectrum Detroit Diesel, Diesel Fuel, 910 hp. (2003)
NMOB	NMOB, Magna One Detroit Diesel, Diesel Fuel, 411 hp. (1986)
DOC	Diesel Emergency Generator, 500 Kw Caterpillar, 670.5 hp. (2005)
Engine Category	Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

**Annual Usage Limitations:**

- 1.) The permittee shall operate the emergency stationary RICE according to the requirements in paragraphs §63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described below from paragraphs §63.6640(f)(1) through (4), is prohibited. [\[§63.6640\(f\)\]](#)
  - a.) There is no time limit on the use of emergency stationary RICE in emergency situations. [\[§63.6640\(f\)\(1\)\]](#)
  - b.) The permittee may operate the emergency stationary RICE for any combination of the purposes specified in paragraphs §63.6640(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs §63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by this paragraph §63.6640(f)(2). [\[§63.6640\(f\)\(2\)\]](#)
    - i.) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [\[§63.6640\(f\)\(2\)\(i\)\]](#)
    - ii.) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the

Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [\[§63.6640\(f\)\(2\)\(ii\)\]](#)

iii.) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [\[§63.6640\(f\)\(2\)\(iii\)\]](#)

c.) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph §63.6640(f)(2). Except as provided in paragraphs §63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [\[§63.6640\(f\)\(4\)\]](#)

i.) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system. [\[§63.6640\(f\)\(4\)\(i\)\]](#)

ii.) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

A.) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

B.) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

C.) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

D.) The power is provided only to the facility itself or to support the local transmission and distribution system.

E.) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [\[§63.6640\(f\)\(4\)\(ii\)\(A\) though \(E\)\]](#)

2.) If the permittee does not operate the engine according to the requirements in paragraphs §63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63 Subpart ZZZZ and must meet all requirements for non-emergency engines. [\[§63.6640\(f\)\]](#)

**Recordkeeping Requirements:**

The Permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [\[§63.6655\(f\)\]](#)

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the 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 CSR 10-6.065(5)(A).

## 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), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance. The following is only an excerpt from the regulation or code, and is provided for summary purposes only

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

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 3) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for 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.
- 4) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR part 60, Appendix A, Method 9 promulgated as of December 23, 1971 is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

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

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and

- j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
  - 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 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(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065, §(5)(C)(1) and §(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, §(5)(C)(1) and §(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 10-6.100 Alternate Emission Limits**

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

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

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) The permittee may be required by the director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall submit a full EIQ for the 2011, 2014, 2017, and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
- 5) In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060 Section (5) or (6) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.
- 6) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 7) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 8) 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.
- 9) 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.

**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 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited**

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.



**10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Contained in State Implementation Plan)**

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

**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 10-5.240 Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area**

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

- 1) Areas in which there are one or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from these sources by regulations of general application are or would be greater than 2000 tons per year or 500 pounds per hour.
- 2) Areas in which there are one or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than 1000 tons for any consecutive three months or 1000 pounds per hour.

**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, §(5)(E)2 and §(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, §(5)(C)1 and §(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) April 1st for monitoring which covers the January through December time period.
    - ii) Exception. Monitoring requirements which require reporting more frequently than 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.
  - 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 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 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 §(5)(C)1 and §(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(5)(C)1.A 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 under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

**10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios**

None.

**10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B; and §(6)(C)3.D; and §(5)(C)3 and §(6)(C)3.E.(I) – (III) and (V) – (VI) 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 the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances 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, §(5)(C)1 and §(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(5)(C)5 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. 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 a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
  - 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, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. 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; and
  - 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.

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

The application utilized in the preparation of this permit was signed by Bill Bitter, Assistant Director Plant Operations. On January 13, 2014, the Air Pollution Control Program was informed that Chris Shoemaker, Assistant Director of Plant Operations, is now the responsible official. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 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 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) 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,
- 3) 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 §(5)(E)1.A and §(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 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 E**

SO<sub>x</sub> Compliance Demonstration

Emergency Generators:

Total Hp = 6542

Total MMBtu = 16.6428

MHDR = 0.1189 MGal/ hr

Hours of Operation = 500 hrs

% Sulfur = 0.15%

Emission Factor = 137\*%S = 137 \*0.15 = 20.7 lb/MGal

$$PTE = \frac{0.1189 \text{ Mgal}}{\text{hr}} \times \frac{20.7 \text{ lb}}{\text{MGal}} \times \frac{500 \text{ hr}}{\text{yr}} \times \frac{1 \text{ ton}}{2000 \text{ lbs}} = \frac{0.62 \text{ tons}}{\text{yr}}$$

Boilers:

Total MHDR = 131 MMBtu/hr

Natural Gas:

Heat Value = 1050 MMBtu/MMft<sup>3</sup>

Total MHDR= 131 MMBtu/hr \* MMft<sup>3</sup>/1050 MMBtu = 0.1248 MMft<sup>3</sup>/hr

SO<sub>x</sub> Emission Factor = 0.6 lb/MMft<sup>3</sup>

$$PTE = \frac{0.1248 \text{ MMft}^3}{\text{hr}} \times \frac{0.6 \text{ lb}}{\text{MMft}^3} \times \frac{8760 \text{ hr}}{\text{yr}} \times \frac{\text{ton}}{2000 \text{ lbs}} = \frac{0.328 \text{ ton}}{\text{yr}}$$

Fuel Oil:

Heat Value = 137 MMBtu/MGal

Total MHDR = 131 MMBtu/hr \* MGal/137 MMBtu = 0.9562 MGal/hr

% Sulfur = 0.15%

SO<sub>x</sub> Emission Factor = 142\*S + 5.7\*S = 142\*(0.15) + 5.7\*(0.15) = 22.155 lb/MGal

$$PTE = \frac{0.9562 \text{ MGal}}{\text{hr}} \times \frac{22.155 \text{ lb}}{\text{MGal}} \times \frac{8760 \text{ hr}}{\text{yr}} \times \frac{\text{ton}}{2000 \text{ lb}} = \frac{92.79 \text{ ton}}{\text{yr}}$$

Burning Fuel oil in the boilers has the higher potential to emit value, so 92.79 tons/yr will be used for the compliance demonstration.

$$\text{Total SO}_x \text{ PTE} = \frac{0.62 \text{ tons}}{\text{yr}} + \frac{92.79 \text{ tons}}{\text{yr}} = \frac{93.41 \text{ tons}}{\text{yr}}$$

This value is below the 100 ton major source threshold for SO<sub>x</sub> emissions and is therefore in compliance.

## STATEMENT OF BASIS

### Voluntary Limitations

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

### 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) Intermediate Operating Permit Application, received January 23, 2012;
- 2) 2011 Emissions Inventory Questionnaire; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

### Construction Permit History/Revisions

St. Louis County Department of Health Permit Number	Description
5960	Zurn Industrial Boiler (65.5 MMBtu/hr, NG & #2 Oil)
7146	Parts Washer #1
7353	ETO Sterilizer #1
7354	ETO Sterilizer #2
7509	Zurn Industrial Boiler #2 (65.5 MMBtu/hr, NG & #2 fuel oil)
7558	Diesel Emergency Generator, 500 Kw Caterpillar, (2005)
<ul style="list-style-type: none"><li>• No revisions were made to construction permits for this installation since there were no special conditions to carry forward into this operating permit.</li></ul>	

### New Source Performance Standards (NSPS) Applicability

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

This rule does not apply since the boilers were constructed in 1975, which is before the applicability date of the standard.

40 Part 60 Subpart IIII *Standard of Performance for Stationary Compression Ignition Internal Combustion Engines*

This rule applies to owners and operators of stationary compression ignition internal combustion engines (CI ICE) that commence construction (engine is ordered) after July 11, 2005 where the stationary CI ICE are manufactured after April 1, 2006. The RICE at this facility were all installed before the applicability date of this standard.

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

40 CFR 63 Subpart O--*Ethylene Oxide Emissions Standards For Sterilization Facilities*

Per §63.360(e), this subpart does not apply to ethylene oxide sterilization operations at hospitals or other facilities whose primary purpose is to provide medical services to humans or animals.

40 CFR 63 Subpart ZZZZ - *National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines*

EQ Reference #	Description (Installation Date)
PP-1	Power Plant #1, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-2	Power Plant #2, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-3	Power Plant #3, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-4	Power Plant #4, Spectrum Detroit Diesel, Diesel Fuel, 1550 hp. (2003)
EMOB	EMOB, Spectrum Detroit Diesel, Diesel Fuel, 910 hp. (2003)
NMOB	NMOB, Magna One Detroit Diesel, Diesel Fuel, 411 hp. (1986)
DOC	Diesel Emergency Generator, 500 Kw Caterpillar, 670.5 hp. (2005)

§63.6590(a)(1)(iii) states that a stationary RICE is existing if construction commenced before June 12, 2006.

According to §63.6585(f)(3), MACT ZZZZ does not apply to existing institutional emergency stationary RICE located at an area source of HAP emissions that are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

§63.6675 defines *institutional emergency stationary RICE* as;

- an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

However the stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes the usage limitations specified in §63.6640(f). (*See Permit Condition 4*)

40 CFR Part 63, Subpart JJJJJ—*National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*

<b>Dual Fired Boilers</b>	
EQ Reference #	Description
EP-2	Boiler #1, Natural Gas and Diesel fired (1975), 65.5 MMBtu
EP-3	Boiler #2, Natural Gas and Diesel fired (1975), 65.5 MMBtu

Permit Condition 3 requires the permittee to record the hours that the boiler(s) burn fuel oil to demonstrate that the units are properly classified as gas fired under 40 CFR 63 JJJJJ, and exempt from the rule.

40 CFR 63 Subpart WWWW—*National Emission Standards for Hospital Ethylene Oxide Sterilizers*

<b>Ethylene Oxide Sterilizers</b>	
EQ Reference #	Description
EP-1	Two (2) Ethylene Oxide Sterilizers

§63.10382(b) classifies an affected source as a new source if construction or reconstruction of the affected source commenced on or after November 6, 2006. Construction Permits #7353 and 7354 state the two units were installed and functional in April 2010, which is after that date.

**Updated Potential to Emit for the Installation**

Pollutant	Potential to Emit (tons/yr) <sup>1</sup>	Potential to Emit (tons/yr) <sup>2</sup> after 100 tpy NOx limit in PW001
CO	49.26	43.23
CO <sub>2e</sub>	94,531	82,197
HAP	1.04	0.90
NO <sub>x</sub>	113.21	100.00
PM <sub>10</sub>	10.20	8.89
PM <sub>25</sub>	9.14	7.97
SO <sub>x</sub>	93.41	86.61
VOC	3.34	2.94

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

- A sulfur value of 0.15% was used in to derive the SOx emission factor for FO#2. Therefore the PTE for SOx shown above is conditioned PTE from PW002 in both scenarios.
- Heat values used were 1050 Btu/SCF for Natural Gas and 137,000 Btu/gal for Fuel Oil #2.
- Emission Factor Sources, U.S. EPA WebFIRE for SCC 10300602 and 10300501. No emission factors for VOC or HAP were provided for fuel oil #2 for SCC 10300501.
- Based upon historical use of the Ethylene Oxide Sterilizers (EP-1), a conservative estimate was made to be 1 ton per year for both HAP and VOC.

<sup>2</sup>PTE was adjusted proportionately by the hours of usage for the combustion units to 7609 hrs/yr to account for the 100 tpy NOx limit in PW001.

**Other Regulatory Determinations**

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

The following calculations demonstrate compliance with the provisions of the rule as long as the fuel sulfur is less than 0.15% by weight as required by Permit Condition PW002:

**RICE:**

EQ Reference #	Description (Installation Date)
PP-1	Power Plant #1, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-2	Power Plant #2, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-3	Power Plant #3, Detroit Diesel, Diesel Fuel, 1000 hp. (1975)
PP-4	Power Plant #4, Spectrum Detroit Diesel, Diesel Fuel, 1550 hp. (2003)
EMOB	EMOB, Spectrum Detroit Diesel, Diesel Fuel, 910 hp. (2003)
NMOB	NMOB, Magna One Detroit Diesel, Diesel Fuel, 411 hp. (1986)
DOC	Diesel Emergency Generator, 500 Kw Caterpillar, 670.5 hp. (2005)

10 CSR 10-6.260(3)(A)2. New sources. 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.

Using AP-42 and assuming that all sulfur in the fuel is converted into SO<sub>2</sub>;



$$\text{Distillate Oil SO}_2 \text{ emission factor (lbs/MMBtu)} = \frac{138 (0.15) \text{ lbs}/10^3 \text{ gal}}{140 \text{ MMBtu} / 10^3 \text{ gal}} = 0.148 \text{ lb/MMBtu}$$

(AP - 42 Section 3.4 (10/96))

$$\text{ppmv SO}_2 = \left( \frac{0.148 \text{ lb}}{\text{MMBtu}} \right) \times \left( \frac{\text{MMBtu}}{10,320 \text{ wscf}} \right) \times \left( \frac{\text{ppmw}}{1.660 \text{E}^{-7} \text{ lb/scf}} \right) \times \left( \frac{0.45 \text{ ppmv}}{\text{ppmw}} \right) = 38.84 \text{ ppmv} \ll 500 \text{ ppmv}$$

(Appendix A – 7 to Part 60)

**Boilers:**

EQ Reference #	Description
EP-2	Boiler #1, Natural Gas and Diesel fired (1975), 65.5 MMBtu
EP-3	Boiler #2, Natural Gas and Diesel fired (1975), 65.5 MMBtu
10 CSR 10-6.260(3)(B) - No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds (8 lbs.) of sulfur dioxide per million Btus actual heat input averaged on any consecutive three (3)-hour time period.	

For maximum SOx emissions (from fuel oil #2 combustion):

$$\text{Distillate Oil SOx emission factor (lbs / MMBtu)} = \frac{157 (0.15) + 5.7 (0.15) \text{ lbs}/10^3 \text{ gal}}{140 \text{ MMBtu} / 10^3 \text{ gal}} = 0.158 \text{ lb/MMBtu} \ll 8 \text{ lbs/MMBtu}$$

(AP - 42 Table 1.3-1(9/98))

Therefore both the RICE and boiler units are in compliance with 10 CSR 10-6.260 when burning fuel oil with a maximum sulfur content of 0.15% by weight.

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

10 CSR 10-6.405(1)(C) exempts units burning fuel oils #2- 6 with a sulfur content less than 1.2%.

Permit Condition 3 contains an enforceable fuel sulfur limit which provides for that exemption.

**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).

## MEMORANDUM

DATE: July 11, 2014

TO: 2012-01-074, St. Luke's Hospital – Chesterfield (189-1101)

FROM: David Buttig, Operating Permit Unit

SUBJECT: Response to Public Comments

A draft of the St. Luke's Hospital – Chesterfield Intermediate Operating Permit was placed on public notice on May 23, 2014, by the Missouri Department of Natural Resources (MDNR). Comments were received on June 17, 2014 from Mark Smith, Air Permitting and Compliance Branch Chief of the Environmental Protection Agency Region 7. The five (5) comments are presented below as submitted, with the response to each comment by the Air Pollution Control Program (APCP) directly following.

### **EPA Comment #1:**

The Installation Description in Section I (page 3) of the draft intermediate operating permit out for public comment, says: “[T]his installation is major for Nitrogen Oxides (NO<sub>x</sub>) and Sulfur Oxides (SO<sub>x</sub>). However, the facility has accepted voluntary facility wide limitations of 100 tons NO<sub>x</sub> per year demonstrated through monthly tracking and a maximum fuel sulfur limit of 0.15% by weight demonstrated through fuel receipts.” This description, as written, suggests that St. Luke's—Chesterfield is taking voluntary limits for both NO<sub>x</sub> and SO<sub>x</sub>, however only the voluntary limit for NO<sub>x</sub> is listed.

Additionally, the installation description on the draft permit cover page indicates “the installation is major Nitrogen Oxides (NO<sub>x</sub>) and has accepted a voluntary facility-wide limitation of 100 tons per year. The indication that this facility is major for SO<sub>x</sub> and voluntary SO<sub>x</sub> limits are not described.

Finally, as the installation description indicates, the facility-wide NO<sub>x</sub> limitation is demonstrated through monthly tracking and maximum fuel sulfur limits. This would lead one to think that the NO<sub>x</sub> is controlled through the adherence to a maximum sulfur limit.

EPA recommends that MDNR include installations descriptions that provide equivalent information and include the facility-wide SO<sub>x</sub> voluntary limitation accepted by St. Luke's—Chesterfield. EPA also recommends that MDNR clarify the mechanism for tracking NO<sub>x</sub> compliance and separate the NO<sub>x</sub> tracking discussion from the SO<sub>x</sub> tracking discussion. Finally, EPA recommends MDNR provide an example SO<sub>x</sub> tracking calculation to show voluntary limitation compliance.

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

The 0.15% fuel sulfur limit for the emission units at the facility limits the PTE for SO<sub>x</sub> to less than major levels of 100 ton/yr. Attachment E was added to show compliance to remain below 100 tons of SO<sub>x</sub> per year with a 0.15% sulfur limit on fuel.

The descriptions of the facility on page 3 and on the cover have been changed to clarify how the NO<sub>x</sub> and SO<sub>x</sub> emissions are being tracked to remain below 100 tons of emission.

**EPA Comment #2:**

Plant wide permit conditions PW001 and PW002, in the draft St. Luke's—Chesterfield operating permit out for public comment, indicates that one of the underlying authorities for the establishment of voluntary limitations is 10 CSR 10-6.020(2)(I)24. This statutory reference is the definition of "Intermittent hospital/medical/infectious waste incinerator (HMIWI)." This draft operating permit lists boilers, emergency generators, and ethylene oxide sterilizers as emission units with limitations and various fuel storage tanks as emission units without limitations. There is no indication that St. Luke's—Chesterfield has a HMIWI. Therefore, EPA recommends MDNR reconsider the inclusion of this regulatory citation in permit conditions PW001 and PW002.

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

The statutory reference 10 CSR 10-6.020(2)(I)24. has been removed from permit conditions PW001 and PW002.

**EPA Comment #3:**

Draft plant wide permit condition PW001 limits "this installation" to less than 100 tons of Nitrogen Oxides (NO<sub>x</sub>) in any 12-month rolling period. In this draft permit, St. Luke's Chesterfield is agreeing to accept a source-wide NO<sub>x</sub> emission limits below the major source levels and thus avoid Part 70 operating permit requirements. However, plant-wide permit condition PW001, as drafted, fails to ensure the synthetic minor limits for NO<sub>x</sub>; which is intended to restrict NO<sub>x</sub> potential -to-emit (PTE) below the Part 70 operating permit levels; is enforceable as a practical matter. 40 CFR §70.2 defines the potential-to-emit (PTE), for purposes of determining whether the facility triggers major source requirements for a particular pollutant, to include consideration of "[a] physical or operational limitation on the capacity of the source to emit [the] pollutant including air pollution control equipment and restrictions on hours of

operation or on the type or amount of material combusted, stored or processed... ..if the limitation or the effect it would have on emissions is federally enforceable.” In other words, if a permit applicant agrees to an enforceable limit that is sufficient to restrict PTE, the facilities PTE is calculated based on that limit.

To effectively limit St. Luke’s—Chesterfield NO<sub>x</sub>, the limitation in PW001 must apply at all times; to all actual operating conditions; to all actual emissions and all actual emissions must be considered in determining compliance with respective limits. St. Luke’s—Chesterfield draft permit states that NO<sub>x</sub> emissions shall be less than 100 tons of in any consecutive 12-month period, however, permit condition PW001 does not specify how the NO<sub>x</sub> shall be determined or measured for assessing compliance and it is unclear whether all actual NO<sub>x</sub> emissions are being considered; including emissions during periods of malfunction or upset and it is unclear what emission units define the “installation.” The draft permit, as placed on public notice, does contain an example data recordkeeping forms and the forms does specify how NO<sub>x</sub> emissions shall be calculated. However, the information regarding the source of the emission factors is not included.

Therefore, EPA strongly recommends that MDNR modify draft permit condition PW001 to include:

- A description or listing of all specific emission units that are included in the “installation” which cap the NO<sub>x</sub> maximum emission limit to 100 tons per consecutive 12-month period;
- A detailed description of the operating scenarios (normal, start-up, shutdown, malfunction, upset, etc.) to be included in the calculation of HAP and VOC emissions; and
- Complete description of the source of the emission factor information used to calculate the NO<sub>x</sub>.

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

Permit condition PW001 is contained in the Section II. Plant Wide Emission Limitation section, therefore this permit condition applies to all emission units located at the installation.

Currently there are no emission factors or calculations for SSM scenarios since each SSM is different. Therefore, PTE calculations have been calculated only in normal scenarios utilizing emission factors provided in AP-42 and WebFIRE for the respective SCC codes.

The source of the emission factors used in Attachment A for Monthly NO<sub>x</sub> Emission Tracking Records were added to Attachment A. The source of the emission factors is WebFIRE with their respective SSC codes.

### **EPA Comment #4:**

Draft plant wide permit condition PW002 appears to be included as an approach to establish a voluntary facility wide limitation of sulfur compounds. However, PW002, as drafted, fails to establish any synthetic minor limit for SO<sub>x</sub>; which is intended to restrict the SO<sub>x</sub> potential-to-

emit (PTE) below the Part 70 operating permit levels. Additionally, PW002 as written is not federally enforceable as a practical matter. 40 CFR §70.2 defines the potential-to-emit (PTE), for purposes of determining whether the facility triggers major source requirements for a particular pollutant, to include consideration of “[a] physical or operational limitation on the capacity of the source to emit [the] pollutant including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed...if the limitation or the effect it would have on emissions is federally enforceable.” In other words, if a permit applicant agrees to an enforceable limit that is sufficient to restrict PTE, the facilities PTE is calculated based on that limit. To effectively limit SO<sub>x</sub>, the limits in PW002 must apply at all times; to all actual operating conditions; to all actual emissions and all actual emissions must be considered in determining compliance with respective limits. Permit conditions PW002 does not specify the installations SO<sub>x</sub> emission limitation on a 12-month rolling total and it is unclear whether all actual SO<sub>x</sub> emissions are being considered; including emissions during periods of malfunction or upset and it is unclear what emission units define the “installation.”

The draft permit, as placed on public notice, does not contain any SO<sub>x</sub> data recordkeeping forms and does not specify how SO<sub>x</sub> emissions are calculated. In addition, the draft permit does not appear to contain any monitoring or recordkeeping requirements that would allow for calculation or consideration of any SO<sub>x</sub> associated with the operation of any “insignificant” emission units. Any facility-wide limits will be ineffective at ensuring that the source remains below their voluntary limits if any emission unit at the facility that emits SO<sub>x</sub> is not covered by the permit limits and/or not subject to sufficient monitoring, record keeping, and reporting to ensure these limits are enforceable as a practical matter.

Therefore, EPA strongly recommends that MDNR modify plant wide condition PW002 to include:

- A description or listing of all specific emission units that are included at the facility which are included in the SO<sub>x</sub> emission limitation and indicate the “not to exceed” emission limit based on a rolling 12-month period;
- Detailed description of the operating scenarios (normal, start-up, shutdown, malfunction, upset, etc.) to be included in the calculation of SO<sub>x</sub> emissions; and
- Complete description of the methodology utilized to calculate the SO<sub>x</sub> emissions and what information such calculations are based upon.

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

Permit condition PW002 is contained in the Section II. Plant Wide Emission Limitation section, therefore this permit condition applies to all emission units located at the installation

Currently there are no emission factors or calculations for SSM scenarios since each SSM is different. Therefore, PTE calculations have been calculated only in normal scenarios with the emission factors available in AP-42 and WebFIRE.

A 0.15% Sulfur fuel restriction was taken by the facility to stay below the 100 ton Part 70 operating permit levels. Although the PTE contained in the Statement of Basis section in the

draft demonstrates compliance with the annual 100 ton SO<sub>x</sub> limitation, Attachment E was added to the permit to provide clarification.

**EPA Comment #5:**

The statement of basis includes a section on maximum achievable control technology (MACT) applicability, beginning on page 2. At the lower portion of page 2, is a discussion of 40 CFR Part 63, Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. Below the table which identifies the dual fired boiler #1 and #2, it says: “Permit Condition 4 requires the permittee to record the hours that the boiler(s) burn fuel oil to demonstrate that the units are properly classified as gas fired under 40 CFR 63 JJJJJ, and exempt from the rule. However, Permit Condition 4 in the draft operating permit captures the applicable requirements associated with 40 CR Part 63, Subpart ZZZZ; whereas Permit Condition 3 in the draft operating permit address the requirements specified above. Therefore, EPA recommends MDNR correct this reference in the Statement of Basis.

The very next section in the draft Statement of Basis addresses 40 CFR 63, Subpart WWWW—National Emission Standards for Hospital Ethylene Oxide Sterilizers including a tabular presentation of the St. Luke’s—Chesterfield affected facilities. Below the table, at the top of page 3, is a discussion which says: “§63.11194(b) classifies an affected source is an existing source if construction or reconstruction of the affected source commenced on or before June 4, 2010. Construction Permits #7353 7354 state the two units were installed and functional on April 2010, which precedes that date.” This statement would appear to be misplaced, in as much as §63.11194(b) defines affected sources under the Industrial, Commercial, and Institutional Boilers Area Sources MACT and is not related to Ethylene Oxide Sterilizers MACT. Therefore, EPA recommends MDNR review this portion of the Statement of Basis and make any necessary modifications.

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

40 CFR Part 63, Subpart JJJJJ—National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources in the Statement of Basis reference to Permit Condition 4 has been corrected to refer to Permit Condition 3.

40 CFR Part 63, Subpart WWWW—National Emission Standards for Hospital Ethylene Oxide Sterilizers statement in the Statement of Basis has been corrected to read as the following: “§63.10382(b) classifies an affected source is a new source if construction or reconstruction of the affected source commenced on or after November 6, 2006. Construction Permits #7353 and 7354 state the two units were installed and functional in April 2010, which is after that date.” Permit Condition 1 for 40 CFR Part 63, Subpart WWWW—National Emission Standards for Hospital Ethylene Oxide Sterilizers has not been affected by this change and has therefore not been changed.

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

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

www.dnr.mo.gov

APR 03 2015

Mr. Chris Shoemaker  
St. Lukes Hospital  
232 Woods Mill Road  
Chesterfield, MO 63017

Re: St. Lukes Hospital, 189-1101  
Permit Number: **OP2014-014**

Dear Mr. Shoemaker:


Enclosed with this letter is your intermediate 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 (30) days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If you send your appeal by registered or certified mail, we will deem it filed on the date you mailed it. If you send your appeal by a method other than registered or certified mail, we will deem it filed on the date the AHC receives it.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact David Buttig at the Department of Natural Resources, 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/dbk

Enclosures

c: St. Louis Regional Office  
✓PAMS File: 2012-01-074