



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 here in.

Intermediate Operating Permit Number: OP2010-100
Expiration Date: SEP 08 2015
Installation ID: 013-0029
Project Number: 2007-03-030

Installation Name and Address

Butler Municipal Power Plant
704 West Mill
Butler, MO 64730
Bates County

Parent Company's Name and Address

City of Butler
P.O. Box 420
Butler, MO 64730

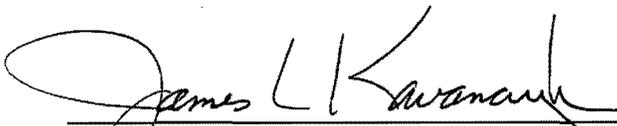
Installation Description:

Butler Municipal Power Plant operates eight (8) diesel fueled engine-generators to supplement electrical power to the city of Butler.

The installation has accepted voluntary, federally enforceable emission limitations in order to qualify for this Intermediate State Operating Permit.

SEP 09 2010

Effective Date



Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Butler Municipal Power Plant operates eight (8) diesel fueled engine-generators to supplement electrical power to the city of Butler. The installation has accepted voluntary, federally enforceable emission limitations in order to qualify for this Intermediate State Operating Permit.

Reported Air Pollutant Emissions, tons per year								
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compound s(VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)	Particulate Matter ≤ 2.5 Microns (PM-2.5)
2008	0.01	0.31	1.07	0.02	0.08	--	--	0.01
2007	0.36	1.50	9.80	0.44	1.35	--	--	0.78
2006	0.07	0.11	7.23	0.10	0.52	--	--	0.07
2005	0.19	1.79	5.36	0.23	--	--	--	--
2004	0.02	0.38	0.25	0.03	0.20	--	--	0.23

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	2008 EIQ Reference ID#
EU0010	Fairbanks Morse Engine-Generator #3	EP-3
EU0020	Fairbanks Morse Engine-Generator #4	EP-4
EU0030	Fairbanks Morse Engine-Generator #5	EP-5
EU0040	Fairbanks Morse Engine-Generator #6	EP-6
EU0050	Caterpillar Engine-Generator #1 North	EP-7
EU0060	Caterpillar Engine-Generator #1 South	EP-8
EU0070	Caterpillar Engine-Generator #2 North	EP-9
EU0080	Caterpillar Engine-Generator #2 South	EP-10

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 15,000-gallon diesel storage tanks
 Two 21,300-gallon diesel storage tanks
 Three 350-gallon diesel storage tanks

DOCUMENTS INCORPORATED BY REFERENCE

This permit incorporates the following documents by reference:
 Missouri Department of Natural Resources Construction Permit No. 1099-009, Issued October 14, 1999

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 10-6.060 Construction Permits Required
Construction Permit 1099-009, Issued October 14, 1999
10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

Emission Limitation:

Butler Municipal Power Plant shall discharge less than 95 tons of nitrogen oxides (NO_x) into the atmosphere from the entire installation in any consecutive 12-month period. [Voluntary Limitation]

Recordkeeping:

- 1) Butler Municipal Power Plant shall maintain an accurate record of emissions of NO_x emitted into the atmosphere from the entire installation. [Construction Permit No. 1099-009, Special Condition 2]
- 2) Butler Municipal Power Plant shall record the monthly and running 12-month totals of NO_x emissions from this installation and shall use Attachment A or an equivalent form for this purpose. [Construction Permit No. 1099-009, Special Condition 2]
- 3) Butler Municipal Power Plant shall maintain records on-site for the most recent 60 months of all records required by this permit condition and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request. [Construction Permit No. 1099-009, Special Condition 2]

Reporting:

Butler Municipal Power Plant shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month, if the 12-month cumulative total records show that the source exceeded the limitation of 95 tons of NO_x. [Construction Permit No. 1099-009, Special Condition 3, Voluntary Limitation]

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.

EU0010 – FAIRBANKS MORSE ENGINE-GENERATOR #3 EU0020 – FAIRBANKS MORSE ENGINE-GENERATOR #4 EU0030 – FAIRBANKS MORSE ENGINE-GENERATOR #5 EU0040 – FAIRBANKS MORSE ENGINE-GENERATOR #6 EU0050 – CATERPILLAR ENGINE-GENERATOR #1 NORTH EU0060 – CATERPILLAR ENGINE-GENERATOR #1 SOUTH EU0070 – CATERPILLAR ENGINE-GENERATOR #2 NORTH EU0080 – CATERPILLAR ENGINE-GENERATOR #2 SOUTH			
Emission Unit	Description	Manufacturer/ Model #	2008 EIQ Reference #
EU0010	Fairbanks Morse Engine-Generator #3: diesel fuel fired; MHDR 8.78 MMBtu/hr; construction date 1946	Fairbanks Morse/ 87871	EP-3
EU0020	Fairbanks Morse Engine-Generator #4: diesel fuel fired; MHDR 14.56 MMBtu/hr; construction date 1952	Fairbanks Morse/ 953760	EP-4
EU0030	Fairbanks Morse Engine-Generator #5: diesel fuel fired; MHDR 14.56 MMBtu/hr; construction date 1959	Fairbanks Morse/ 968757	EP-5
EU0040	Fairbanks Morse Engine-Generator #6: diesel fuel fired; MHDR 15.68 MMBtu/hr; construction date 1959	Fairbanks Morse/ 969954	EP-6
EU0050	Caterpillar Engine-Generator #1 North: diesel fuel fired; MHDR 19.15 MMBtu/hr; construction date 1999	Caterpillar/ 7RN00933	EP-7
EU0060	Caterpillar Engine-Generator #1 South: diesel fuel fired; MHDR 19.15 MMBtu/hr; construction date 1999	Caterpillar / 7RN00937	EP-8
EU0070	Caterpillar Engine-Generator #2 North: diesel fuel fired; MHDR 19.15 MMBtu/hr; construction date 1999	Caterpillar / 7RN00936	EP-9
EU0080	Caterpillar Engine-Generator #2 South: diesel fuel fired; MHDR 19.15 MMBtu/hr; construction date 1999	Caterpillar / 7RN00938	EP-10

PERMIT CONDITION (EU0010 through EU0080)-001
 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

Emission Limitation:

- 1) Emissions from existing source operations (EU0010 through EU0040) shall not contain more than two thousand parts per million by volume (2,000 ppmv) of sulfur dioxide.
- 2) Emissions from new source operations (EU0050 through EU0080) shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- 3) 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.
- 4) 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 Specifications:

- 1) The engine-generators (EU0010 through EU0040) shall be limited to burning fuel oil with an annual average sulfur content of 0.5 percent or less by weight.
- 2) The engine-generators (EU0050 through EU0080) shall be limited to burning fuel oil with an annual average sulfur content of 0.05 percent or less by weight.¹

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) All records shall be maintained for five (5) years.
- 3) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(5)(C)1.B.

PERMIT CONDITION (EU0010 through EU0080)-002

10 CSR 10-6.075 Maximum Achievable Control Technology Regulations
 40 CFR Part 63 Subpart A, General Provisions and Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Note: This Permit Condition is not applicable until the compliance date of May 3, 2013.
 [§63.6595(a)(1)]

¹ This voluntary limitation will allow emission units EU0050 through EU0080 to qualify for the Acid Rain new unit exemption.

Emission Limitation:

- 1) If you own or operate an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to subpart ZZZZ and the operating limitations in Table 2b to subpart ZZZZ, which apply to you. [§63.6603(a)]

Table 2d to Subpart ZZZZ of Part 63
 Requirements for Existing Compression Ignition
 Stationary RICE Located at Area Sources of HAP Emissions

For each . . .	You must meet the following requirement, except during periods of startup . . .
3. Non-Emergency, non-black start CI > 500 HP.	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O ₂ ; or b. Reduce CO emissions by 70 percent or more.

Table 2b to Subpart ZZZZ of Part 63
 Operating Limitations for Existing Non-Emergency
 Compression Ignition Stationary RICE >500 HP

For each . . .	You must meet the following operating limitation. . .
1. CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. ¹
2. CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst	Comply with any operating limitations approved by the Director.

¹ Sources can petition the Director pursuant to the requirements of 40 CFR 63.8(g) for a different temperature range.

- 2) Compliance with the numerical emission limitations established in subpart ZZZZ is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to subpart ZZZZ. [§63.6603]
- 3) If you own or operate an existing nonemergency CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. [§63.6604]
- 4) You must be in compliance with the emission limitations and operating limitations in subpart ZZZZ that apply to you at all times. [§63.6605(a)]
- 5) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.6605(b)]

Testing:

- 1) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to subpart ZZZZ that apply to you within 180 days after May 3, 2013 and according to the provisions in §63.7(a)(2). [§63.6612(a)]
- 2) You are not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in §63.6612(b)(1) through (4). [§63.6612(b)]
 - a) The test must have been conducted using the same methods specified in subpart ZZZZ, and these methods must have been followed correctly. [§63.6612(b)(1)]
 - b) The test must not be older than 2 years. [§63.6612(b)(2)]
 - c) The test must be reviewed and accepted by the Director. [§63.6612(b)(3)]
 - d) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes. [§63.6612(b)(4)]

Table 4 to Subpart ZZZZ of Part 63.
Requirements for Performance Tests

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. CI stationary RICE	Reduce CO emissions.	i. Measure the O ₂ at the inlet and outlet of the control device; and ii. Measure the CO at the inlet and the outlet of the control device	(1) Portable CO and O ₂ analyzer (1) Portable CO and O ₂ analyzer	(a) Using ASTM D6522–00 (2005) ^a (incorporated by reference, <i>see</i> §63.14). Measurements to determine O ₂ must be made at the same time as the measurements for CO concentration (a) Using ASTM D6522–00 (2005) ^{a,b} (incorporated by reference, <i>see</i> §63.14) or Method 10 of 40 CFR appendix A. The CO concentration must be at 15 percent O ₂ , dry basis
3. Stationary RICE	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number of traverse points; and ii. Determine the O ₂ concentration of the stationary RICE exhaust at the sampling port location; and iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 1 or 1A of 40 CFR Part 60, appendix A § 63.7(d)(1)(i). (1) Method 3 or 3A or 3B of 40 CFR Part 60, appendix A, or ASTM Method D6522–00 (2005). (1) Method 4 of 40 CFR Part 60, appendix A, or Test Method 320 of 40 CFR Part 63, appendix A, or ASTM D 6348–03.	(a) If using a control device, the sampling site must be located at the outlet of the control device. (a) Measurements to determine O ₂ concentration must be made at the same time and location as the measurements for formaldehyde concentration. (a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 of 40 CFR Part 63, appendix A; or ASTM D6348-03 c, provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. Measure CO at the exhaust of the stationary RICE	(1) Method 10 of 40 CFR Part 60, appendix A, ASTM Method D6522-00 (2005) a, Method 320 of 40 CFR Part 63, appendix A, or ASTM D6348-03.	(a) CO concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour longer runs.

^a You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106. ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

^b You may also use Method 320 of 40 CFR Part 63, appendix A, or ASTM D6348-03.

^c You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

- 3) If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of subpart ZZZZ. [§63.6615]

Table 3 to Subpart ZZZZ of Part 63.
 Subsequent Performance Tests

For each . . .	Complying with the requirement to . . .	You must . . .
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions.	Conduct subsequent performance tests every 8,760 hrs or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that are limited use stationary RICE	Conduct subsequent performance tests every 8,760 hrs or 5 years, whichever comes first.

- 4) You must conduct each performance test in Tables 3 and 4 of subpart ZZZZ that applies to you. [§63.6620(a)]
- 5) Each performance test must be conducted according to the requirements that subpart ZZZZ specifies in Table 4. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. [§63.6620(b)]
- 6) You must conduct three separate test runs for each performance test required, as specified in §63.7(e)(3). Each test run must last at least 1 hour. [§63.6620(d)]

- 7) You must use Equation 1 to determine compliance with the percent reduction requirement:
[§63.6620(e)(1)]

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet,
 C_o = concentration of CO or formaldehyde at the control device outlet, and
R = percent reduction of CO or formaldehyde emissions.

- 8) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in §63.6620(e)(2)(i) through (iii).
[§63.6620(e)(2)]

- a) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation: [§63.6620(e)(2)(i)]

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

Where:

F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10⁶ Btu).

F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10⁶ Btu).

- b) Calculate the CO₂ correction factor for correcting measurement data to 15 percent oxygen, as follows: [§63.6620(e)(2)(ii)]

$$X_{co_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

X_{co_2} = CO₂ correction factor, percent.

5.9 = 20.9 percent O₂–15 percent O₂, the defined O₂ correction value, percent

- c) Calculate the NO_x and SO₂ gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:
[§63.6620(e)(2)(iii)]

$$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2} \quad (\text{Eq. 4})$$

Where:

%CO₂ = Measured CO₂ concentration measured, dry basis, percent.

- 9) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Director for operating limitations to be established during the initial performance test and

- continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Director. [§63.6620(f)]
- 10) If you petition the Director for approval of operating limitations, your petition must include the information described in §63.6620(g)(1) through (5). [§63.6620(g)]
- a) Identification of the specific parameters you propose to use as operating limitations; [§63.6620(g)(1)]
 - b) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions; [§63.6620(g)(2)]
 - c) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; [§63.6620(g)(3)]
 - d) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and [§63.6620(g)(4)]
 - e) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. [§63.6620(g)(5)]
- 11) If you petition the Director for approval of no operating limitations, your petition must include the information described in §63.6620(h)(1) through (7). [§63.6620(h)]
- a) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time; [§63.6620(h)(1)]
 - b) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions; [§63.6620(h)(2)]
 - c) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions; [§63.6620(h)(3)]
 - d) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations; [§63.6620(h)(4)]
 - e) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments; [§63.6620(h)(5)]
 - f) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and [§63.6620(h)(6)]
 - g) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations. [§63.6620(h)(7)]
- 12) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [§63.6620(i)]

Monitoring:

- 1) If you own or operate an existing non-emergency CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either §63.6625(g)(1) or §63.6625(g)(2). Owners and operators must follow the manufacturer’s specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Director to approve different maintenance requirements that are as protective as manufacturer requirements. [§63.6625(g)]
 - a) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or [§63.6625(g)(1)]
 - b) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. [§63.6625(g)(2)]
- 2) If you operate an existing stationary engine, you must minimize the engine’s time spent at idle during startup and minimize the engine’s startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to subpart ZZZZ apply. [§63.6625(h)]
- 3) *To demonstrate initial compliance:* You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of subpart ZZZZ. [§63.6630(a)]

Table 5 to Subpart ZZZZ of Part 63.

Initial Compliance with Emission Limitations and Operating Limitations

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if
8. Existing non-emergency CI stationary RICE >500 HP located at an area source.	a. Reduce CO or formaldehyde emissions ...	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
9. Existing non-emergency CI stationary RICE >500 HP located at an area source.	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O ₂ , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable

- a) During the initial performance test, you must establish each operating limitation in Table 2b of subpart ZZZZ that applies to you. [§63.6630(b)]
- 4) If you must comply with emission and operating limitations, you must monitor and collect data according to this section. [§63.6635(a)]
 - a) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating. [§63.6635(b)]
 - b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods. [§63.6635(c)]

- 5) *To demonstrate continuous compliance with the emission limitations and operating limitations:* You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 2b and 2d to subpart ZZZZ that apply to you according to methods specified in Table 6 to subpart ZZZZ. [§63.6640(a)]

Table 6 to Subpart ZZZZ of Part 63.
Continuous Compliance with Emission Limitations and Operating Limitations

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if
10. Existing stationary RICE >500 HP that are not limited use stationary RICE	a. Reduce CO or formaldehyde emissions; or b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.
11. Existing limited use stationary RICE >500 HP that are limited use CI stationary RICE.	a. Reduce CO or formaldehyde emissions; or b. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust.	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit.

Recordkeeping:

- 1) If you must comply with the emission and operating limitations, you must keep the records described in §63.6655(a)(1) through (a)(5). [§63.6655(a)]
 - a) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
 - b) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
 - c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). [§63.6655(a)(3)]
 - d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
 - e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.6655(a)(5)]
- 2) You must keep the records required in Table 6 subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to you. [§63.6655(d)]
- 3) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
- 4) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]

- 5) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]

Reporting:

- 1) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate an existing stationary CI RICE located at an area source of HAP emissions. [§63.6645(a)(2)]
- 2) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1). [§63.6645(g)]
- 3) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to subpart ZZZZ, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.6645(h)]
 - a) For each initial compliance demonstration required in Table 5 to subpart ZZZZ that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. [§63.6645(h)(1)]
 - b) For each initial compliance demonstration required in Table 5 to subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to subpart ZZZZ, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2). [§63.6645(h)(2)]
- 4) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 2b and 2d to subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in subpart ZZZZ. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. [§63.6640(b)]
 - a) You must submit each report in Table 7 of subpart ZZZZ that applies to you. [§63.6650(a)]
 - b) Unless the Director has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of subpart ZZZZ and according to the requirements in §63.6650(b)(1) through (b)(9). [§63.6650(b)]
 - i) For semiannual Compliance reports, the first Compliance report must cover the period beginning on May 3, 2013 and ending on December 31, 2013. [§63.6650(b)(1)]
 - ii) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31, 2014. [§63.6650(b)(2)]
 - iii) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30. [§63.6650(b)(3)]
 - iv) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31. [§63.6650(b)(4)]
 - v) If the Missouri Department of Natural Resources has established dates for submitting semiannual reports, you may submit the first and subsequent Compliance reports according to the dates the Missouri Department of Natural Resources has established instead of according to the dates in §63.6650(b)(1) through (b)(4). [§63.6650(b)(5)]

- vi) For annual Compliance reports, the first Compliance report must cover the period beginning on May 3, 2013 and ending on December 31, 2013. [§63.6650(b)(6)]
- vii) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31, 2014. [§63.6650(b)(7)]
- viii) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31. [§63.6650(b)(8)]
- ix) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31. [§63.6650(b)(9)]
- c) The Compliance report must contain the information in §63.6650(c)(1) through (6). [§63.6650(c)]
 - i) Company name and address. [§63.6650(c)(1)]
 - ii) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)(2)]
 - iii) Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
 - iv) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]
 - v) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period. [§63.6650(c)(5)]
 - vi) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period. [§63.6650(c)(6)]
- d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in subpart ZZZZ, the Compliance report must contain the information in §63.6650(c)(1) through (4) and the information in §63.6650(d)(1) and (2). [§63.6650(d)]
 - i) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
 - ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(d)(2)]
- e) You must report all deviations as defined in subpart ZZZZ in the semiannual monitoring report. If you submit a Compliance report pursuant to Table 7 of subpart ZZZZ along with, or as part of, the semiannual monitoring report and the Compliance report includes all required information concerning deviations from any emission or operating limitation in subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [§63.6650(f)]

Table 7 to Subpart ZZZZ of Part 63.
Requirements for Reports

You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Compliance report.....	<p>a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period; or</p> <p>b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in § 63.6650(d) or</p> <p>c. If you had a malfunction during the reporting period, the information in § 63.6650(c)(4).</p>	<p>i. Semiannually according to the requirements in § 63.6650(b)(1)-(5) for engines that are not limited use stationary CI RICE subject to numerical emission limitations; and</p> <p>ii. Annually according to the requirements in § 63.6650(b)(6)-(9) for engines that are limited use stationary CI RICE subject to numerical emission limitations.</p> <p>i. Semiannually according to the requirements in § 63.6650(b)</p> <p>i. Semiannually according to the requirements in § 63.6650(b)</p>
2. Report.....	<p>b. The operating limits provided in your Federally enforceable permit, and any deviations from these limits; and</p> <p>c. Any problems or errors suspected with the meters.</p>	<p>i. Annually, according to the requirements in §63.6650.</p> <p>i. See item 2.a.i.</p>

5) You must also report each instance in which you did not meet the requirements in Table 8 in subpart ZZZZ (Applicability of General Provisions) that apply to you. [§63.6640(e)]

PERMIT CONDITION (EU0050 through EU0080)-003

10 CSR 10-6.270 Acid Rain Source Permits Required

Note: This permit condition includes the requirements needed to maintain compliance with the “New Units Exemption” under 40 CFR Part 72.7.

Operational Limitations:

- 1) The engine-generators (EU0050 through EU0080) shall be limited to burning fuel oil with an annual average sulfur content of 0.05 percent or less by weight. [§72.7(a)(3)]
- 2) The engine-generators (EU0050 through EU0080) shall be exempt from the Acid Rain Program, except for the provisions of §§72.2 through 72.6, and §§72.10 through 72.13. [§72.7(b)(1)]

Monitoring:

- 1) Compliance with the requirement that fuel burned during the year have an annual average sulfur content of 0.05 percent by weight or less shall be determined as follows using a method of determining sulfur content that provides information with reasonable precision, reliability, accessibility, and timeliness: [§72.7(d)]
 - a) For fuel oil burned during the year, the requirement is met if the annual average sulfur content is equal to or less than 0.05 percent by weight. The annual average sulfur content, as a percentage by weight, shall be calculated using Equation 1: [§72.7(d)(3)]

$$\% S_{annual} = \frac{\sum_{n=1}^{last} \% S M_n}{\sum_{n=1}^{last} M_n} \quad (\text{Eq. 1})$$

Where:

$\% S_{annual}$ = annual average sulfur content of the fuel burned during the year by the unit, as a percentage by weight;

$\% S_n$ = sulfur content of the nth sample of the fuel delivered during the year to the installation, as a percentage by weight;

M_n = mass of the nongaseous fuel in a delivery during the year to the installation of which the nth sample is taken, in lb;

n = each sample taken of the fuel delivered during the year to the unit, taken at least once for each delivery to the installation.

- 2) *Special Provisions:* The permittee, and to the extent applicable, the designated representative of the units shall: [§72.7(f)(1)]
 - a) Comply with the requirements of burning fuel oil with an annual average sulfur content of 0.05 percent or less by weight for all periods for which the units are exempt; and [§72.7(f)(1)(i)]
 - b) Comply with the requirements of the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect. [§72.7(f)(1)(ii)]
- 3) *Loss of exemption:* On the earliest of the following dates, a unit shall lose its exemption and shall be treated as an affected unit under the Acid Rain Program: [§72.7(f)(4)(i)]
 - a) The date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe; [§72.7(f)(4)(i)(A)]
 - b) The date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or [§72.7(f)(4)(i)(B)]
 - c) January 1 of the year following the year in which the unit burns a gaseous fuel other than natural gas or the annual average sulfur content for fuel oil burned at the unit exceeds 0.05 percent by weight. [§72.7(f)(4)(i)(C)]

Recordkeeping:

- 1) For a period of 5 years from the date the records are created, the permittee shall retain records demonstrating that the requirements of this permit condition are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Director. [§72.7(f)(3)]
 - a) Such records shall include, for each delivery of fuel to the installation, the type of fuel, the sulfur content, and the sulfur content of each sample taken. [§72.7(f)(3)(i)]
 - b) The permittee shall bear the burden of proof that the requirements of this permit condition are met. [§72.7(f)(3)(ii)]

Reporting:

- 1) The designated representative for a unit that loses its exemption shall submit a complete Acid Rain permit application 60 days after the first date on which the unit is no longer exempt, notwithstanding §72.30(b) and (c). [§72.7(f)(4)(ii)]

- 2) The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(5)(C)1.B.

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:
 1. 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;
 2. 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;
 3. 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
 4. St. Louis metropolitan area. The open burning of household refuse is prohibited;
 - (B) Yard waste, with the following exceptions:
 1. Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
 2. 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;
 3. 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:
 - A. 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;
 - B. 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;
 - C. The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
 - D. 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

4. 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) Butler Municipal Power Plant 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 Butler Municipal Power Plant 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 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee may be required by the Director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.

- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the Director.
- 6) The permittee shall complete required reports on state supplied EIQ forms or in a form satisfactory to the Director and the reports shall be submitted to the Director by June 1 after the end of each reporting period.
- 7) 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.
- 8) 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 B, 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 10-3.090 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.

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

- 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 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'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 Mark F. Arbuthnot, City Administrator. 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 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.

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 March 12, 2007;
- 2) 2008 Emissions Inventory Questionnaire, received February 24, 2009; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

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

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

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations
40 CFR Part 63 Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

This rule was amended on March 3, 2010, after the operating permit application was submitted. The amended rule includes emission standards for existing stationary compression ignition reciprocating internal combustion engines that are located at area sources of hazardous air pollutant emissions.

The rule will be applicable to the engine-generators (EU0010 through EU0080). The permittee must achieve compliance with the applicable provisions of this rule no later than May 3, 2013.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program 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 Revisions

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

- 1) Missouri Department of Natural Resources Construction Permit No. 1099-009 authorized the installation of six Caterpillar diesel engine-generators.
 - a) Only four Caterpillar diesel engine-generators (EU0050 through EU0080) were installed at the installation. Since the facility did not begin construction of the additional two engines within two years of construction permit issuance, the facility will need to submit a Missouri Department of Natural Resources construction permit application before any additional engines can be constructed.
 - b) Special Condition 1 required that the permittee discharge less than 100 tons of NO_x from the Caterpillar diesel engine-generators (EU0050 through EU0080) in any consecutive 12-months. In order to qualify for an Intermediate Operating Permit, the permittee has accepted the voluntary, federally enforceable emission limit of discharging less than 95 tons of NO_x from the entire installation in any consecutive 12-months. Therefore, Special Condition 1 has been amended in the operating permit to incorporate this more stringent emission limitation. Recordkeeping and reporting requirement associated with the emission limitation have also been amended.

New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, *New Source Performance Regulations*

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*

These subparts do not apply to storage vessels with a capacity less than 151 m³ (39,890 gallons).

Since all of the storage vessels at the installation have capacities less than 151 m³ (39,890 gallons), these subparts do not apply.

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*

This subpart does not apply to storage vessels with a capacity greater than or equal to 75 m³ (19,813 gallons) but less than 151 m³ (39,890 gallons) storing a liquid with a maximum true vapor pressure less than 15.0 kPa. The two 21,300 gallon fuel storage tanks each store diesel fuel oil, a liquid with a maximum true vapor pressure less than 15.0 kilopascals (kPa). Therefore, this subpart does not apply.

None of the other NSPS standards applies.

Maximum Available Control Technology (MACT) Applicability

10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*

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

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. The engine-generators (EU0010 through EU0080) are affected sources. According to §63.6595(a)(1), as an owner or operator of an existing stationary CI RICE located at an area source of HAP emissions, the permittee must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

None of the other MACT standards applies.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

In the permit application and according to Air Pollution Control Program 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.

None of the other NESHAP standards applies.

Other Regulatory Determinations

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

This rule does not apply to the engine-generators (EU0010 through EU0080) because according to §(1)(A), internal combustion engines operated outside of the Kansas City and St. Louis metropolitan areas are exempt.

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

This rule applies to the engine-generators (EU0010 through EU0080). The calculations below demonstrate that these units will be in compliance with this rule.

General Equation

$$\text{ppmv SO}_2 = \text{SO}_2 \text{ Emission Factor (lb/MMBtu)} \div \text{F factor (wscf/MMBtu)} \div \text{Conversion Factor (lb/scf)} \times \text{Conversion Factor (ppmv/ppmw)}$$

Where:

- All of the sulfur in the fuel is converted to SO₂ emissions.
- For generators > 600 hp: SO₂ emission factor is 1.01S lb/MMBtu. [EPA AP-42, Table 3.4-1]
- Assume S = 0.5 (worst case for EU0010 through EU0040)
- 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]

- Conversion factor = 1.660E-7 lb/scf per ppm. [40 CFR Part 60 Appendix A Method 19, Table 19-1]
 - Conversion factor for ppmw to ppmv = 28.8/MW = 28.8/64 = 0.45 [EPA AP-42, App A]
- Calculation

$$ppmv SO_2 = \frac{1.01(0.5) lb}{MMBtu} \times \frac{MMbtu}{10,320 ft^3} \times \frac{scf}{1.660E^{-7} lb} \times \frac{0.45 ppmv}{ppmw} = 133 ppmv SO_2 < 500 ppmv$$

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

The engine-generators (EU0050 through EU0080) qualify for the “New Unit Exemption” found in 40 CFR 72.6(b)(9). Permit Condition (EU0050 through EU0080)-003 contains the requirements necessary to maintain the exemption.

This rule does not apply to the engine-generators (EU0010 through EU0040) because they were constructed before November 15, 1990 and do not serve a generator with a nameplate capacity of greater than twenty-five megawatts (25 MW).

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

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

These rules do not apply to the engine-generators (EU0010 through EU0080) because they are not located in an affected county.

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

10 CSR 10-6.362, *Clean Air Interstate Rule Annual NO_x Trading Program*

10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NO_x Trading Program*

10 CSR 10-6.366, *Clean Air Interstate Rule SO_x Trading Program*

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

These rules do not apply to the engine-generators (EU0010 through EU0080) because these electrical generating units have a nameplate capacity of less than twenty-five megawatts (25 MW).

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

This rule does not apply to the engine-generators (EU0010 through EU0080) because according to §(2)(A), liquids and gases used solely as fuels are excluded in defining process weight.

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

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

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

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

Prepared by:

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