



Missouri Department of Natural Resources
Air Pollution Control Program

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: OP2012-033
Expiration Date: AUG 22 2017
Installation ID: 021-0063
Project Number: 2011-12-030

Installation Name and Address

Heartland Regional Medical Center
5325 Faraon Street
St. Joseph, MO 64506
Buchanan County

Parent Company's Name and Address

Heartland Health Systems
5325 Faraon Street
St. Joseph, MO 64506

Installation Description:

Heartland Regional Medical Center is a medical facility located in St. Joseph, Missouri. Process operations include combustion boilers, emergency generators, fuel oil storage vessels, natural gas-fired combustion dryers, and parts washers. The primary fuel for the combustion boilers is natural gas and the back-up fuel is No. 2 fuel oil. The installation is subject to 40 CFR Part 60 Subpart IIII *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR Part 63 Subpart WWWW *National Emission Standards for Hospital Ethylene Oxide Sterilizers*.

AUG 23 2012

Effective Date



Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Heartland Regional Medical Center is a medical facility located in St. Joseph, Missouri. Process operations include combustion boilers, emergency generators, fuel oil storage vessels, natural gas-fired combustion dryers, and parts washers. The primary fuel for the combustion boilers is natural gas and the back-up fuel is No. 2 fuel oil. The installation is subject to 40 CFR Part 60 Subpart IIII *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR Part 63 Subpart WWWW *National Emission Standards for Hospital Ethylene Oxide Sterilizers*.

Reported Air Pollutant Emissions, tons per year					
Pollutants	2010	2009	2008	2007	2006
Particulate Matter ≤ Ten Microns (PM ₁₀)	0.40	0.40	0.38	0.39	0.37
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	0.40	0.40	0.38	0.39	0.37
Sulfur Oxides (SO _x)	0.06	0.06	0.03	0.03	0.06
Nitrogen Oxides (NO _x)	5.22	5.23	5.05	5.15	4.98
Volatile Organic Compounds(VOC)	0.29	0.29	0.28	0.29	0.27
Carbon Monoxide (CO)	4.39	4.39	4.25	4.33	4.08
Lead (Pb)	0.00	0.00	0.00	0.00	0.00
Hazardous Air Pollutants (HAPs)	0.00	0.00	0.00	0.00	0.00
Ammonia (NH ₃)	0.03	0.03	0.02	0.03	0.02

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
EP1	Combustion Boiler #1
EP2	Combustion Boiler #2
EP4A	1100 hp Emergency Generator
EP4B	1106 hp Emergency Generator
EP4C	154 hp Emergency Generator
EP4D	2012 hp Emergency Generator
EP7	Three combustion dryers, two McQuay rooftop units, and three heaters
EP8	Combustion Boiler #4
EP9	Two Sterilizers

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

Two 20,000-gallon No. 2 fuel oil underground storage vessels

One 4,000-gallon No. 2 fuel oil underground storage vessel

Two 160-gallon No. 2 fuel oil horizontal fixed roof storage vessels

One 275-gallon No. 2 fuel oil horizontal fixed roof storage vessel

Two 20-gallon parts washers

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(2) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

Operational Limitation

The permittee shall not combust fuel that contains more than 0.29 weight percent sulfur.

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.

Reporting

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any limitation established by this permit condition.
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.

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.

Boilers		
Emission Unit	Description	Manufacturer/Model #
EP1	Combustion Boiler #1: primary fuel: natural gas; secondary fuel: No. 2 fuel oil; MHDR: 26.56 MMBtu/hr; installed 1981	Cleaver Brooks/Model D34
EP2	Combustion Boiler #2: primary fuel: natural gas; secondary fuel: No. 2 fuel oil; MHDR: 26.56 MMBtu/hr; installed 1981	Cleaver Brooks/Model D34
EP8	Combustion Boiler #4: primary fuel: natural gas; secondary fuel: No. 2 fuel oil; MHDR: 21 MMBtu/hr; installed 2001; start-up 2003	Superior/ Model 4-5-2506-S150-GP-GA2

PERMIT CONDITION (EP1, EP2, and EP8)-001
 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

Emission Limitation

1. No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any source any visible emissions with an opacity greater than 20 percent.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60 percent.

Monitoring

1. The permittee shall conduct opacity readings on each emission unit using the procedures contained in U.S. EPA Test Method 22. The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
2. The permittee must maintain the following monitoring schedule:
 - a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
 - b) Should the permittee observe no violations of this regulation during this period then-
 - i) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - ii) If a violation is noted, monitoring reverts to weekly.
 - iii) Should no violation of this regulation be observed during this period then-
 - (1) The permittee may observe once per month.
 - (2) If a violation is noted, monitoring reverts to weekly.

3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping

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

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

Reporting

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

PERMIT CONDITION (EP1 and EP2)-002

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

Emission Limitation

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

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

Operational Limitation

Combustion Boilers #1 and #2 (EP1 and EP2) shall be limited to burning pipeline grade natural gas and No. 2 fuel oil.

Monitoring/Recordkeeping

1. The permittee shall maintain records of the fuel burned (natural gas or No. 2 fuel oil) and verify the sulfur content. 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 to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any limitation established by this permit condition.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted annually in the annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION (EP1 and EP2)-003

10 CSR 10-2.040 Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating¹

¹This requirement is federally enforceable only.

Emission Limitation

The permittee shall not emit particulate matter in excess of 0.21 lb/MMBtu of heat input from indirect heating sources

Operational Limitation

The permittee shall calibrate, maintain and operate the emission unit according to the manufacturer's specifications and recommendations.

Monitoring/Recordkeeping

1. Attachment F contains calculations which demonstrate that this emission unit will never exceed the emission limitation while burning the specified fuel.
2. Records may be kept in either written or electronic form.
3. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
4. All records shall be maintained for five years.

Reporting

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

PERMIT CONDITION EP8-001

10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Emission Limitation

1. The permittee has elected to demonstrate compliance with the fuel oil sulfur limits based on a certification from the fuel supplier. [§60.42c(h)(1)]
2. The fuel oil sulfur limit applies at all times, including periods of startup, shutdown, and malfunction. [§60.42c(i)]

Monitoring

The monitoring requirements of Paragraphs (a) and (d) of §60.46 shall not apply to affected facilities subject to §60.42c(h)(1) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, as described under §60.48c(f), as applicable. [§60.46c(e)]

Recordkeeping/Reporting

1. For affected facilities subject to §60.42c(h)(1) where the owner or operator seeks to demonstrate compliance with the SO₂ standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in §60.48c(f), as applicable. [§60.44c(h)]
2. The permittee shall keep records and submit reports as required including the following information, as applicable: [§60.48c(e)]
 - a) Calendar dates covered in the reporting period. [§60.48c(e)(1)]
 - b) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under §60.48c(f)(1). [§60.48c(e)(11)]
 - i) Fuel supplier certification for distillate oil shall include the following information: [§60.48c(f)(1)]
 - (1) The name of the oil supplier; and [§60.48c(f)(1)(i)]
 - (2) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c. [§60.48c(f)(1)(ii)]
 - c) In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period. [§60.48c(e)(11)]
3. The permittee shall record and maintain records of the amounts of each fuel combusted during each month. [§60.48c(g)]
4. All records shall be maintained for five years and shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
5. The reporting period for the reports required under Subpart Dc is each six-month period. All reports shall be submitted to the Missouri Department of Natural Resources and shall be postmarked by the 30th day following the end of the reporting period. [§60.48c(i)]
6. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted annually in the annual compliance certification, as required by Section IV of this permit.

Generators		
Emission Unit	Description	Manufacturer/Model #
EP4A	1100 hp Emergency Generator; internal combustion engine; No. 2 fuel oil-fired; MHDR: 7.7 MMBtu/hr; installed 1981	Caterpillar/ Model D349
EP4B	1106 hp Emergency Generator; internal combustion engine; No. 2 fuel oil-fired; MHDR: 7.7 MMBtu/hr; installed 1994	Caterpillar/ Model 3508
EP4C	154 hp Emergency Generator; internal combustion engine; No. 2 fuel oil-fired; MHDR: 0.526 MMBtu/hr; installed 2005	Cummins Onan
EP4D	2012 hp Emergency Generator, internal combustion engine, No. 2 fuel oil-fired, MHDR 5.118 MMBtu/hr, installed 2011	Caterpillar

PERMIT CONDITION (EP4A through EP4C)-001
 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

Emission Limitation

1. Emissions from any new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
2. Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
3. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

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

Operational Limitation/Equipment Specification

These emission units shall be limited to burning No. 2 fuel oil.

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.

Reporting

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any limitation established by this permit condition.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted annually in the annual compliance certification, as required by Section IV of this permit.

PERMIT CONDITION EP4D-001

10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart IIII Standards of Performance for Stationary Compression Ignition Internal
Combustion Engines

Emission Limitation

1. Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE. [§60.4205(b)]
2. The permittee must comply with the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007. [§60.4202(a)(2)]
 - a) Exhaust emissions shall not exceed 6.4 grams per kilowatt-hour of NMHC+NO_x, 3.5 grams per kilowatt-hour of CO, and 0.20 grams per kilowatt-hour of PM. [Table 1 to §89.112]
3. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4204 and 60.4205 over the entire life of the engine. [§60.4206]

Operational Limitation

1. Owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [§60.4207(b)]
2. All diesel fuel is subject to the following per-gallon standards: [§80.510(b)]
 - a) Sulfur content. [§80.510(b)(1)]
 - i) 15 ppm maximum. [§80.510(b)(1)(i)]
 - b) Cetane index or aromatic content, as follows: [§80.510(b)(2)]
 - i) A minimum cetane index of 40; or [§80.510(b)(2)(i)]
 - ii) A maximum aromatic content of 35 volume percent. [§80.510(b)(2)(ii)]

Compliance Requirements

1. The permittee operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [§60.4211(a)(1)]
2. The permittee shall change only those emission-related settings that are permitted by the manufacturer. [§60.4211(a)(2)]
3. The permittee shall meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply. [§60.4211(a)(3)]

4. The permittee must comply with 40 CFR Part 60 Subpart IIII by purchasing an engine certified to the emission standards in §60.4205(b), as applicable, for the same model year and engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [§60.4211(c)]
5. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Director 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 year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [§60.4211(f)]
6. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate. [§60.4212(c)]

Monitoring

If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine. [§60.4209(a)]

Recordkeeping

1. The permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [§60.4214(b)]
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 to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any limitation established by this permit condition.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted annually in the annual compliance certification, as required by Section IV of this permit.

Sterilizers		
Emission Unit	Description	Manufacturer/Model #
EP9	Two sterilizers	3M Sterivac/8XL

PERMIT CONDITION EP9-001

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
40 CFR Part 63 Subpart WWWW National Emission Standards for Hospital Ethylene Oxide Sterilizers

Management Practice Standards

1. You 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]
2. For each sterilization unit not equipped with an air pollution control device, you 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. You must keep the records specified in Paragraphs (a) and (b) of §63.10432.
 - a) A copy of the Initial Notification of Compliance Status that you submitted to comply with this subpart. [§63.10432(a)]
 - b) Records required by §63.10420 for each sterilization unit not equipped with an air pollution control device. [§63.10432(b)]
2. Your records must be in a form suitable and readily available for expeditious review. [§63.10434(a)]
3. You must keep each record for five years following the date of each record. [§63.10434(b)]
4. You must keep each record onsite for at least two years after the date of each record. You may keep the records offsite for the remaining three years. [§63.10434(c)]
5. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

Reporting

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any limitation established by this permit condition.
2. Reports of any deviations from monitoring, record keeping and reporting requirements of this permit condition shall be submitted annually in the annual compliance certification, as required by Section IV of this permit.

Dryers and Heaters	
Emission Unit	Description
EP7	Three combustion dryers (1.4 MMBtu/hr each), Two McQuay rooftop units (1.875 MMBtu/hr each), and three heaters (0.12 MMBtu/hr each). All units are natural gas fired.

<p align="center">PERMIT CONDITION EP7-001</p> <p>10 CSR 10-2.040 Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating¹</p>
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¹This requirement is federally enforceable only.

Emission Limitation

The permittee shall not emit particulate matter in excess of 0.21 lb/MMBtu of heat input from indirect heating sources

Operational Limitation

The permittee shall calibrate, maintain and operate the emission unit according to the manufacturer's specifications and recommendations.

Monitoring/Recordkeeping

1. Attachment F contains calculations which demonstrate that this emission unit will never exceed the emission limitation while burning the specified fuel.
2. Records may be kept in either written or electronic form.
3. These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
4. All records shall be maintained for five years.

Reporting

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

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) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
 - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
 - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
 - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
 - b) Yard waste, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
 - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
 - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
 - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
 - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
 - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
 - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the Director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department Director; and

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

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

Monitoring:

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

The permittee shall maintain the following monitoring schedule:

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

Recordkeeping:

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

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

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

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

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

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

10 CSR 10-6.250 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 record keeping 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
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- 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 Record Keeping and Reporting Requirements

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, 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. 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's 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 written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, 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 Don Campbell, Manager, Plant Services. 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
SO₂ Compliance Demonstration

This attachment presents calculations that demonstrate that Permit Condition PW001 will ensure that Heartland Regional Medical Center East’s emissions will not exceed 100 tons per year of sulfur dioxide.

General Assumptions:

- Conversion of all sulfur in the fuel to SO₂.
- Assume that combustion boilers burn fuel oil continuously, year around.

SO₂ PTE of Boilers

- Heating value of No. 2 fuel oil is 140 MMBtu/1000 gallons. [EPA Document AP-42, Chapter 1.3]

EU ID #	Description	MHDR (MMBtu/hr)
EP1	Combustion Boiler #1	26.56
EP2	Combustion Boiler #2	26.56
EP8	Combustion Boiler #4	21
	Total heat capacity	74.12

SO₂ Emission Factor = 142(S) lb/1000 gal where S is 0.29%. [EPA Document AP-42, Table 1.3-1]

$$PTE\ SO_2 = \frac{74.12\ MMBtu}{hr} \times \frac{1000\ gal}{140\ MMBtu} \times \frac{142 \times 0.29\ lb}{1000\ gal} \times \frac{8760\ hr}{year} \times \frac{ton}{2000\ lb} = 95.49\ tons/year$$

SO₂ PTE of Emergency Generators:

EU ID #	Description	MHDR (MMBtu/hr)
EP4A	Caterpillar Generator	7.7
EP4B	Caterpillar Generator	7.7
EP4C	Cummins Onan Generator	0.526
EP4D	Caterpillar Generator	5.118
	Total heat capacity	21.04

SO₂ Emission Factor = 138(S) lb/1000 gal where S is 0.29%. [FIRE SCC 20200102]

$$PTE\ SO_2 = \frac{21.04\ MMBtu}{hr} \times \frac{1000\ gal}{140\ MMBtu} \times \frac{39.7\ lb}{1000\ gal} \times \frac{500\ hr}{year} \times \frac{ton}{2000\ lb} = 1.49\ tons/year$$

Attachment E, continued

Calculation of PTE SO₂ from all natural gas-fired combustion units

- Assume that all natural gas-fired combustion units burn natural gas continuously, year around.
- Heating value of natural gas is 1,050 MMBtu/MMcf. [EPA Document AP-42, Appendix A]

EU ID #	Description	MHDR (MMBtu/hr)
EP7	Three natural gas-fired combustion dryers	4.2
EP7	Two natural gas-fired McQuay rooftop units	3.75
EP7	Three heaters	0.36
	Total heat capacity	8.31

SO₂ Emission Factor = 0.6 lb/MMcf [EPA Document AP-42, Table 1.4-2]

$$PTE\ SO_2 = \frac{8.31\ MMBtu}{hr} \times \frac{MMcf}{1050\ MMBtu} \times \frac{0.6\ lb}{MMcf} \times \frac{8760\ hr}{year} \times \frac{ton}{2000\ lb} = 0.02\ tons/year$$

Sum of SO₂

$$PTE\ SO_2 = 95.49\ tons + 1.49\ tons + 0.02\ tons = 97.00\ tons$$

97.00 tons of SO₂ is below the major source threshold of 100 tons.

Attachment F
 10 CSR 10-2.040 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-2.040 *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*. The installation's total heat input (Q):

Emission Unit	Description	MHDR (MMBtu/hr)
EP1	Boiler	26.56
EP2	Boiler	26.56
EP7	Heaters	8.31
EP8	Boiler	21
Total Q		82.43

The maximum allowable PM emission limitation for new indirect heating sources having a total heat input below 10 MMBtu/hr is 0.40 lb/MMBtu heat input: [10 CSR 10-2.040(5)(B)]

$$E = 0.80(Q)^{-0.301} = 0.80(82.43)^{-0.301} = 0.21$$

Emission Unit	Description	Emission Factor (lb/MMscf)	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)
EP1	Boiler	7.6	0.0072	0.21
EP2	Boiler	7.6	0.0072	0.21
EP7	Heaters	7.6	0.0072	0.21

The boilers will also be in compliance while burning #2 fuel oil:

Emission Unit	Description	Emission Factor (lb/1000 gal)	Emission Factor (lb/MMBtu)	Emission Limit (lb/MMBtu)
EP1	Boiler #1 (#2 oil)	2.30	0.016	0.21
EP2	Boiler #2 (#2 oil)	2.30	0.016	0.21

The emission factors were taken from FIRE for Process SCC 10300603 for natural gas and 10300502 for distillate oil. The average heating values of 1,050 Btu/scf for natural gas and 140 MMBtu/1000 gal for distillate oil used to convert the emission factors to lb/MMBtu were taken from AP-42 Appendix A. The calculations demonstrate that the emission units have worst-case emissions far below the applicable emission limit while being properly maintained and operated; therefore, no monitoring or recordkeeping other than maintenance records are required while combusting natural gas or distillate oil.

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 December 12, 2011
- 2) 2010 Emissions Inventory Questionnaire, received March 31, 2011
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 4) Construction Permit #0498-003, Issued March 13, 1998
- 5) Construction Permit #062003-018, Issued May 20, 2003
- 6) U.S. EPA's Factor Information Retrieval (FIRE) Date System 6.25

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

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

None

Changes since Previous Operating Permit

The boiler associated with EP3 has been disassembled and removed from operation and is not included in this operating permit.

A new emergency engine (EP4D) has been added to the installation.

The voluntary plant wide condition limiting the installation to 99.5 tons of SO_x any consecutive 12 month period has been replaced by a 0.29 weight percent sulfur content limitation on fuel. This voluntary limitation limits the installation to 97.0 tons of SO_x per 12 month period.

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 10-2.210, *Control of Emissions from Solvent Metal Cleaning*

This rule does not apply to the two parts washers because according to 10 CSR 10-2.210(1)(A), this rule only applies in Clay, Jackson and Platte Counties. The installation is in Buchanan County.

10 CSR 10-2.215, *Control of Emissions from Solvent Cleanup Operations*

This rule does not apply to the two parts washers because according to 10 CSR 10-2.215(1)(A), this rule only applies in Clay, Jackson and Platte Counties. The installation is in Buchanan County.

10 CSR 10-2.260, *Control of Petroleum Liquid Storage, Loading, and Transfer*

This rule does not apply to the fuel oil tanks because according to 10 CSR 10-2.260(1)(A), this rule only applies in Clay, Jackson and Platte Counties. The installation is in Buchanan County.

10 CSR 10-6.360, *Control of NO_x Emissions from Electric Generating Units and Non-Electric Generating Boilers*

This rule does not apply to Combustion Boilers or Generators because according to 10 CSR 10-6.360(1)(A), this rule does not apply to installations located in Buchanan County.

10 CSR 10-6.390, *Control of NO_x Emissions from Large Stationary Internal Combustion Engines*

This rule does not apply to Generators because according to 10 CSR 10-6.390(1)(A), this rule does not apply to installations located in Buchanan County.

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

This rule does not apply to Combustion Boilers because according to 10 CSR 10-6.400(1)(B)6, the burning of fuel for indirect heating is exempt.

This rule does not apply to Generators because according to 10 CSR 10-6.400(2)(A), liquids and gases that are used solely as fuels and are introduced for purposes of combustion are excluded from the definition of process weight.

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

This rule does not apply because all of the indirect heating equipment at the facility uses either natural gas or No. 2 fuel oil. [10 CSR 10-6.405(1)(C)]

Construction Permit History

1) Construction Permit #0498-003, Issued March 13, 1998

This construction permit was issued for the installation of a combustion boiler rated at 12.55 MMBtu/hr and an emergency generator rated at 1106 hp. This permit contains special conditions which are not included in this operating permit because the boiler has been removed.

2) Construction Permit #062003-018, Issued May 20, 2003

This construction permit was issued for a 21 MMBtu/hr Superior boiler. This permit contains no special conditions.

New Source Performance Standards (NSPS) Applicability

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

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

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

These regulations do not apply to the storage tanks. The smallest size tank covered by these regulations is 19,813 gallons. The storage tanks at this installation have capacities less than the applicability threshold with the exception of the two 20,000 gallon tanks. The 20,000 gallon tanks store fuel oil which has a true vapor pressure of less than 15.0 kPa and therefore this rule does not apply. [§60.110b(b)]

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

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

40 CFR Part 60 Subpart Db, *Standards of Performance for Industrial, Commercial, Institutional Steam Generating Units for Which Construction is Commenced After June 19, 1984*

These regulations do not apply to the boilers. The smallest boiler covered by these regulations is 100 MMBtu/hr. The boilers at this installation have capacities less than the applicability threshold

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

This rule applies to each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr.

Combustion Boilers #1 and #2 (EP1 and EP2) were constructed prior to 1989 and are not subject to this rule.

Combustion Boiler #4 was constructed after 1989 and has a heat input capacity between ten and 100 MMBtu/hr and is therefore subject to this rule. The 0.50 weight percent sulfur limitation from §60.42c(d) has not been included because the installation has accepted a stricter plant wide fuel limit of 0.29 weight percent sulfur.

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

This rule applies to compression ignition internal combustion engines manufactured after April 1, 2006. Therefore this rule only applies to EP4D.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63 Subpart O, *Ethylene Oxide Emissions Standards for Sterilization Facilities*

This rule does not apply to the sterilizers at the installation because according to §63.360(e), this subpart does not apply to ethylene oxide sterilization operations at stationary sources such as hospitals, doctors offices, clinics, or other facilities whose primary purpose is to provide medical services to humans or animals.

40 CFR Part 63 Subpart T, *National Emission Standards for Halogenated Solvent Cleaning*

This rule applies to cold cleaning machines that use methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform. The parts washer does not use any of these solvents therefore this rule does not apply. [§63.460(a)]

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

This rule applies to the two ethylene oxide sterilizers because the installation is a hospital that is located at an area source of HAP.

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

The existing emergency engines at this installation are not subject to this rule because it does not apply to existing institutional emergency engines, which include engines at medical facilities, at area sources of HAP. [§63.590(b)(3)(viii)]

The new emergency engine (EP4D) is not subject to this rule because it is meeting the requirements of 40 CFR Part 60 Subpart IIII. [§63.6590(c)(1)]

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

This rule does not apply to the boilers because they meet the definition of gas-fired boilers. The boilers only burn diesel fuel during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. The periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [§63.11195(e) and §63.11237]

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61, Subpart M – *National Emission Standards for Asbestos* is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

Other Regulatory Determinations

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

This rule applies to Boilers #1, #2, and #4

This rule does not apply to Generators (EP4A, EP4B, EP4C, and EP4D) because according to 10 CSR 10-6.220(1)(A), the rule does not apply to stationary internal combustion engines operated in the Kansas City metropolitan area, which includes Buchanan County

It is highly unlikely that the natural gas combustion units, parts washers, sterilizers, or storage tanks will exceed opacity limitations, therefore no conditions were included in the permit for this rule.

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

This rule applies to Combustion Boilers #1 and #2 (EP1 and EP2) when burning No. 2 fuel oil. The rule establishes a sulfur dioxide emission limit of eight lb/MMBtu actual heat input average on any consecutive three-hour time period. The calculations below demonstrate that these units will be in compliance with this rule.

SO₂ Emission Factor for distillate oil is 142S lb/1000 gal. [EPA document AP-42, Table 1.3-1]
Heating value of No. 2 fuel oil is 140 MMBtu/1000 gal. [EPA document AP-42, Chapter 1.3-1]

$$\frac{lb}{MMBtu} = \frac{142 \times 0.29 lb}{1000 gal} \times \frac{1000 gal}{140 MMBtu} = 0.29 lb/MMBtu$$

This rule does not apply to Combustion Boiler #4 (EP8) or EP4D because according to 10 CSR 10-6.260(1)(A)1, emission sources subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070 are exempt.

This rule applies to Generators (EP4A, EP4B, and EP4C). The calculations below demonstrate that these units will be in compliance with this rule.

General Equation

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

Where:

- All of the sulfur in the fuel is converted to SO₂ emissions.
- SO₂ emission factor is 1.01S lb/MMBtu. [EPA document AP-42, Table 3.4-1].
- The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil, the F factor is 10,320 wscf/MMBtu. [40 CFR Part 60 Appendix A Method 19 Table 19-2]
- The conversion factor is 1.660E-7 lb/scf per ppm. [40 CFR Part 60 Appendix A Method 19, Table 19-1]
- Conversion factor for ppm weight to ppmv = 28.8/MW = 28.8/64 = 0.45 [EPA document AP-42, Appendix A]

$$ppmv SO_2 = \frac{1.01 \times 0.29 lb}{MMBtu} \times \frac{MMBtu}{10,320 ft^3} \times \frac{scf}{1.660 \times 10^{-7} lb} \times \frac{0.45 ppmv}{ppmw} = 77 ppmv$$

77 ppmv < 500 ppmv, therefore, in compliance

This rule does not apply to the combustion dryers and the McQuay rooftop units because they use pipeline grade natural gas exclusively. [10 CSR 10-6.260(1)(A)2]

10 CSR 10-2.040 *Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating* was rescinded by the State of Missouri on October 30, 2011 and replaced by 10 CSR 10-6.405 *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating*. 10 CSR 10-2.040 has not yet been removed from Missouri's State Implementation Plan (SIP) and is, therefore, still federally enforceable, but not state enforceable (see Permit Condition (EP1 and EP2)-003 and EP7-001). 10 CSR 10-2.040 will no longer be federally enforceable upon removal from Missouri's SIP.

This rule does not apply to Combustion Boiler #4 (EP8) because it is subject to 10 CSR 10-6.070.

Greenhouse Gas Emissions

On May 13, 2010, EPA issued the GHG Tailoring Rule which set the major source threshold for CO₂e to be 100,000 tons per year within 40 CFR Part 70. As of July 1, 2011, all Title V operating permits are required to include GHG emissions. Potential emissions of greenhouse gases (CO₂e) for this installation are calculated to be 42,030 tons, classifying the installation as a minor source of GHGs.

This source is not subject to 40 CFR Part 98 - *Mandatory Greenhouse Gas Reporting Rule*. In addition, Missouri regulations do not require the installation to report CO₂ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's actual CO₂ emissions were not included within this permit.

Potential to Emit

The following table shows that the installation qualifies for an Intermediate State Operating Permit with the voluntary permit condition PW001.

Pollutant	Potential to Emit (tons/yr)
CO	33.65
CO ₂ e	42,030
HAP	1.59
NO _x	81.67
PM ₁₀	7.37
PM ₂₅	6.79
SO _x	97.00
VOC	5.99

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

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

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

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

Prepared by:

Colin Janssen
Environmental Engineer

CERTIFIED MAIL: 70093410000193532108
RETURN RECEIPT REQUESTED

Mr. Don Campbell
Heartland Regional Medical Center
5325 Faraon Street
St. Joseph, MO 64506

Re: Heartland Regional Medical Center, 021-0063
Permit Number: **OP2012-033**

Dear Mr. Campbell:

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 Colin Janssen 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/cjk

Enclosures

c: Kansas City Regional Office
PAMS File: 2011-12-030