



Missouri Department of Natural Resources
Air Pollution Control Program

INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Intermediate Operating Permit Number: OP2012-027
Expiration Date: AUG 05 2017
Installation ID: 031-0061
Project Number: 2011-03-021

Installation Name and Address

Jackson Municipal Utilities
420 Florence
Jackson, MO 63755
Cape Girardeau County

Parent Company's Name and Address

City of Jackson
101 Court Street
Jackson, MO 63755

Installation Description:

Jackson Municipal Utilities is an electric generating plant owned and operated by the City of Jackson, Missouri. The facility includes several fuel oil storage tanks, diesel engines, one natural gas fired engine and space heaters.

AUG 06 2012

Effective Date

A handwritten signature in cursive script that reads "Kyla L. Moore".

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Jackson Municipal Utilities is an electric generating plant owned and operated by the City of Jackson, Missouri. The facility includes several fuel oil storage tanks, diesel engines, one natural gas fired engine and space heaters.

Reported Air Pollutant Emissions, tons per year					
Pollutants	2010	2009	2008	2007	2006
Particulate Matter ≤ Ten Microns (PM ₁₀)	0.06	0.06	0.01	0.02	0.04
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	0.06	0.06	0.01	0.02	0.03
Sulfur Oxides (SO _x)	--	--	--	--	0.32
Nitrogen Oxides (NO _x)	3.55	3.55	0.44	1.14	2.0
Volatile Organic Compounds(VOC)	0.11	0.11	0.01	0.04	0.16
Carbon Monoxide (CO)	--	--	--	--	--
Lead (Pb)	--	--	--	--	--
Hazardous Air Pollutants (HAPs)	--	--	--	--	--
Ammonia (NH ₃)	--	--	--	--	--

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.

<u>Emission Unit #</u>	<u>Description of Emission Unit</u>
EU06	Engine No. 5
EU07	Engine No. 6
EU08	Engine No. 8
EU09	Engine No. 7
EU10	Engine No. 4
EU11	Engine No. 3
EU14	Engine No. 9
EU19	Engine No. 10
EU20	Engine No. 11
EU21	Engine No. 12

EMISSION UNITS WITHOUT LIMITATIONS

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

Description of Emission Source

- (3) 14,100 gal and (2) 336 gal fuel oil tanks constructed in 1972
- (2) 12, 127 gal, (1) 302 gal and (4) 186 gal fuel oil tanks constructed in 1946
- (3) 500 gal fuel oil tanks constructed in 2001
- (1) 336 gal fuel oil tank constructed in 1983
- (1) 231 gal fuel oil tank constructed in 1936
- (1) 1,000 gal fuel oil tank constructed in 1988

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 10-6.020(2)(I)24. and 10 CSR 10-6.065(5)(C)2. Voluntary Limitation(s)

Emission Limitation:

Jackson Municipal Utilities shall emit less than 100.0 tons per year of nitrogen oxides (NO_x) in any consecutive 12-month period.

Monitoring/Recordkeeping:

1. The permittee shall record the monthly and 12-month rolling total emissions of NO_x using Attachment A.
2. All records shall be maintained on site for five years and be made available to Department of Natural Resources personnel immediately upon request.

Reporting:

Jackson Municipal Utilities 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 during which records indicate that the 100 ton per year NO_x limitation has been exceeded.

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.

EU06 & EU07 Diesel Generators			
Emission Unit	Description	Manufacturer/Model #	2009 EIQ Reference #
EU06	Engine No. 5: #2 diesel fuel fired diesel generator engine; MHDR = 6.85 MMBtu/hr; constructed 1936	Engine: American Locomotive Company Generator: Elliott Company	EP06
EU07	Engine No. 6: #2 diesel fuel fired diesel generator engine; MHDR = 10.96 MMBtu/hr; constructed 1946	Engine: Busch-Sulzer Bros. Generator: Elliott Company	EP07

<p>PERMIT CONDITION (EU06 & EU07)-001 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds</p>
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Emission Limitation:

1. Emissions from any existing source operation shall not contain more than two thousand parts per million by volume (2000 ppmv) of sulfur dioxide.
2. Stack gasses shall not contain more than seventy milligrams (70 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
3. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

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

Operational Limitation/Equipment Specifications:

The emission unit shall be limited to burning number 2 diesel fuel.

Monitoring/Recordkeeping:

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

Reporting:

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(6)(C)1.C.(III).

EU08 & EU09 Diesel Generators			
Emission Unit	Description	Manufacturer/Model #	2009 EIQ Reference #
EU08	Engine No. 8: #2 diesel fuel fired diesel generator engine with backup fuel natural gas; MHDR = 63.02 MMBtu/hr; constructed 1972	Engine: Worthington-CEI, Inc. Generator: Electric Machinery Mfg. Co.	EP08
EU09	Engine No. 7: #2 diesel fuel fired diesel generator engine with backup fuel natural gas; MHDR = 63.02 MMBtu/hr; constructed 1972	Engine: Worthington-CEI, Inc. Generator: Electric Machinery Mfg. Co.	EP09

<p>PERMIT CONDITION (EU08 & EU09)-001 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds</p>

Emission Limitation:

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

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³))	Annual arithmetic mean
	0.14 ppm (365 µg/m ³)	24-hour average not to be exceeded more than once per year

	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days

Operational Limitation/Equipment Specifications:

The emission unit shall be limited to burning number 2 diesel fuel or natural gas.

Monitoring/Recordkeeping:

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

Reporting:

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(6)(C)1.C.(III).

EU10 & EU11 Diesel Generators			
Emission Unit	Description	Manufacturer/Model #	2009 EIQ Reference #
EU10	Engine No. 4: #2 diesel fuel fired diesel generator engine with backup fuel natural gas; MHDR = 10.96 MMBtu/hr; constructed 1946	Engine: Busch-Sulzer Bros. Generator: Elliott Co.	EP10
EU11	Engine No. 3: #2 diesel fuel fired diesel generator engine with backup fuel natural gas; MHDR = 10.96 MMBtu/hr; constructed 1946	Engine: Busch-Sulzer Bros. Generator: Elliott Co.	EP11

PERMIT CONDITION (EU10 & EU11)-001

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

Emission Limitation:

1. Emissions from any existing source operation shall not contain more than two thousand parts per million by volume (2000 ppmv) of sulfur dioxide.
2. Stack gasses shall not contain more than seventy milligrams (70 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.

3. No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

4.

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

Operational Limitation/Equipment Specifications:

The emission unit shall be limited to burning number 2 diesel fuel or natural gas.

Monitoring/Recordkeeping:

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

Reporting:

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(6)(C)1.C.(III).

EU14 & EU19-EU21 Diesel Generators			
Emission Unit	Description	Manufacturer/Model #	2009 EIQ Reference #
EU14	Engine No. 9: #2 diesel fuel fired diesel generator engine with backup fuel natural gas; MHDR = 31.51 MMBtu/hr; constructed 1983	Engine: Fairbanks Morse Engine Division, Colt Industries Generator: Louis Allis, Beloit Power Systems	EP14
EU19	Engine No. 10: #2 diesel fuel fired diesel generator engine; MHDR = 19.012 MMBtu/hr; constructed 2001, installed 2006	Caterpillar	EP19
EU20	Engine No. 11: #2 diesel fuel fired diesel generator engine; MHDR = 19.012 MMBtu/hr; constructed 2001, installed 2006	Caterpillar	EP20
EU21	Engine No. 12: #2 diesel fuel fired diesel generator engine; MHDR = 19.012 MMBtu/hr; constructed 2001, installed 2006	Caterpillar	EP21

PERMIT CONDITION (EU14 & EU19-EU21)-001
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

Emission Limitation:

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

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

Operational Limitation/Equipment Specifications:

Emission Unit EU14 (Engine No. 9) shall be limited to burning number 2 diesel fuel or natural gas. Emission Units EU19 (Engine No. 10), EU20 (Engine No. 11), and EU21 (Engine No. 12) shall be limited to burning number 2 diesel fuel.

Monitoring/Recordkeeping:

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

Reporting:

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(6)(C)1.C.(III).

PERMIT CONDITION (EU19-EU21)-002

10 CSR 10-6.060 Construction Permits Required
Construction Permit 082005-011, Issued August 17, 2005

Emission Limitation:

Jackson Municipal Utilities shall emit less than 40.0 tons of NO_x from the three diesel engines (EP19 Engine No. 10, EP20 Engine No. 11 and EP21 Engine No. 12) in any consecutive 12-month period. [Special Condition 1A]

Monitoring/Recordkeeping:

1. Attachment A or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with the NO_x emission limit. [Special Condition 1B]
2. Jackson Municipal Utilities shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. [Special Condition 1B]

Reporting:

Jackson Municipal Utilities shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which records indicate that the 40 ton per year NO_x limitation has been exceeded.

PERMIT CONDITION (EU19-EU21)-003

10 CSR 10-6.390 Control of NO_x Emissions From Large Stationary Internal Combustions Engines

Recordkeeping/Reporting:

The owner or operator shall submit to the Director the identification number and type of each unit subject to this rule or to the exemption is Subsection (1)(D) of this rule, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with this rule.

1. The owner or operator shall submit an annual report documenting the total NOx emissions from May 1 through September 30 of each year to the Director by November 1 of that year.
2. The owner or operator shall maintain all records necessary to demonstrate compliance with this rule for a period of five (5) years at the plant at which the subject unit is located. The records shall be made available to the Director upon request. The owner or operator shall maintain records of the following information for each day of the control period the unit is operated:
 - a) The identification number of each unit and the name and address of the plant where the unit is located;
 - b) The calendar date of record;
 - c) The number of hours the unit is operated during each day including start-up[s], shutdowns, malfunctions, and the type and duration of maintenance and repair;
 - d) The date and results of each emissions inspection;
 - e) A summary of any emissions corrective maintenance taken; and
 - f) The results of all compliance tests.

PERMIT CONDITION (EU06 through EU14)-002 and (EU19-EU21)-004
 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

Emission and Operating Limitations:

1. An existing stationary combustion-ignition (CI) reciprocating internal combustion engine (RICE) located at an area source of HAP emissions must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. [40 CFR 63.6590(2)]
2. The owner or operator must comply with the requirements in Table 2d that apply:

Table 2d:

For each...	You must meet the following requirement, except during periods of startup...	Applies to Emission Unit...
4. Emergency stationary CI RICE and black start stationary CI RICE	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;	EU08 EU09
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	EU14 EU19
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	EU20 EU21
8. Non-emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd at 15 percent O ₂ ;	EU06 EU07
	b. Reduce CO emissions by 93 percent or more.	EU10 EU11

3. For existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP and with a displacement of less than 30 liters per cylinder the diesel fuel must meet the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. [§63.6604]
4. For all existing black start stationary RICE located at an area source of HAP emissions (EU08, EU09, EU14, EU19, EU20 and EU21), you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for

the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63.6625(e)]

5. For all existing non-emergency, non-black start CI engine greater than or equal to 300 HP (EU10 and EU11) that is not equipped with a closed crankcase ventilation system, you must comply with either Paragraph (a) or Paragraph (b) below. 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 Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. [§63.6625(g) (1 and (2))]
 - a) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
 - 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.
6. 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 shall apply. [§63.6625(h)]

Performance Testing Requirements:

1. The owner or operator must conduct each performance test in Tables 3 and 4 of this subpart that apply:[§63.6620(a)]

Table 3:

For each...	Complying with the requirement to...	You must	Applies to Emission Units...
4. Existing non-emergency, non-black start CI stationary RICE with a brake horsepower >500 that is not limited use stationary RICE; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE located at an area source of HAP emissions with a brake horsepower >500 that is operated more than 24 hours per calendar year and is not limited use stationary RICE	Limit or reduce CO or formaldehyde emissions	Conduct subsequent performance tests every 8,760 hours, or 3 years whichever comes first	EU06 EU07 EU10 EU11

Table 4:

For each...	Complying with the requirement to...	You must...	Using...	According to the following requirements...	Applies to Emission Unit...
1.2SLB, 4SLP and CI stationary RICE	a. Reduce CO emissions	i.Measure the O ₂ at the inlet and outlet of the control device; and	(1)Portable CO and O ₂ analyzer	(a) Using ASTM D6522-00 (2005) ^a (incorporated by reference, see §63.14). Measurements to determine O ₂ must be made at the same time as the measurements for CO concentration.	EU06 EU07 EU08 EU09 EU10 EU11 EU14 EU19 EU20 EU21
		ii.Measure the CO at the inlet and the outlet of the control device	(1)Portable CO and O ₂ analyzer	(1) Using ASTM D6522-00 (2005) ^a (incorporated by reference, see §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	(1) Method 1 or 1A of 40 CFR Part 60 appendix A §63.7(d)(1)(i)	9a)If using a control device, the sampling site must be located at the outlet of the control device.	EU06 EU07 EU08 EU09 EU10 EU11 EU14 EU19 EU20 EU21
		ii.Determine the O ₂ concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR Part 60 appendix A, or ASTM Method D6522-00(2005)	(a)Measurements to determine O ₂ concentration must be made at the same time and locations as the measurements for formaldehyde concentration.	
		iii.Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(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)Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.	
		iv.Measure formaldehyde at	(1)Method 320 of 323 of 40 CFR	(a)Formaldehyde concentration	

		the exhaust the stationary RICE; or	Part 63, appendix A; or ASTM D6348-03, 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	must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer test 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), Method 320 of 40 CFR Part 63, appendix A, or ASTM D6348093	(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.	

2. Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. 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)]
3. You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least one hour. [§63.6620(d)]
4. You must use Equation 1 of this section 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.

5. 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 below: [§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.

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

Fc= 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_{co2}= 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.

6. 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 Administrator 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 Administrator. [§63.6620(f)]
7. If you petition the Administrator for approval of operating limitations, your petition must include the following information: [§63.6620(g)(1) through (5)]
- Identification of the specific parameters you propose to use as operating limitations;
 - 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;
 - 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;
 - 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
 - A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
8. If you petition the Administrator for approval of no operating limitations, your petition must include the information described in Paragraphs (h)(1) through (7) of this section. [§63.6620(h)(1) through (7)]
- 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;

- b) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;
 - 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;
 - 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;
 - 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;
 - f) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
 - g) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.
9. 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)]
10. You must conduct any initial performance test that applies within 180 days after the compliance date (May 3, 2013). [§63.6612(a)]

Monitoring:

- 1. You must demonstrate initial compliance with each emission and operating limitation that applies according to Table 5 of this subpart: [§63.6630(a)]

Table 5:

For each...	Complying with the requirement to...	You have demonstrated initial compliance if...	Applies to Emission Units...
1. ...existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial	EU08 EU09 EU14 EU10 EU11 EU12

<p>2. ...existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS</p>	<p>performance test. i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>	
<p>3. ...existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Reduce CO emissions and not using oxidation catalyst</p>	<p>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>	<p>EU06 EU07 EU10 EU11</p>
<p>4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, existing non-emergency stationary CI RICE >500 HP located at an area source of HAP, and existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are operated more than 24 hours per calendar year</p>	<p>a. Limit the concentration of CO, and not using oxidation catalyst</p>	<p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.</p>	

2. You must demonstrate continuous compliance with each emission limitation and operating limitation according to the methods specified in Table 6 to this subpart: [§63.6640(a)]

Table 6:

For each	Complying with the requirement to...	You must demonstrate continuous compliance by...	Applies to emission units...
<p>10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE</p>	<p>a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and using oxidation catalyst or NSCR</p>	<p>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; and</p>	<p>EU08 EU09 EU14 EU10 EU11 EU12</p>
		<p>ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and</p>	
		<p>iii. Reducing these data to 4-hour rolling averages; and</p>	
		<p>iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</p>	
		<p>v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</p>	
<p>11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE, and existing 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate more than 24 hours per calendar year and are not limited use stationary RICE</p>	<p>a. Reduce CO or formaldehyde emissions, or limit the concentration of formaldehyde or CO in the stationary RICE exhaust, and not using oxidation catalyst or NSCR</p>	<p>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; and</p>	<p>EU06 EU07 EU10 EU11</p>

		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and	
		iii. Reducing these data to 4-hour rolling averages; and	
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.	

Recordkeeping:

1. You must keep the following records: [§63.6655(a)(1)-(5)]
 - 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).
 - b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
 - c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
 - d) Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - 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.
2. You must keep the records required in Table 6 of this subpart (see above) to show continuous compliance with each emission or operating limitation that applies to you. [§63.6655(d)]
3. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan. [§63.6655(e)]
4. Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
5. 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)]
6. 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. [§63.6645(a)]
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 this subpart, 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 this subpart 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 this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, 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 submit each report in Table 7 of this subpart that applies: [§63.6650(a)]

Table 7:

For each...	You must submit a...	The report must contain...	Applies to emission units...
1. ...existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP and operated more than 24 hours per calendar year...	Compliance report	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. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4) i. Semi-annually according to the requirements in §63.6650(b)(1)–(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and	All units

		ii. Annually according to the requirements in §63.6650(b)(6)–(9) for engines that are limited use stationary RICE subject to numerical emission limitations. i. Semi-annually according to the requirements in §63.6650(b). i. Semi-annually according to the requirements in §63.6650(b).	
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5. For semi-annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595. [§63.6650(b)(1)-(9)]
 - a) For semi-annual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.
 - b) For semi-annual Compliance reports, each subsequent Compliance report must cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31.
 - c) For semi-annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual reporting period.
 - d) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR Part 70 or 71, and if the permitting authority has established dates for submitting semi-annual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in Paragraphs (b)(1) through (b)(4) of this section.
 - e) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.
 - f) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.
 - g) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
 - h) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.
6. The Compliance report must contain the information in Paragraphs (c)(1) through (6) of this section. [§63.6650(c)(1) – (6)]
 - a) Company name and address.
 - b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

- c) Date of report and beginning and ending dates of the reporting period.
 - d) 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.
 - e) 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.
 - f) 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.
7. 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 this subpart, the Compliance report must contain the information in Paragraphs (c)(1) through (4) of this section and the information in Paragraphs (d)(1) and (2) of this section. [§63.6650(d)(1)-(2)]
- a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
 - b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
8. For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in Paragraphs (c)(1) through (4) and (e)(1) through (12) of this section. [§63.6650(e)(1)-(12)]
- a) The date and time that each malfunction started and stopped.
 - b) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
 - c) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
 - d) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - e) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - f) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - g) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
 - h) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
 - i) A brief description of the stationary RICE.
 - j) A brief description of the CMS.
 - k) The date of the latest CMS certification or audit.
 - l) A description of any changes in CMS, processes, or controls since the last reporting period.

9. Each affected source that has obtained a title V operating permit pursuant to 40 CFR Part 70 or 71 must report all deviations as defined in this subpart in the semi-annual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semi-annual 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)]

IV. Core Permit Requirements

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

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
 - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
 - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
 - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
 - b) Yard waste, with the following exceptions:
 - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
 - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
 - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
 - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
 - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
 - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
 - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the Director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department Director; and

- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) Jackson Municipal Utilities 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 Jackson Municipal Utilities 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 Recordkeeping. 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 submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the Director.
- 2) The permittee may be required by the Director to file additional reports.

- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall submit a full EIQ for the 2011, 2014, 2017, and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the Director. The reports shall be submitted to the Director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 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.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

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

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

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

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
- d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
- e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
- f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or

- b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

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

10 CSR 10-6.065, §(5)(E)2 and §(6)(C)1.B Permit Duration

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

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

- 1) Recordkeeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program'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, recordkeeping, reporting, or any other requirements of the permit.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in Paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

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

10 CSR 10-6.065 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r)

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

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

10 CSR 10-6.065(5)(C)1.A General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

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

None.

10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B; and §(6)(C)3.D; and §(5)(C)3 and §(6)(C)3.E.(I) – (III) and (V) – (VI) Compliance Requirements

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

10 CSR 10-6.065, §(5)(C)1 and §(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions

limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:

- a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(5)(C)5 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program'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 Donald Schuette, Director of Electric Utilities. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire;
or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 3) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065 §(5)(E)1.A and §(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

ATTACHMENT A
 Monthly Nitrogen Oxides Emission Tracking Record

Month, Year	(a) Energy Production of EU06 through EU21 (kW-hr)	(b) Amount of Diesel Fuel Burned in EU14 through EU21 (Mgal)	(c) Conversion Factor*	(d) NOx Emission Factor (lb/Mgal)	(e) NOx Emissions of EU06 through EU21 (tons) [a x c]	(f) NOx Emission of EU14 through EU21 (tons) [b x d/2000]	(g) Rolling 12-month total NOx Emissions of EU06 through EU21 (tons)**	(h) Rolling 12-month total NOx Emissions of EU14 through EU21 (tons)***
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				
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			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				

*To Convert kW-hr to tons of NOx, multiply 0.00016(kW-hr x 1.341 hp-hr/kW-hr x 0.024 lb NOx/hp-hr/2000 lb)

** Column (g) is the sum of the last twelve (12) months of Column (e). NOTE: A 12-month total NOx emission less than 100.0 tons for Column (g) indicates compliance.

*** Column (h) is the sum of the last twelve (12) months of Column (F). NOTE: A 12-month total NOx emission less than 40.0 tons for Column (g) indicates compliance.

STATEMENT OF BASIS

Voluntary Limitations

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

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Intermediate Operating Permit Application, received March 7, 2011;
- 2) 2009 Emissions Inventory Questionnaire, received April 23, 2010; 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.

None.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*

This rule is not applicable because the installation is in an ozone attainment area.

Construction Permit Revisions

None.

New Source Performance Standards (NSPS) Applicability

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

This Subpart does not apply to the fuel oil storage tanks at this facility because none were installed during the applicable dates. Furthermore this Subpart only applies to storage tanks with a capacity 40,000 gallons or greater and the fuel oil storage tanks at this facility are much smaller.

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*

One 336 gallon fuel oil storage tank was constructed during the applicable time period however this Subpart only applies to tanks with a capacity of 40,000 gallons or greater.

40 CFR Part 60 Subpart Kb, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*

Three (3) 500 gallon and One (1) 1,000 gallon tank were constructed after July 23, 1984, however this Subpart only applies to tanks with a capacity of 151 cubic meters.

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

This subpart does not apply to the diesel engine generators because they were constructed prior to July 7, 2005.

Maximum Achievable Control Technology (MACT) Applicability

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

This Subpart applies to the generators because this facility is an area source of Hazardous Air Pollutant (HAP) emissions.

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.

Other Regulatory Determinations

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

Compliance Calculation for EU06 Engine No. 5

Emission Limit = 2,000 ppmv SO₂ & 70 mg/m³ SO₃

MHDR = 0.050 Mgal/hr

Temp(F) = 400 deg F

$$Q = 2800 \text{ ACFM}$$

$$EF = 138 \text{ lb/sMgal}$$

$$S = 0.5\%$$

$$\text{SO}_2 \text{ concentration (C)} = \text{MHDR} \times EF \times S \times 453.59 \times 10E6 \times (F+460) \times 22.4 / (60 \times (32+460)) \times 0.028317 \times 1000 \times 64 \times Q = 201.23 \text{ ppmv} < 2,000 \text{ ppmv}$$

$$\text{SO}_3 \text{ concentration (C1)} = \text{MHDR} \times EF \times (\text{SO}_3) \times 16.018E6 / Q / 60 = 9.19 \text{ mg/m}^3 < 70 \text{ mg/m}^3$$

Compliance Calculation for EU07 Engine No. 6

$$\text{Emission Limit} = 2,000 \text{ ppmv SO}_2 \text{ \& 70 mg/m}^3 \text{ SO}_3$$

$$\text{MHDR} = 0.079 \text{ Mgal/hr}$$

$$\text{Temp(F)} = 400 \text{ deg F}$$

$$Q = 4200 \text{ ACFM}$$

$$EF = 138 \text{ lb/sMgal}$$

$$S = 0.5\%$$

$$\text{SO}_2 \text{ concentration (C)} = \text{MHDR} \times EF \times S \times 453.59 \times 10E6 \times (F+460) \times 22.4 / (60 \times (32+460)) \times 0.028317 \times 1000 \times 64 \times Q = 212.96 \text{ ppmv} < 2,000 \text{ ppmv}$$

$$\text{SO}_3 \text{ concentration (C1)} = \text{MHDR} \times EF \times (\text{SO}_3) \times 16.018E6 / Q / 60 = 9.81 \text{ mg/m}^3 < 70 \text{ mg/m}^3$$

Compliance Calculation for EU08 Engine No. 8 (for diesel fuel)

$$\text{Emission Limit} = 500 \text{ ppmv SO}_2 \text{ \& 35 mg/m}^3 \text{ SO}_3$$

$$\text{MHDR} = 0.456 \text{ Mgal/hr}$$

$$\text{Temp(F)} = 400 \text{ deg F}$$

$$Q = 24160 \text{ ACFM}$$

$$EF = 138 \text{ lb/sMgal}$$

$$S = 0.5\%$$

$$\text{SO}_2 \text{ concentration (C)} = \text{MHDR} \times EF \times S \times 453.59 \times 10E6 \times (F+460) \times 22.4 / (60 \times (32+460)) \times 0.028317 \times 1000 \times 64 \times Q = 212.87 \text{ ppmv} < 500 \text{ ppmv}$$

$$\text{SO}_3 \text{ concentration (C1)} = \text{MHDR} \times EF \times (\text{SO}_3) \times 16.018E6 / Q / 60 = 9.80 \text{ mg/m}^3 < 35 \text{ mg/m}^3$$

Compliance Calculation for EU09 Engine No. 7 (for diesel fuel)

$$\text{Emission Limit} = 500 \text{ ppmv SO}_2 \text{ \& 35 mg/m}^3 \text{ SO}_3$$

$$\text{MHDR} = 0.456 \text{ Mgal/hr}$$

$$\text{Temp(F)} = 400 \text{ deg F}$$

$$Q = 24160 \text{ ACFM}$$

$$EF = 138 \text{ lb/sMgal}$$

$$S = 0.05\%$$

$$\text{SO}_2 \text{ concentration (C)} = \text{MHDR} \times EF \times S \times 453.59 \times 10E6 \times (F+460) \times 22.4 / (60 \times (32+460)) \times 0.028317 \times 1000 \times 64 \times Q = 21.29 \text{ ppmv} < 500 \text{ ppmv}$$

$$\text{SO}_3 \text{ concentration (C1)} = \text{MHDR} \times EF \times (\text{SO}_3) \times 16.018E6 / Q / 60 = 9.80 \text{ mg/m}^3 < 35 \text{ mg/m}^3$$

Compliance Calculation for EU10 Engine No. 4 (for diesel fuel)

$$\text{Emission Limit} = 2,000 \text{ ppmv SO}_2 \text{ \& 70 mg/m}^3 \text{ SO}_3$$

$$\text{MHDR} = 0.079 \text{ Mgal/hr}$$

$$\text{Temp(F)} = 400 \text{ deg F}$$

$$Q = 4018 \text{ ACFM}$$

$$EF = 138 \text{ lb/sMgal}$$

$$S = 0.5\%$$

SO_2 concentration (C) = MHDR x EF x S x 453.59 x 10E6 x (F+460) x 22.4/(60x(32+460) x 0.028317 x 1000 x 64 x Q) = 222.60 ppmv < 2,000 ppmv

SO_3 concentration (C1) = MHDR x EF (SO₃) x 16.018E6/Q/60 = 10.25 mg/m³ < 70 mg/m³

Compliance Calculation for EU11 Engine No. 3 (for diesel fuel)

Emission Limit = 2,000 ppmv SO₂ & 70 mg/m³ SO₃

MHDR = 0.079 Mgal/hr

Temp(F) = 1000 deg F

Q = 4018 ACFM

EF = 138 lb/sMgal

S = 0.5%

SO_2 concentration (C) = MHDR x EF x S x 453.59 x 10E6 x (F+460) x 22.4/(60x(32+460) x 0.028317 x 1000 x 64 x Q) = 377.91 ppmv < 2,000 ppmv

SO_3 concentration (C1) = MHDR x EF (SO₃) x 16.018E6/Q/60 = 10.25 mg/m³ < 70 mg/m³

Compliance Calculation for EU14 Engine No. 9 (for diesel fuel)

Emission Limit = 500 ppmv SO₂ & 35 mg/m³ SO₃

MHDR = 0.228 Mgal/hr

Temp(F) = 1000 deg F

Q = 16800 ACFM

EF = 138 lb/sMgal

S = 0.5%

SO_2 concentration (C) = MHDR x EF x S x 453.59 x 10E6 x (F+460) x 22.4/(60x(32+460) x 0.028317 x 1000 x 64 x Q) = 15.31 ppmv < 500 ppmv

SO_3 concentration (C1) = MHDR x EF (SO₃) x 16.018E6/Q/60 = 7.05 mg/m³ < 35 mg/m³

Compliance Calculation for EU19 Engine No. 10, EU20 Engine No. 11 and EU21 Engine No. 12 (for diesel fuel)

Emission Limit = 500 ppmv SO₂ & 35 mg/m³ SO₃

MHDR = 0.138 Mgal/hr

Temp(F) = 946 deg F

Q = 15745 ACFM

EF = 138 lb/sMgal

S = 0.5%

SO_2 concentration (C) = MHDR x EF x S x 453.59 x 10E6 x (F+460) x 22.4/(60x(32+460) x 0.028317 x 1000 x 64 x Q) = 161.10 ppmv < 500 ppmv

SO_3 concentration (C1) = MHDR x EF (SO₃) x 16.018E6/Q/60 = 4.54 mg/m³ < 35 mg/m³

10 CSR 10-6.390, *Control of NOx Emissions From large Stationary Internal Combustion Engines*

This regulation applies to the large stationary engines that emitted greater than one (1) ton per day of NO_x on average during the period from May 1 through September 30 of 1995, 1996 or 1996, or which began operation after September 30, 1997. Emission Units EU06 through EU14 (Engines Nos. 3 through 9) did not emit greater than one (1) ton per day of NO_x during the applicable periods; therefore this rule does not apply to these units. Emission Units EU19, EU20, and EU21 (Engines Nos. 10, 11, 12) began operation after September 30, 1997, therefore this rule does apply. However because they emit less than twenty-five (25) tons of NO_x during the period from May 1 through September 30, they

are only subject to the record-keeping and reporting requirements of this rule which are listed in Permit Condition (EU19-EU21)-003.

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tons/yr) ¹
CO	15.85
CO ₂ e	2236.7
HAP	0.11
NO _x	99.9
PM ₁₀	4.8
SO _x	3.0
VOC	5.66

¹Construction Permit 082005-011 limited NO_x emissions of engines 10, 11 and 12 to a total of 40 tons per year. As a result this limited the potential of all other pollutants, which was taken into consideration when calculating the potential to emit listed in the table above. Likewise, the facility has taken a voluntary NO_x emissions limit for the entire facility of 100.0 tons per year, which in turn, limited all other pollutants and is reflected in the above total potential to emit.

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:

Jill Wade, P.E.
Environmental Engineer

CERTIFIED MAIL: 70093410000193530531
RETURN RECEIPT REQUESTED

Mr. Donald Schuette
Jackson Municipal Utilities
101 Court Street
Jackson, MO 63755

Re: Jackson Municipal Utilities, 031-0061
Permit Number: **OP2012-027**

Dear Mr. Schuette:

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

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty (30) days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If you send your appeal by registered or certified mail, we will deem it filed on the date you mailed it. If you send your appeal by a method other than registered or certified mail, we will deem it filed on the date the AHC receives it.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Jill Wade at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS/jwk

Enclosures

c: Southeast Regional Office
PAMS File: 2011-03-021