

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: OP2018-075
Expiration Date: AUG 20 2023
Installation ID: 189-1029
Project Number: 2015-01-024

Installation Name and Address

SSM DePaul Health Center
12303 DePaul Drive
Bridgeton, MO 63044
St. Louis County

Parent Company's Name and Address

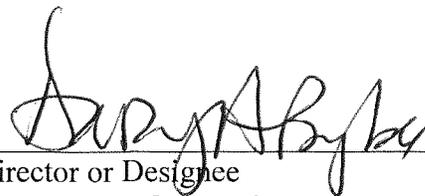
SSM Healthcare
1015 Corporate Square Drive, Suite 110
St. Louis, MO 63132

Installation Description:

SSM DePaul Health Center is a hospital located in Bridgeton, MO. The facility has the potential to emit above the major source threshold limits for Nitrogen Oxides (NO_x) and Sulfur Oxides (SO_x). Sources of pollutants at the facility include four (4) boilers, two (2) emergency generators, two (2) cooling towers, and painting operations.



Prepared by:
David Buttig
Operating Permit Unit



Director or Designee
Department of Natural Resources

AUG 20 2018

Effective Date

Table of Contents

I. INSTALLATION EQUIPMENT LISTING	3
EMISSION UNITS WITH LIMITATIONS	3
EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS	3
II. PLANT WIDE EMISSION LIMITATIONS.....	4
PERMIT CONDITION PW001.....	4
10 CSR 10-6.060 Construction Permits Required.....	4
Construction Permit 7699 and 7700, Issued April 02, 2012.....	4
10 CSR 10-6.020(2)(I)23. and 10 CSR 10-6.065(5)(C)2. Voluntary Limitation(s)	4
III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	5
PERMIT CONDITION 1.....	5
40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.....	5
PERMIT CONDITION 2.....	6
40 CFR Part 63, Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Source.....	6
PERMIT CONDITION 3.....	6
10 CSR 10-6.261, <i>Control of Sulfur Dioxide Emissions</i>	6
PERMIT CONDITION 4.....	8
40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE)	8
PERMIT CONDITION 5.....	10
10 CSR 10-6.260, <i>Restriction of Emission of Sulfur Compounds</i>	10
PERMIT CONDITION 6.....	11
10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage.....	11
PERMIT CONDITION 7.....	11
10 CSR 10-5.570, <i>Control of Sulfur Dioxide Emissions from Stationary Boilers</i>	11
IV. CORE PERMIT REQUIREMENTS	14
V. GENERAL PERMIT REQUIREMENTS.....	20
VI. ATTACHMENTS	24
ATTACHMENT A.....	25
Inspection/Maintenance/Repair/Malfunction Log.....	25
ATTACHMENT B.....	26
NO _x Emissions Compliance	26
ATTACHMENT C.....	27
SO _x Emissions Compliance.....	27

I. Installation Equipment Listing

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.

EQ Emission Unit #	Description	STL County Permit #
EP-01	Boilers 1 and 3: Boiler 1 includes Low-NO _x Burner; 63 MMBtu/hr each; Combusts Residual Fuel Oil and Natural Gas; Constructed 1974	4814, 4816
EP-02	Two Emergency Generators: 31.08 MMBtu/hr each; Combusts #2 Diesel Fuel; Manufactured 1974, Put in Service November 2014	7876, 7877
EP-03	Boilers 2A and 2B: 14.47 MMBtu/hr each; Combusts Natural Gas; Constructed 2013	7699, 7700
EP-05	One 10,000-gal #2 Diesel Fuel tank and Two 20,000-gal #6 Fuel Oil USTs	
EP-07	Emergency Generator: 533 HP; Combusts #2 Diesel Fuel, Manufactured September 2006, Put in Service July 2016; 1.356 MMBtu/hr	7981

EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS

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

EQ Emission Unit #	Description
EP-04	Cooling Towers: One 1-Cell and One 3-Cell Towers; 450 Mgal/hr
EP-06	Interior and Exterior Brush Painting Using Water and Oil Based Paints and Sealants for Building Maintenance: 0.08 gal/hr

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. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Limitations.

PERMIT CONDITION PW001

10 CSR 10-6.060 Construction Permits Required
Construction Permit 7699 and 7700, Issued April 02, 2012
10 CSR 10-6.020(2)(I)23. and 10 CSR 10-6.065(5)(C)2. Voluntary Limitation(s)

Emission Limitation:

- 1) The permittee shall emit less than 100.0 tons of Nitrogen Oxides (NO_x) per consecutive 12-month period from the entire installation.
- 2) The permittee shall emit less than 100.0 tons of Sulfur Oxides (SO_x) per consecutive 12-month period from the entire installation.

Monitoring/Recordkeeping:

- 1) The permittee shall maintain records of NO_x emitted into the atmosphere using Attachment B, or equivalent form created by the permittee.
- 2) The permittee shall maintain records of SO_x emitted into the atmosphere using Attachment C, or equivalent form created by the permittee.
- 3) The permittee shall maintain all records for a minimum of 60 months.
- 4) The permittee shall make records immediately available for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

- 1) The permittee shall report any deviations/exceedances of this permit condition using the annual compliance certification to the Air Pollution Control Program Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, as required by 10 CSR 10-6.065(5)(A).
- 2) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month, if the 12-month cumulative total records show that the source exceeded the limitation of 100 tons of NO_x or SO_x.

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 on the date of permit issuance.

PERMIT CONDITION 1		
40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units		
Emission Unit	Description	Manufacturer/Model #
EP-03	Two Natural Gas Fired Boilers: MHDR 14.47 MMBtu/hr each; Constructed 2011	Unilux/ZF 1400HS

Operational Limitations:

The permittee shall be limited to combusting pipeline grade natural gas in operation of the boilers.

Monitoring/Recordkeeping:

- 1) The permittee shall keep fuel supplier certifications. Fuel supplier certification shall include the following information: [§60.48c(f)(4)]
 - a) The name of the supplier of the fuel; [§60.48c(f)(4)(i)]
 - b) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and [§60.48c(f)(4)(ii)]
 - c) The method used to determine the potential sulfur emissions rate of the fuel. [§60.48c(f)(4)(iii)]
- 2) The permittee shall record and maintain the following records: [§60.48c(g)]
 - a) The amount of natural gas combusted in each boiler during each operating day, or [§60.48c(g)(1)]
 - b) The amount of natural gas combusted in each boiler during each calendar month, or [§60.48c(g)(2)]
 - c) The amount of each steam generating unit fuel delivered to the installation during each calendar month. [§60.48c(g)(3)]
- 3) All records shall be maintained onsite for a minimum of 60 months and shall be made available to Department of Natural Resources' personnel upon request.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the annual compliance certification to the Air Pollution Control Program Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, as required by 10 CSR 10 CSR 10-6.065(5)(A).

PERMIT CONDITION 2		
40 CFR Part 63, Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Source		
Emission Unit	Description	Manufacturer/Model #
EP-01	Two Dual Fired Boilers: MHDR = 63 MMBtu/hr each; Constructed 1974; Low-NO _x Burner	Murray Trane/Type D, Model MCF-58

Operational Limitations:

The permittee shall maintain the boilers in accordance with the definition of a gas-fired boiler in order to maintain its gas-fired exemption:

- 1) Burns gaseous fuels not combined with any solid fuels;
- 2) Burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel; and
- 3) Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. This limit applies per boil.

Monitoring/Recordkeeping:

- 1) The permittee shall monitor and record the hours and reason for fuel oil usage in each of the boilers on a monthly and calendar year basis.
- 2) All records shall be maintained onsite for a minimum of 60 months and shall be made available to Department of Natural Resources’ personnel upon request.

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 switched fuels, within 30 days of the change. The notification must identify:
 - a) The name of the permittee, 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)]
- 2) The permittee shall report any deviations/exceedances of this permit condition using the annual compliance certification.
- 3) All reports shall be submitted to the Air Pollution Control Program Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, or AirComplianceReporting@dnr.mo.gov, as required by 10 CSR 10 CSR 10-6.065(5)(A).

PERMIT CONDITION 3		
10 CSR 10-6.261, <i>Control of Sulfur Dioxide Emissions</i>		
Emission Unit	Description	Manufacturer/Model #
EP-01	Two Dual Fired Boilers: MHDR = 63 MMBtu/hr each; Constructed 1974; Combusts Residual Fuel Oil #6 and Natural Gas	Murray Trane/Type D, Model MCF-58

Emission Limitation:

- 1) During the months of October, November, December, January, February, and March of every year, the permittee shall not burn fuel oil containing more than two percent (2%) sulfur. [10 CSR 10-6.261(3)(B)2.B.(I)]

- 2) During the months of April, May, June, July, August, and September of every year, the permittee shall not burn fuel oil containing more than four percent (4%) sulfur. [10 CSR 10-6.261(3)(B)2.B.(I)]

Monitoring:

- 1) Monitoring will not be required if the permittee can show that the emissions of SO₂ from the source into the atmosphere will not exceed two and three tenths pounds (2.3 lbs) per million Btus actual heat input to the source. [10 CSR 10-6.261(3)(B)2.B.(II)]

Compliance Demonstration/Recordkeeping:

- 1) The permittee shall demonstrate compliance with these limitations by one of the following methods:
 - a) Fuel Delivery Records:
 - i) The permittee shall maintain fuel delivery records indicating the sulfur content of the fuel meets the requirements of this permit condition. These records shall include:
 - (1) The name, address, and contact information of the fuel supplier;
 - (2) The type of fuel;
 - (3) The sulfur content or maximum sulfur content expressed in ppm sulfur; and
 - (4) The heating value of the fuel.
 - ii) The permittee shall maintain records of any equipment malfunctions, using Attachment A or an equivalent form generated by the permittee.
 - iii) The permittee must furnish the director all data necessary to determine compliance status. [10 CSR 10-6.261(4)(G)]
 - b) Fuel Sampling and Analysis:
 - i) The permittee shall use fuel sampling and analysis to determine sulfur weight percent, or equivalent, of fuel(s) used to operate fuel emission sources in accordance with 10 CSR 10-6.040.
- 2) The permittee shall maintain a list of modifications to the source's operating procedures or other routine procedures instituted to prevent or minimize the occurrence of any excess SO₂ emissions. [10 CSR 10-6.261(4)(A)2.]
- 3) The permittee shall maintain a record of data, calculations, results, records, fuel deliveries, and/or fuel sampling tests. [10 CSR 10-6.261(4)(A)3.]
- 4) The permittee shall maintain a record of any adjustments and maintenance performed on these systems or devices. [10 CSR 10-6.261(4)(A)4.]
- 5) The permittee shall maintain records of any equipment malfunctions, using Attachment A or an equivalent form generated by the permittee.
- 6) The permittee must furnish the director all data necessary to determine compliance status. [10 CSR 10-6.261(4)(G)]
- 7) All required reports and records must be retained on-site for a minimum of five (5) years and made available within five (5) business days upon written or electronic request by the director. [10 CSR 10-6.261(4)(F)]

Reporting:

- 1) Report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the staff director for each calendar quarter within thirty (30) days following the end of the quarter. The notification must be a written report and must include, at a minimum, the following: [10 CSR 10-6.261(4)(A)1.]
 - a) Name and location of source; [10 CSR 10-6.261(4)(A)1.A.]

- b) Name and telephone number of person responsible for the source; [10 CSR 10-6.261(4)(A)1.B.]
 - c) Identity and description of the equipment involved; [10 CSR 10-6.261(4)(A)1.C.]
 - d) Time and duration of the period of SO₂ excess emissions; [10 CSR 10-6.261(4)(A)1.D.]
 - e) Type of activity; [10 CSR 10-6.261(4)(A)1.E.]
 - f) Estimate of the magnitude of the SO₂ excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude; [10 CSR 10-6.261(4)(A)1.F.]
 - g) Measures taken to mitigate the extent and duration of the SO₂ excess emissions; and [10 CSR 10-6.261(4)(A)1.G.]
 - h) Measures taken to remedy the situation which caused the SO₂ excess emissions and the measures taken or planned to prevent the recurrence of these situations; [10 CSR 10-6.261(4)(A)1.H.]
- 2) The permittee shall report any deviations of this permit condition to the Air Pollution Control Program, Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).
- 3) The permittee shall report to the Air Pollution Control Program, Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction that could possibly cause an exceedance of this regulation.

PERMIT CONDITION 4	
40 CFR Part 60 Subpart III – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE)	
Emission Unit	Description
EP-07	Emergency Generator: 533 HP; Combusts #2 Diesel Fuel, Manufactured September 2006, Put in Service July 2016; Meets Tier 3 exhaust emission standards.

Emission Standards:

The permittee of pre-2007 model year emergency stationary CI ICE with a displacement of less than ten liters per cylinder shall comply with the emission standards in Table 1 of Subpart III. [§60.4205(a)]

Fuel Requirements:

- 1) The permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel: [§60.4207(b)]
 - a) Sulfur Content, 15 ppm maximum;
 - b) Cetane index minimum of 40;
 - c) Aromatic content maximum of 35 volume percent.

Monitoring:

If the permittee of an emergency stationary CI ICE that does not meet the standards applicable to non-emergency engines, the permittee shall install a non-resettable hour meter prior to start-up. [§60.4209(a)]

Compliance Requirements:

- 1) The permittee shall install and configure the engine according to the manufacturer’s specifications. [§60.4211(b)(1)]

- 2) The permittee must operate the emergency stationary ICE according to the requirements in §60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under this subpart, 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 in §60.4211(f)(1) through (3), is prohibited. [§60.4211(f)]
 - a) There is no limit on the use of emergency stationary ICE in emergency situations. [§60.4211(f)(1)]
 - b) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2). [§60.4211(f)(2)]
 - i) Emergency stationary ICE 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 ICE beyond 100 hours per calendar year. [§60.4211(f)(2)(i)]
 - ii) Emergency stationary ICE 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 § 60.17), 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. [§60.4211(f)(2)(ii)]
 - iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [§60.4211(f)(2)(iii)]
- 3) Emergency stationary ICE 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 §60.4211(f)(2). Except as provided in §60.4211(f)(3)(i), the 50 hours per calendar 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. [§60.4211(f)(3)]
 - a) 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: [§60.4211(f)(3)(i)]
 - i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [§60.4211(f)(3)(i)(A)]
 - ii) 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. [§60.4211(f)(3)(i)(B)]

- iii) The dispatch follows reliability, emergency operation, or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [§60.4211(f)(3)(i)(C)]
 - iv) The power is provided only to the facility itself or to support the local transmission and distribution system. [§60.4211(f)(3)(i)(D)]
 - v) 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. [§60.4211(f)(3)(i)(E)]
- 4) If the permittee does not operate the engine according to the requirements in §60.4211(f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines. [§60.4211(f)]

PERMIT CONDITION 5		
<i>10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds</i>		
Emission Unit	Description	Manufacturer/Model #
EP-01	Two Dual Fired Boilers: MHDR = 63 MMBtu/hr each; Constructed 1974; Combusts Residual Fuel Oil and Natural Gas	Murray Trane/Type D, Model MCF-58

Emission Limitation:

- 1) During the months of October, November, December, January, February, and March of every year, no person shall burn or permit the burning of any fuel oil containing more than two percent (2%) sulfur in any installation having a capacity of less than two thousand million (2,000 MM) BTUs per hour.
- 2) During the remainder of the year, no person shall burn or permit the burning of any fuel oil containing more than four percent (4%) sulfur in any installation having a capacity of less than two thousand million (2,000 MM) BTUs per hour.

Monitoring/Record Keeping:

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

Reporting:

- 1) The permittee shall report any exceedance of any of the terms imposed by this permit condition, or any malfunction which could cause an exceedance of any of the terms imposed by this permit condition, no later than ten days after the exceedance or event causing the exceedance. The permittee shall submit these reports to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219.
- 2) The permittee shall report any deviations from the monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report (SAM) and annual compliance certification (ACC). The permittee shall submit the SAM and ACC reports to both the

EPA Region VII and Air Pollution Control Program’s Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov.

PERMIT CONDITION 6	
10 CSR 10-5.500 Control of Emissions From Volatile Organic Liquid Storage	
Emission Unit	Description
EP-05	One 10,000-gal #2 Diesel Fuel tank and Two 20,000-gal #6 Fuel Oil USTs

Recordkeeping:

The permittee shall maintain regularly accessible records of the dimensions of the storage vessels and an analysis of the capacity of the storage vessels.

Monitoring/Reporting:

No monitoring or reporting requirements.

PERMIT CONDITION 7		
10 CSR 10-5.570, Control of Sulfur Dioxide Emissions from Stationary Boilers		
Emission Unit	Description	Manufacturer/Model #
EP-01	Two Dual Fired Boilers: MHDR = 63 MMBtu/hr each; Constructed 1974; Combusts Residual Fuel Oil #6 and Natural Gas	Murray Trane/Type D, Model MCF-58

Emission Limitations:

The permittee shall not cause or allow the emission of sulfur dioxide (SO₂) into the atmosphere exceeding one (1.0) pound of SO₂ per MMBtu of actual heat input in any thirty day period from applicable units.

Monitoring:

- 1) The permittee shall use the following compliance method for multi-unit and multi-fuel installations:
 - a) SO₂ emission rates for a single boiler that burns different fuels. The permittee shall determine the SO₂ emission rate of a large boiler which burns multiple fuels separately, according to the following formula:

$$E_s = \frac{\sum_{i=1}^r (K b_r) + \sum_{i=1}^s (K c_s)}{H_t}$$

Where:

- E_s = unit SO₂ emissions in lb per MMBtu heat input;
- K_b = liquid fuel sample monthly composite SO₂ emission rate in lbs;
- K_c = gaseous fuel sample monthly composite SO₂ emission rate in lbs;
- r = number of different liquid fuels used;
- s = number of different gaseous fuels used;
- H_t = total heat content for all fuels in any monthly period.

- b) Averaging SO₂ emissions among different boilers:
 - i) To meet the emission limitation, compliance may be demonstrated by emission averaging according to the following procedures.

- ii) Compliance with the limit shall be demonstrated on a monthly rolling average. For each monthly period, the following equation shall be used to calculate the monthly rolling average weighted emission ate using the actual heat capacity for each existing boiler participating in the emissions averaging option:

$$\text{Avg. Weighted Emissions} = \frac{\sum_{i=1}^n (Er \times Hb)}{\sum_{i=1}^n Hb}$$

Where:

Avg. Weighted Emissions = monthly average weighted emission level for SO₂, in units of lbs per MMBtu of heat input;

Er = Emission rate, in units of lbs per MMBtu of heat input;

Hb = The average heat input for each monthly period of boiler, i in units of MMBtu;

n = Number of boilers participating in the emissions averaging options.

- 2) The permittee shall demonstrate compliance with these limitations by one of the following methods:
- a) Fuel Delivery Records:
 - i) The permittee shall maintain fuel delivery records indicating the sulfur content of the fuel meets the requirements of this permit condition. These records shall include:
 - (1) The name, address, and contact information of the fuel supplier;
 - (2) The type of fuel;
 - (3) The sulfur content or maximum sulfur content expressed in ppm sulfur; and
 - (4) The heating value of the fuel.
 - ii) The permittee shall maintain records of any equipment malfunctions, using Attachment A or an equivalent form generated by the permittee.
 - iii) The permittee must furnish the director all data necessary to determine compliance status.
 - b) Fuel Sampling and Analysis:
 - i) The permittee shall use fuel sampling and analysis to determine sulfur weight percent, or equivalent, of fuel(s) used to operate fuel emission sources in accordance with 10 CSR 10-6.040.
- 3) The permittee shall maintain a list of modifications to the source's operating procedures or other routine procedures instituted to prevent or minimize the occurrence of any excess SO₂ emissions.
 - 4) The permittee shall maintain a record of data, calculations, results, records, fuel deliveries, and/or fuel sampling tests.
 - 5) The permittee shall maintain a record of any adjustments and maintenance performed on these systems or devices.
 - 6) The permittee shall maintain records of any equipment malfunctions, using Attachment A or an equivalent form generated by the permittee.
 - 7) The permittee must furnish the director all data necessary to determine compliance status.
 - 8) All required reports and records must be retained on-site for a minimum of five (5) years and made available within five (5) business days upon written or electronic request by the director.

Reporting:

- 1) The permittee shall report any deviations/exceedances of this permit condition using the annual compliance certification to the Air Pollution Control Program Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, or AirComplianceReporting@dnr.mo.gov, as required by 10 CSR 10 CSR 10-6.065(5)(A).

- 2) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section at P.O. Box 176, Jefferson City, MO 65102 or AirComplianceReporting@dnr.mo.gov, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

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 are only excerpts from the regulation or code, and are 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.

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) 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 to the director in writing at least ten days prior to any maintenance, start-up, or shutdown activity that 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, notice shall be given as soon as practicable prior to the activity.
- 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 that 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. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

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

The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation that would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

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

- 1) The permittee shall submit a 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) 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.
- 3) The permittee shall submit a full EIQ for the 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.
- 4) 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.

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 that, 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 10-6.165 Restriction of Emission of Odors

This is a State Only permit requirement.

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

10 CSR 10-6.170 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 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

This is a State Only permit requirement.

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.

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 at an installation:
 - 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”;
 - 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.

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

No owner or operator shall operate applicable hand-fired fuel burning equipment unless the owner or operator meets the conditions set forth in 10 CSR 10-5.040. This regulation shall apply to all hand-fired fuel-burning equipment at commercial facilities 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 or to other equipment exempted under 10 CSR 10-5.040. 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
(Rescinded on February 11, 1979, Contained in State Implementation Plan)**

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

40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
 - b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B of 40 CFR Part 82:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements contained 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 airtight 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.*

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)(C)1, §(6)(C)1.B, §(5)(E)2.C 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. If a timely and complete application for a permit renewal is submitted, but the Air Pollution Control Program fails to take final action to issue or deny the renewal permit before the end of the term of this permit, this permit shall not expire until the renewal permit is issued or denied.

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Record Keeping and Reporting Requirements

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program, Compliance and 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, record keeping, reporting, or any other requirements of the permit.
 - d) Submit supplemental reports as required or as needed. 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.
- 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)

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

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 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 the Air Pollution Control Program, Compliance and 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 record keeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
 - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. 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)34 Responsible Official

The application utilized in the preparation of this permit was signed by Rodger Glaus, Administrative Director. 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 (MoDNR) 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) MoDNR 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 B
NO_x Emissions Compliance

This sheet covers the months of: _____ through _____
 (Month/Year) (Month/Year)

MM/YYYY	Emission Unit	Throughput	NO _x Emission Factor	NO _x Emissions	Total Month Emissions	12-Month Rolling Total
	EP-01: Boiler 1 (Natural Gas)	MMFt ³	50 lbs/MMft ³			
	EP-01: Boiler 3 (Natural Gas)	MMFt ³	100 lbs/MMft ³			
	EP-01: combined (Fuel Oil)	MGal	47 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	604 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	100 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	604 lbs/Mgal			
	EP-01: Boiler 1 (Natural Gas)	MMFt ³	50 lbs/MMft ³			
	EP-01: Boiler 3 (Natural Gas)	MMFt ³	100 lbs/MMft ³			
	EP-01: Combined (Fuel Oil)	MGal	47 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	604 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	100 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	604 lbs/Mgal			
	EP-01: Boiler 1 (Natural Gas)	MMFt ³	50 lbs/MMft ³			
	EP-01: Boiler 3 (Natural Gas)	MMFt ³	100 lbs/MMft ³			
	EP-01: Combined (Fuel Oil)	MGal	47 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	604 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	100 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	604 lbs/Mgal			
	EP-01: Boiler 1 (Natural Gas)	MMFt ³	50 lbs/MMft ³			
	EP-01: Boiler 3 (Natural Gas)	MMFt ³	100 lbs/MMft ³			
	EP-01: Combined (Fuel Oil)	MGal	47 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	604 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	100 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	604 lbs/Mgal			

Note 1: [NO_x Emissions] = [Throughput] x [NO_x Emission Factor] x 0.0005 tons/lb
 Note 2: [Total Month Emissions] = [Summation of all emission units NO_x emissions for the month]
 Note 3: [12-Month Rolling Total] = [Current Total Month Emissions] + [Previous 11-months Total Month Emissions]
 Note 4: A 12-Month Rolling Total less than 100.0 tons demonstrates compliance.

Attachment C
SO_x Emissions Compliance

This sheet covers the months of: _____ through _____
 (Month/Year) (Month/Year)

MM/YYYY	Emission Unit	Throughput	SO _x Emission Factor	SO _x Emissions	Total Month Emissions	12-Month Rolling Total
	EP-01 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-01 (Fuel Oil)	MGal	7.385 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	7.2 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	0.216 lbs/Mgal			
	EP-01 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-01 (Fuel Oil)	MGal	7.385 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	7.2 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	0.216 lbs/Mgal			
	EP-01 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-01 (Fuel Oil)	MGal	7.385 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	7.2 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	0.216 lbs/Mgal			
	EP-01 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-01 (Fuel Oil)	MGal	7.385 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	7.2 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	0.216 lbs/Mgal			
	EP-01 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-01 (Fuel Oil)	MGal	7.385 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	7.2 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	0.216 lbs/Mgal			
	EP-01 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-01 (Fuel Oil)	MGal	7.385 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	7.2 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	0.216 lbs/Mgal			
	EP-01 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-01 (Fuel Oil)	MGal	7.385 lbs/Mgal			
	EP-02 (Fuel Oil)	MGal	7.2 lbs/Mgal			
	EP-03 (Natural Gas)	MMft ³	0.6 lbs/MMft ³			
	EP-07 (Fuel Oil)	MGal	0.216 lbs/Mgal			

Note 1: [SO_x Emissions] = [Throughput] x [SO_x Emission Factor] x 0.0005 tons/lb

Note 2: [Total Month Emissions] = [Summation of all emission units SO_x emissions for the month]

Note 3: [12-Month Rolling Total] = [Current Total Month Emissions] + [Previous 11-months Total Month Emissions]

Note 4: A 12-Month Rolling Total less than 100.0 tons demonstrates 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.

Installation Description

SSM DePaul Health Center is a hospital located in Bridgeton, MO. The facility has the potential to emit above the major source threshold limits for Nitrogen Oxides (NO_x) and Sulfur Oxides (SO_x). Sources of pollutants at the facility include four (4) boilers, two (2) emergency generators, two (2) cooling towers, and painting operations.

Emission Units Removed Since Previous Operating Permit

Emission Unit #	Description
N/A	10 gallon parts washer/cold cleaner
N/A	Radiological film development

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tons/yr)
CO	63.09
HAP	1.25
NO _x	< 100.0
PM ₁₀	16.98
PM _{2.5}	11.76
SO _x	< 100.0
VOC	13.33

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

²Emergency Generators have been evaluated at 500 hours of operation.

³NO_x and SO_x emissions are limited to less than 100.0 tons per Permit Condition PW001.

Reported Air Pollutant Emissions, tons per year

Pollutants	2016	2015	2014	2013	2012
Particulate Matter ≤ Ten Microns (PM ₁₀)	0.73	0.64	1.08	2.01	0.51
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	0.73	0.64	1.08	2.01	0.50
Sulfur Oxides (SO _x)	0.26	0.20	0.58	0.31	0.49

Pollutants	2016	2015	2014	2013	2012
Nitrogen Oxides (NO _x)	9.92	8.61	14.86	10.58	5.53
Volatile Organic Compounds (VOC)	0.61	0.52	0.97	0.65	0.36
Carbon Monoxide (CO)	6.17	5.66	7.33	6.22	5.47
Hazardous Air Pollutants (HAPs)	0.12	0.11	--	--	--
Ammonia (NH ₃)	0.04	0.04	0.07	0.05	0.03

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 14, 2015;
- 2) 2016 Emissions Inventory Questionnaire, received March 01, 2017;
- 3) Construction Permit #7699 Issued April 02, 2012;
- 4) Construction Permit #7700 Issued April 02, 2012; and
- 5) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined that the following requirements are not 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 History

Permit	Issued	Description
1051	December 29, 1980	Construction of Natural Gas/Fuel Oil #6 Boiler
4814	May 05, 2008	Modify one 63 MMBtu/hr boiler (Boiler 1) with Low NO _x Burner
7699	April 02, 2012	Permitted to construct a 14.47 MMBtu/hr Natural Gas Boiler (EP-03). Special Conditions included in Permit Condition PW001.
7700	April 02, 2012	Permitted to construct a 14.47 MMBtu/hr Natural Gas Boiler (EP-03). Special Conditions included in Permit Condition PW001.
7876	November 03, 2014	Permitted to construct a 1250 kW Emergency Generator: Diesel Fired; 2220 HP
7877	November 03, 2014	Permitted to construct a 1250 kW Emergency Generator: Diesel Fired; 2220 HP
7981	July 19, 2016	Permitted to construct a 533 HP Emergency Generator (EP-07)

New Source Performance Standards (NSPS) Applicability

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

This regulation applies to EP-03 and has been included in this operating permit as Permit Condition 1. This regulation does not apply to EP-01 since construction on the boiler commenced prior to June 09, 1989.

40 CFR Part 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This subpart applies to EP-07 and has been included as Permit Condition 4.

This subpart does not apply to EP-02 since construction on the engine commenced prior to July 11, 2005.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63 Subpart Q National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers

This regulation does not apply to the cooling towers due to §63.400(a) which states that the regulation applies to major sources of HAPs and DePaul Health Center is not a major source.

40 CFR Part 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This regulation applies to the internal combustion engines (EP-02) and is included in this operating permit as Permit Condition 2.

This regulation applies to EP-07 and complies with this regulation by complying with the requirements of 40 CFR Part 60 Subpart IIII.

EP-02 is not subject to this regulation per §63.6585(f)(3). In order to maintain this status, the stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which included operating according to the provisions specific in §63.6640(f).

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

Boilers included in EP-01 are subject to this subpart and have been included in this operating permit as Permit Condition 2. These boilers are subject to the 48-hour diesel restriction in order to be considered gas-fired boilers.

Boilers included in EP-03 are not subject to this subpart since they are gas-fired boilers per §63.11195(e).

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos

containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

Other Regulatory Determinations

10 CSR 10-5.330 Control of Emissions from Industrial Surface Coating Operations

This regulation does not apply to the painting operations since the painting is done for building maintenance per 10 CSR 10-5.330(1)(D)3.

10 CSR 10-5.500 Control of Emission from Volatile Organic Liquid Storage

The storage tanks are not subject to any of the regulations of this regulation since the storage tanks individual volumes are less than 40,000 gallons in capacity per 10 CSR 10-5.500(1)(B). In order to maintain this status, the permittee shall maintain readily accessible records of the dimensions of the storage vessels.

10 CSR 10-5.510 Control of Emissions of Nitrogen Oxide

This regulation does not apply to the installation since the installation has taken a limitation to emit less than 100 tons on nitrogen oxide.

10 CSR 10-5.520 Control of Volatile Organic Compound Emissions from Existing Major Sources

This regulation does not apply to the installation since the installation does not have a potential to emit more than 100 tons of VOC per year.

10 CSR 10-5.570 Control of Sulfur Emissions From Stationary Boilers

This regulation applies to the boilers over 50 MMBtu/hr (EP-01), and is included in this operating permit as Permit Condition 7.

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

This regulation does not apply to the internal combustion engines per 10 CSR 10-6.220(1)(A). This regulation does not apply to EP-03 per 10 CSR 10-6.220(1)(L) due to combusting only natural gas.. This regulation does not currently apply to EP-01 since it is considered a gas-fired boiler. If a fuel switch occurs for EP-01 to fuel oil, EP-01 will then be subject to this regulation.

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

The new emergency generator (EP-07) meet the exception since these emission units are subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070.

Boilers EP-03 meet the exception 10 CSR 10-6.261(1)(A) because the boilers operate on exclusively natural gas.

EP-02 is subject to this regulation but is subject to a both restrictive federally enforceable limitation in Permit Condition 2 as the following demonstration shows:

$$SO_2 \text{ Emission Factor} = \left(\frac{(142 \times 0.0015) \frac{lbs}{10^3 gal}}{140 \frac{MMBtu}{10^3 gal}} \right) = 0.001521 \frac{lb}{MMBtu}$$

$$\begin{aligned} ppmv SO_2 &= \left(\frac{0.001521 lb}{MMBtu} \right) \times \left(\frac{MMBtu}{10,320 wscf} \right) \times \left(\frac{ppmw}{1.660 \times 10^{-7} \frac{lb}{scf}} \right) \times \left(\frac{0.45 ppmv}{ppmw} \right) \\ &= 0.3995 ppmv \end{aligned}$$

$$0.3995 ppmv < 500 ppmv$$

This demonstrates that with the 15 ppm sulfur limitation from Permit Condition 2, the generators will be in compliance with the regulation

EP-01 is subject to this regulation and is included in this operating permit as Permit Condition 5.

10 CSR 10-6.261 Control of Sulfur Dioxide Emissions

Boilers EP-03 meet the exception 10 CSR 10-6.261(1)(A) because the boilers operate on exclusively natural gas.

The new emergency generator (EP-07) meets the exception 10 CSR 10-6.261(1)(C) since it is more strictly limited by NSPS III.

EP-02 meets the exception under 10 CSR 10-6.261(1)(C)2. since the emission unit is subject to a more restrictive federally enforceable limit included in this permit as Permit Condition 2.

EP-01 is conditionally exempt from this regulation since it is limited to burning 48 hours of fuel oil per 12-month period by MACT JJJJJ. If a fuel switch is done and more than 48 hours of fuel oil is combusted, EP-01 will be subject to this regulation.

10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes

This regulation does not apply to the cooling towers due to emitting less than 0.5 lb/hr particulate matter per 10 CSR 10-6.400(1)(B)12.

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

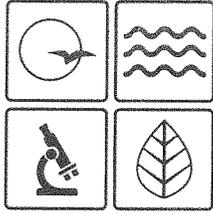
Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

- 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 APCP a schedule for achieving compliance for that regulation(s).

Response to Public Comments:

The draft Part 70 Operating Permit was placed on public notice as of June 22, 2018 for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: <http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm>. No comments were received.



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

AUG 20 2018

Mr. Rodger Glaus
SSM DePaul Health Center
1015 Corporate Square Drive, Suite 110
St. Louis, MO 63132

Re: SSM DePaul Health Center, 189-1029
Permit Number: OP2018-075

Dear Mr. Glaus

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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

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 contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:dbj

Enclosures

c: PAMS File: 2015-01-024



Recycled paper