



PART 70 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.

Operating Permit Number: OP2016-002

Expiration Date: MAY 17 2021

Installation ID: 023-0050

Project Number: 2012-08-032

Installation Name and Address

Poplar Bluff Municipal Utilities Generating
Plant
PO Box 1268
Poplar Bluff, MO 63902-1268
Butler County

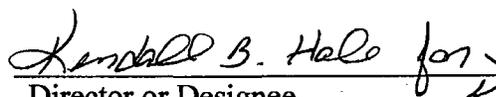
Parent Company's Name and Address

City of Poplar Bluff
Municipal Utilities and City Cable Dept.
3000 North Westwood
Poplar Bluff MO, 63901-1933

Installation Description:

Municipal Utilities Generating Plant in Poplar Bluff is a city owned utility company that provides electricity to the surrounding community. The installation operates dual fuel (diesel and natural gas) internal combustion engine generator sets. The installation's operations also include several diesel storage tanks and cooling towers. The facility is major for Carbon Monoxide (CO), Nitrogen Oxides (NOx), Sulfur Oxides (SOx), and Volatile Organic Compounds (VOC). The facility is considered a minor source of Hazardous Air Pollutants (HAP).


Prepared by
Jason Dickneite
Operating Permit Unit


Director or Designee
Department of Natural Resources

MAY 17 2016

Effective Date

Table of Contents

I. INSTALLATION EQUIPMENT LISTING	3
EMISSION UNITS WITH LIMITATIONS	3
EMISSION UNITS WITHOUT LIMITATIONS	3
II. PLANT WIDE EMISSION LIMITATIONS.....	4
III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	5
PERMIT CONDITION 1	5
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	5
PERMIT CONDITION 2.....	6
10 CSR 10-6.261 Control of Sulfur Dioxide Emissions	6
PERMIT CONDITION 3.....	7
10 CSR 10-6.270 Acid Rain Source Permits Required	7
PERMIT CONDITION 4.....	9
10 CSR 10-6.390 Control of NOx Emissions from Large Stationary Internal Combustion Engines.....	9
PERMIT CONDITION 5.....	10
10 CSR 10-6.060 Construction Permits Required.....	10
Construction Permit #092001-020, Issued September 14, 2001, Amended December 6, 2002.....	10
PERMIT CONDITION 6.....	11
40 CFR 63 Subpart ZZZZ— <i>National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>	11
IV. CORE PERMIT REQUIREMENTS	15
V. GENERAL PERMIT REQUIREMENTS.....	21
VI. ATTACHMENTS	26
ATTACHMENT A.....	27
ATTACHMENT B.....	28

I. Installation Equipment Listing

EMISSION UNITS WITH LIMITATIONS

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

<u>Emission Unit</u>	<u>EIQ Reference #</u>
Diesel Engine #1	EU0010
Diesel Engine #2	EU0020
Diesel Engine #3	EU0030
Diesel Engine #4	EU0040
Diesel Engine #5	EU0050

EMISSION UNITS WITHOUT LIMITATIONS

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

<u>Description of Emission Source</u>	<u>EIQ Reference #</u>
One (1) 500,000-gallon diesel storage tank, installed 1973	EP-01
Two (2) 300-gallon diesel storage tanks, installed 1973	EP-02
Cooling tower #1	EP-03
Space heater, natural gas-fired	EP-06
Three (3) 480-gallon diesel storage tanks, installed 2002	EP-22
Space heaters, natural gas-fired	EP-62
Cooling Tower #3	EU0060
Cooling Tower #4	EU0070
Cooling Tower #5	EU0080

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 as of the date that this permit is issued. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Limitations.

None.

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 as of the date that this permit is issued.

PERMIT CONDITION 1		
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds		
DIESEL ENGINES #1, #2, #3, #4, and #5		
2005 EIQ Reference #	Description	Manufacturer/Model #
EU0010	Diesel Engine #1: reciprocating internal combustion engine; rated at 7 MW; 56.83 MMBtu/hr; dual fuel (diesel and natural gas); installed 1973	Delaval-Enterprise/ DGSRV-16-4
EU0020	Diesel Engine #2: reciprocating internal combustion engine; rated at 7 MW; 57.30 MMBtu/hr; dual fuel (diesel and natural gas); installed 1973	Delaval-Enterprise/ DGSRV-16-4
EU0030	Diesel Engine #3: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0040	Diesel Engine #4: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0050	Diesel Engine #5: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
<p>This is a state implementation plan (SIP) rule only, and as such, can only be enforced by the state where it occurs in an operating permit. The state of Missouri has rescinded this rule and is in the process of having it removed from the SIP. This permit condition expires as soon as the SIP removal of state rule 10 CSR 10-6.260 has been approved.</p>		

Emission Limitations:

- 1) Emissions from any new (post-1971) source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide. [10 CSR 10-6.260(3)(A)(2)]
- 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. [10 CSR 10-6.260(3)(A)(2)]

Operational Limitation/Equipment Specifications:

The emission unit shall be limited to burning either pipeline grade natural gas or fuel oil with a sulfur content of 0.5 percent by weight or less.

Monitoring/Recordkeeping:

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

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined that the emission unit(s) exceeded the emission limitation(s).
- 2) The permittee shall report any deviations of this permit condition to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

PERMIT CONDITION 2		
10 CSR 10-6.261 Control of Sulfur Dioxide Emissions		
DIESEL ENGINES #1 AND #2		
2005 IEQ Reference #	Description	Manufacturer/Model #
EU0010	Diesel Engine #1: reciprocating internal combustion engine; rated at 7 MW; 56.83 MMBtu/hr; dual fuel (diesel and natural gas); installed 1973	Delaval-Enterprise/ DGSRV-16-4
EU0020	Diesel Engine #2: reciprocating internal combustion engine; rated at 7 MW; 57.30 MMBtu/hr; dual fuel (diesel and natural gas); installed 1973	Delaval-Enterprise/ DGSRV-16-4
This rule is a state only rule, and is not federally enforceable. This rule has been submitted as a Missouri SIP revision to be approved as a part of the Missouri SIP. Once that approval has occurred, this rule will be federally enforceable.		

Emission Limitations:

- 1) The emission unit shall be limited to burning pipeline grade natural gas or fuel oil No. 2.
- 2) No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight (8) pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three-hour time period.

Monitoring/Recordkeeping:

- 1) The permittee shall maintain an accurate record of:
 - a) Fuel delivery records;
 - b) Fuel sampling and analysis;
 - c) Performance tests;
 - d) Continuous emission monitoring.
- 2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

Reporting:

The permittee must:

- 1) Report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the staff director for each calendar quarter within thirty (30) days following the end of the quarter. In all cases, the notification must be a written report and must include, at a minimum, the following:
 - a) Name and location of source;
 - b) Name and telephone number of person responsible for the source;
 - c) Identity and description of the equipment involved;
 - d) Time and duration of the period of SO2 excess emissions;

- e) Type of activity;
 - f) Estimate of the magnitude of the SO₂ excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude;
 - g) Measures taken to mitigate the extent and duration of the SO₂ excess emissions; and
 - h) Measures taken to remedy the situation which caused the SO₂ excess emissions and the measures taken or planned to prevent the recurrence of these situations;
- 2) Maintain a list of modifications to the source’s operating procedures or other routine procedures instituted to prevent or minimize the occurrence of any excess SO₂ emissions;
 - 3) Maintain a record of data, calculations, results, records, and reports from any SO₂ emissions performance test, SO₂ continuous emission monitoring, fuel deliveries, and/or fuel sampling tests; and
 - 4) Maintain a record of any applicable SO₂ monitoring data, performance evaluations, calibration checks, monitoring system and device performance tests, and any adjustments and maintenance performed on these systems or devices.

PERMIT CONDITION 3		
10 CSR 10-6.270 Acid Rain Source Permits Required		
DIESEL ENGINES #3, #4 AND #5		
EIQ Reference #	Description	Manufacturer/ Model #
EU0030	Diesel Engine #3: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0040	Diesel Engine #4: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0050	Diesel Engine #5: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
NOTE: This permit condition includes the requirements needed to maintain compliance with the “New Units Exemption” under 40 CFR Part 72.7.		

Operational Limitations:

- 1) Diesel Engines #3, #4 and #5 (EU0030 through EU0050) shall be limited to burning pipeline grade natural gas and fuel oil with an annual average sulfur content of 0.05 percent or less by weight. [\[§72.7\(a\)\(3\)\]](#)
- 2) Diesel Engines #3, #4 and #5 (EU0030 through EU0050) shall be exempt from the Acid Rain Program, except for the provisions of §§72.2 through 72.7, and §§72.10 through 72.13. [\[§72.7\(b\)\(1\)\]](#)

Monitoring:

- 1) Compliance with the requirement that fuel burned during the year have an annual average sulfur content of 0.05 percent by weight or less shall be determined as follows using a method of determining sulfur content that provides information with reasonable precision, reliability, accessibility, and timeliness: [\[§72.7\(d\)\]](#)
 - a) For gaseous fuel burned during the year, if natural gas is the only gaseous fuel burned, the sulfur requirement is assumed to be met. [\[§72.7\(d\)\(1\)\]](#)

- b) For fuel oil burned during the year, the requirement is met if the annual average sulfur content is equal to or less than 0.05 percent by weight. The annual average sulfur content, as a percentage by weight, shall be calculated using the equation: [§72.7(d)(3)]

$$\%S_{\text{annual}} = \frac{\sum_{n=1}^{\text{last}} \%SM_n}{\sum_{n=1}^{\text{last}} M_n}$$

where:

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

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

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

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

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

Recordkeeping:

- 1) For a period of five years from the date the records are created, the permittee shall retain records demonstrating that the requirements of this permit condition are met. The five-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. [§72.7(f)(3)]
- Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable. Such records shall include, for each delivery of fuel to the installation, the type of fuel, the sulfur content, and the sulfur content of each sample taken. [§72.7(f)(3)(i)]
 - The permittee shall bear the burden of proof that the requirements of this permit condition are met. [§72.7(f)(3)(ii)]

Reporting:

- 1) The designated representative for a unit that loses its exemption shall submit a complete Acid Rain permit application 60 days after the first date on which the unit is no longer exempt, notwithstanding §72.30(b) and (c). [§72.7(f)(4)(ii)]
- 2) The permittee shall report any deviations of this permit condition to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

PERMIT CONDITION 4		
10 CSR 10-6.390 Control of NOx Emissions from Large Stationary Internal Combustion Engines		
DIESEL ENGINES #3, #4 AND #5		
EIQ Reference #	Description	Manufacturer/ Model #
EU0030	Diesel Engine #3: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0040	Diesel Engine #4: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0050	Diesel Engine #5: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
10 CSR 10-6.390(1)(D) - Any compression ignited stationary internal combustion engine that begins operation after September 30, 1997, and emits twenty-five (25) tons or less of NOx during the period from May 1 through September 30 is exempt from the requirements in subparagraphs 10 CSR 10-6.390(3)(B)3 & (B)4 but subject to the record-keeping and reporting requirements of 10 CSR 10-6.390(4). This exemption will be based on the previous year NOx emissions during the period from May 1 through September 30. If the exemption limit is exceeded, for any reason, the engine will be required to meet the applicable limits in 10 CSR 10-6.390(3)(B) each year thereafter.		

Recordkeeping:

- 1) The permittee shall maintain records of the following information for each day of the control period that Diesel Engines #3, #4 and #5 (EU0030 through EU0050) are operated:
 - a) The identification number of each unit and the name and address of the plant where the unit is located for each unit subject to the requirements of this rule;
 - b) The calendar date of record;
 - c) The number of hours the unit is operated during each day including start-ups, 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;
 - f) The results of all compliance tests.
- 2) The permittee shall maintain all records necessary to demonstrate compliance with this rule for a period of five years at the plant at which the subject unit is located. The records shall be made available to the director upon request.

Reporting:

- 1) The permittee shall submit an annual report documenting for each controlled unit the total NOx emissions from May 1 through September 30 of each year to the director by November 1 of that year, beginning in 2007.
- 2) Reports of any deviations from recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

PERMIT CONDITION 5		
10 CSR 10-6.060 Construction Permits Required		
Construction Permit #092001-020, Issued September 14, 2001, Amended December 6, 2002		
DIESEL ENGINES #3, #4 AND #5		
IQ Reference #	Description	Manufacturer/ Model #
EU0030	Diesel Engine #3: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0040	Diesel Engine #4: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0050	Diesel Engine #5: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG

Emission Limitations:

- 1) The permittee shall not discharge into the atmosphere more than 100 tons of carbon monoxide (CO) in any consecutive 12 month period from the three internal combustion engine generator sets (EU0030 through EU0050) [[Special Condition 1](#)]
- 2) The permittee shall not discharge into the atmosphere more than forty (40) tons of nitrogen oxides (NOx) in any consecutive 12 month period from the three internal combustion engine generator sets (EU0030 through EU0050) [[Special Condition 2](#)]

Recordkeeping:

The permittee shall maintain the monthly and the sum of the most recent consecutive 12 month records of CO and NOx emissions from the three internal combustion engine generator sets (EU0030 through EU0050). The permittee shall use Attachment “A” *Monthly CO Emissions Tracking Record* and Attachment “B” *Monthly NOx Emissions Tracking Record*, or equivalent forms to demonstrate compliance with the annual CO and NOx limits. These records shall be maintained onsite with the units for five years and shall be made available for inspection to the Department of Natural Resources’ personnel upon request. [[Special Condition 9](#)]

Continuous Compliance Requirements:

- 1) Performance testing shall be performed in order to verify the emission factors used to demonstrate compliance with the 40 ton/year NOx limitation found in Special Condition No.2 of Construction Permit #092001-020.

- 2) CO Emission factors shall also be developed from the performance testing results for the different modes of operation under the testing requirements of MACT ZZZZ (*See Permit Condition 5*).
- 3) The performance testing shall be performed each internal combustion engine for both of the two mode of operations; dual fuel mode (99% natural gas and 1% No. 2 fuel oil), and also No. 2 fuel oil (diesel) and shall be performed during the 5 year term of this operating permit.
- 4) A completed Performance Test Plan Template (Form--MO 780-2184) must be submitted to the Air Pollution Control Program 30 days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. This form can be found at <http://dnr.mo.gov/forms/index.html>. The Proposed Test Plan must be approved by the Director prior to conducting the required emission testing.
- 5) Two (2) copies of a written report of the performance tests results shall be submitted to the Director of the Air Pollution Control Program within 60 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required EPA Method for at least one sample run.

Reporting:

The permittee shall report to the APCP Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month if the 12 month cumulative total shows that the source exceeded the 100 tons of CO per year or 40 tons of NOx per year limitations imposed by this condition. [\[Special Condition 10\]](#)

PERMIT CONDITION 6		
10 CSR 10-6.075 <i>Maximum Achievable Control Technology Standards</i>		
40 CFR 63 Subpart ZZZZ— <i>National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines</i>		
DIESEL ENGINES #1, #2, #3, #4, & #5		
EIQ Reference #	Description	Manufacturer/ Model #
EU0010	Diesel Engine #1: reciprocating internal combustion engine; rated at 7 MW; 56.83 MMBtu/hr; dual fuel (diesel and natural gas); installed 1973	Delaval-Enterprise/ DGSRV-16-4
EU0020	Diesel Engine #2: reciprocating internal combustion engine; rated at 7 MW; 57.30 MMBtu/hr; dual fuel (diesel and natural gas); installed 1973	Delaval-Enterprise/ DGSRV-16-4
EU0030	Diesel Engine #3: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0040	Diesel Engine #4: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
EU0050	Diesel Engine #5: reciprocating internal combustion engine; compression ignited (CI); dual fuel (diesel and natural gas); rated at 6.7 MW; MHDR 54 MMBtu/hr; installed 2002	Fairbanks Morse/ FM/MAN 32/40 DG
<ul style="list-style-type: none"> • MACT ZZZZ Classification: Existing, non-emergency, non-black start stationary CI RICE >500 HP • The facility is an area source of HAP 		

Emission Limitations:

For each of the engines the permittee must;

- a) Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O₂; or
- b) Reduce CO emissions by 70 percent or more. [\[Table 2d to Subpart ZZZZ, Item #3\]](#)

Operational Requirements:

- 1) The permittee must be in compliance with the applicable requirements of MACT ZZZZ at all times. [[§63.6605\(a\)](#)]
- 2) At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. [[§63.6605\(b\)](#)]
- 3) During periods of startup the permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [[§63.6625\(h\)](#)]
- 4) The permittee must meet the following operating limitation, except during periods of startup;
 - a) maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
 - b) maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. (The permittee can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.) [[Table 2b to MACT ZZZZ. Item #2](#)]
- 5) If the permittee changes the catalyst, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the permittee reestablishes the values of the operating parameters, the permittee must also conduct a performance test to demonstrate that the applicable emission limit is met for the stationary RICE. [[§63.6640\(b\)](#)]

Continuous Compliance Requirements:

- 1) The permittee must demonstrate continuous compliance with each emission limitation, operating limitation and other applicable requirements in Tables 2b and Table 2d to MACT ZZZZ, according to methods specified in Table 6 to MACT ZZZZ. [[§63.6640\(a\)](#)]
- 2) If the affected CI engine is not equipped with a closed crankcase ventilation system, The permittee must:
 - 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.
- 3) The permittee 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\(g\)](#)]
- 4) If the permittee has elected to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of MACT ZZZZ, the permittee must install, operate, and maintain each CPMS according to the requirements in paragraphs §63.6625(b)(1) through (6). [[§63.6625\(b\)](#)]
- 5) The permittee shall demonstrate continuous compliance by:
 - a) Conducting performance tests every 8,760 hrs or 3 yrs, whichever comes 1st, for CO to demonstrate that the required CO% reduction is achieved or that the emissions remain at or below the CO concentration limit; and
 - b) Collecting the catalyst inlet temp. data according to §63.6625(b); and

- c) Reducing these data to 4-hr rolling averages; and
- d) Maintaining the 4-hr rolling averages within the operating limits for the catalyst inlet temperature.; and
- e) Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limit established during the performance test. [Table 6 to Subpart ZZZZ of Part 63, Item #10]

Monitoring:

- 1) The permittee shall monitor and collect data as follows: [§63.6635(a)]
 - a) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee shall monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§63.6635(b)]
 - b) The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee shall, however, use all the valid data collected during all other periods. [§63.6635(c)]

Notifications:

- 1) The permittee shall 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 by the dates specified. [§63.6645(a)]
- 2) The permittee shall 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) The permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.6645(h)]

Recordkeeping:

- 1) The permittee shall retain the records described in §63.6655(a)(1) through (a)(5), and §63.6655(b)(1) through (b)(3). [§63.6655(a)]
- 2) The permittee shall retain the records required in Table 6 of MACT ZZZZ to show continuous compliance with each emission or operating limit that applies. [§63.6655(d)]
- 3) The permittee shall retain each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]
- 4) These records shall be kept on-site, and shall be made available to Department personnel upon request.

Reporting:

- 1) The permittee must report each instance in which each applicable emission limitation or operating limitation in Table 2d to MACT ZZZZ is not met. These instances are deviations from the emission and operating limitations in MACT ZZZZ. These deviations must be reported according to the requirements in §63.6650. [§63.6640(b)]
- 2) The permittee shall submit each report in Table 7 of MACT ZZZZ that applies. [§63.6650(a)]

- 3) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), the permittee shall submit each report by the date in Table 7 of MACT ZZZZ and according to the requirements in paragraphs §63.6650(b)(1) through (b)(9): [\[§63.6650\(b\)\]](#)
 - a) The permittee may submit the first and subsequent Compliance Reports as part of their 40 CFR Part 70 semi-annual Compliance Reports instead of according to the dates in paragraphs §63.6650(b)(1) through (b)(4). [\[§63.6650\(b\)\(5\)\]](#)
- 4) The Compliance report must contain the information in paragraphs §63.6650 (c)(1) through (6): [\[§63.6650\(c\)\]](#)
- 5) For each deviation from an emission or operating limit, the permittee shall include the information in §63.6650(c)(1) through (4) and §63.6650(e)(1) through (12): [\[§63.6650\(e\)\]](#)
- 6) The permittee shall report all deviations as defined in MACT ZZZZ in the semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A). If the permittee submits a Compliance Report pursuant to Table 7 of MACT ZZZZ along with, or as part of, the semi-annual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance Report includes all required information concerning deviations from any emission or operating limit in MACT ZZZZ, 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 permittee may have to report deviations from permit requirements to the Air Pollution Control Program. [\[§63.6650\(f\)\]](#)
- 7) Required reports shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the 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 as of the date that this permit is issued. 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.
- 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) Poplar Bluff Municipal Utilities Generating Plant may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Poplar Bluff Municipal Utilities Generating Plant fails to comply with the provisions or any condition of the open burning permit.
- 5) Reporting and Record Keeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR part 60 Subpart CCCC promulgated as of September 22, 2005 shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR part 60, Appendix A, Method 9 promulgated as of December 23, 1971 is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

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

- 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(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(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(6)(C)3.B]

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

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

10 CSR 10-6.110 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 pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions 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. This odor evaluation shall be taken at a location outside of the installation's property boundary.

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

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos

abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

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

used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

10 CSR 10-6.280 Compliance Monitoring Usage

- 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(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(6)(C)1.C General Record Keeping and Reporting Requirements

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - 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.A 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 semiannual 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(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(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G 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 pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions 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(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The applicable requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(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(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously

emitted. The permittee shall notify the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions.

Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. 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 subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3 of this rule. 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.
 - 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; and
 - d) The permit shield shall not apply to these changes.

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

The application utilized in the preparation of this permit was signed by Doug Bagby, City Manager. On August 7, 2015, the Air Pollution Control Program was informed that Mark Massingham is now the responsible official. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) 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,
- 3) 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,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(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 CO Emission Tracking Record

This sheet covers the period from _____ to _____.
 (month, year) (month, year)

	Mode of Operation	Amount of Fuel Combusted	Emission Factor (Note 1)	Emission Factor Units	Emissions (tons) (Note 2)
Internal Combustion Engines (EU0030, EU0040, EU0050)	Dual Fuel (99% natural gas and 1% diesel)			lb/mmft ³	
Internal Combustion Engines (EU0030, EU0040, EU0050)	Diesel			lb/kgal	
Total CO Emissions for this Month (Note 3)					
12-Month CO Emissions Total from Previous Month's Worksheet (Note 4)					
Monthly CO Emissions Total from Previous Years Worksheet (Note 5)					
Current 12-Month Total CO Emission (Note 6)					

Note 1: Emission factor developed from stack testing. The emission factors developed during the November 19-22, 2002 performance testing is 692 lb/mmft³ for dual fired mode, while the emission factor for fuel oil fired mode is 7.2 lb/kgal. Once the required testing in Permit Condition 4 is completed, the most recent emission factor shall be used to demonstrate compliance with the 100 ton/year limit.

Note 2: Emission = {(Amount of Fuel Combusted) X (Emission Factor)}/2000

Note 3: Sum of CO emissions reported for both fuel modes of operation.

Note 4: Running 12-month total of CO emissions from previous month's worksheet.

Note 5: CO reported for this month in the last calendar year.

Note 6: Amount reported for Note 4 minus amount reported for Note 5 plus amount reported for Note 3, not to exceed 100.0 tons for any consecutive 12-month period.

ATTACHMENT B
 Monthly NOx Emission Tracking Record

This sheet covers the period from _____ to _____.
 (month, year) (month, year)

	Mode of Operation	Amount of Fuel Combusted	Emission Factor (Note 1)	Emission Factor Units	Emissions (tons) (Note 2)
Internal Combustion Engines (EU0030, EU0040, EU0050)	Dual Fuel (99% natural gas and 1% diesel)			lb/mmft ³	
Internal Combustion Engines (EU0030, EU0040, EU0050)	Diesel			lb/kgal	
Total NOx Emissions for this Month (Note 3)					
12-Month NOx Emissions Total from Previous Month's Worksheet (Note 4)					
Monthly NOx Emissions Total from Previous Years Worksheet (Note 5)					
Current 12-Month Total NOx Emission (Note 6)					

Note 1: Emission factor developed from stack testing. The emission factors developed during the November 19-22, 2002 performance testing is 212 lb/mmft³ for dual fired mode, while the emission factor for fuel oil fired mode is 635 lb/kgal. Once the required testing in Permit Condition 4 is completed, the most recent emission factor shall be used to demonstrate compliance with the 40 ton/year limit.

Note 2: Emission = {(Amount of Fuel Combusted) X (Emission Factor)}/2000

Note 3: Sum of NOx emissions reported for both fuel modes of operation.

Note 4: Running 12-month total of NOx emissions from previous month's worksheet.

Note 5: NOx reported for this month in the last calendar year.

Note 6: Amount reported for Note 4 minus amount reported for Note 5 plus amount reported for Note 3, not to exceed 40.0 tons for any consecutive 12-month period.

STATEMENT OF BASIS

INSTALLATION DESCRIPTION

Municipal Utilities Generating Plant in Poplar Bluff is a city owned utility company that provides electricity to the surrounding community. The installation operates dual fuel (diesel and natural gas) internal combustion engine generator sets. The installation's operations also include several diesel storage tanks and cooling towers. The facility is major for Carbon Monoxide (CO), Nitrogen Oxides (NO_x), Sulfur Oxides (SO_x), and Volatile Organic Compounds (VOC). The facility is considered a minor source of Hazardous Air Pollutants (HAP).

Reported Air Pollutant Emissions, tons per year					
Pollutants	2014	2013	2012	2011	2010
Particulate Matter ≤ Ten Microns (PM ₁₀)	0.03	0.03	0.79	1.38	0.15
Particulate Matter < 2.5 Microns (PM _{2.5})	0.03	0.03	0.79	0.00	0.14
Sulfur Oxides (SO _x)	0.04	0.09	1.13	0.26	0.13
Nitrogen Oxides (NO _x)	2.49	1.39	39.83	35.41	9.94
Volatile Organic Compounds(VOC)	0.11	0.08	3.23	2.60	0.56
Carbon Monoxide (CO)	0.39	0.07	14.20	14.75	2.71
Lead (Pb)	0.00	0.00	0.00	0.00	0.00
Hazardous Air Pollutants (HAPs)	0.00	0.00	0.00	0.00	0.00
Ammonia (NH ₃)	0.02	0.01	0.44	0.00	0.09

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) Part 70 Operating Permit Application, received August 9,2012;
- 2) 2011 Emissions Inventory Questionnaire;
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition; and
- 4) Air Pollution Control Program (APCP) Construction Permit #092001-020, issued September 14, 2001, amended December 6, 2002.

Other Air Regulations Determined Not to Apply to the Operating Permit

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

10 CSR 10-6.100, *Alternate Emission Limits*

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

Construction Permit Revisions

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

Construction Permit #092001-020, Issued September 14, 2001, Amended December 6, 2002

- 1) APCP Construction Permit #092001-020 authorized the installation of Diesel Engines #3, #4 and #5 and Cooling Towers #3, #4 and #5.

- a) Special Conditions #1 and #2 were reworded for clarity. The cooling towers are not sources of CO or NO_x and incorrectly included in the verbiage of the special condition.
- b) Special Conditions #3 through #8 relate to compliance testing that was to be performed no later than 180 days after initial start-up. Since this testing has been completed by the permittee, these special conditions are not included in the operating permit.

New Source Performance Standards (NSPS) Applicability

- 1) 40 CFR Part 60 Subpart K, *Standards of Performance for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978* does not apply to the 500,000-gallon diesel storage tank (EP-01) or the two 300-gallon diesel tanks (EP-02) because storage tanks containing diesel are exempt from this rule.
- 2) 40 CFR Part 60 Subpart Ka, *Standards of Performance for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 19, 1978, and Prior to July 23, 1984* does not apply to this installation because there are no storage tanks constructed, reconstructed, or modified after May 19, 1978, and prior to July 23, 1984.
- 3) 40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984* does not apply to the three 480-gallon diesel storage tanks (EP-22) because their capacities are less than 20,000 gallons.
- 4) 40 CFR Part 60 Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* applies to stationary compression ignition internal combustion engines that were manufactured, modified or reconstructed after July 11, 2005. There are no units at this installation at this time that meet these criteria.
- 5) 40 CFR Part 60 Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* applies to stationary spark ignition internal combustion engines that were manufactured, modified or reconstructed after June 12, 2006. There are no units at this installation at this time that meet these criteria.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR 63 Subpart ZZZZ—*National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* applies to the reciprocating internal combustion engines (RICE) at this facility. (See Permit Condition 5)

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Greenhouse Gas Emissions

This installation is a minor source for greenhouse gases.

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tons/yr) ¹
CO	716.80
CO ₂ e	83,531
HAP	11.62
HAP- Formaldehyde	3.52
NO _x	1604.41
PM ₁₀	51.09
PM ₂₅	36.25
SO _x	25.07
VOC	150.49

APCP Construction Permit #092001-020 limits the NO_x to 40 tons/year from Engines #3, #4 and #5, restricting annual operation. This PTE represents Diesel Engines #1 and #2 evaluated at 8760 hours. For Engines #3, #4, and #5, Dual Fuel was used for worse case for HAP, PM₁₀/2.5, and VOC at 1873.5 hrs/yr and Fuel oil was used for worse case for CO, CO₂e, NO_x, and SO_x, @108.8hrs/yr. The emission factors developed during the November 19-22, 2002 performance testing was used to evaluate Engines 3-5.

Other Regulatory Determinations

- 1) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*, applies to the Engines 1-5 (EU0010 through EU0050). The calculations below demonstrate that these units will be in compliance with this rule.

General Equation

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

Where:

- All of the sulfur in the fuel is converted to SO₂ emissions.
- For RICE > 600 hp: SO₂ emission factor is 1.01S lb/MMBtu. [EPA AP-42, Table 3.4-1]
- Assume S = 0.5 (worst case scenario)
- The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil, the F factor is 10,320 wscf/MMBtu. [40 CFR Part 60 Appendix A Method 19 Table 19-2]
- Conversion factor = 1.660E-7 lb/scf per ppm. [40 CFR Part 60 Appendix A Method 19, Table 19-1]
- Conversion factor for ppmw to ppmv = 28.8/MW = 28.8/64 = 0.45 [EPA AP-42, App A]

Calculation

$$\text{ppmv SO}_2 = \frac{1.01(0.5) \text{ lb}}{\text{MMBtu}} \times \frac{\text{MMbtu}}{10,320 \text{ ft}^3} \times \frac{\text{scf}}{1.660\text{E}^{-7} \text{ lb}} \times \frac{0.45 \text{ ppmv}}{\text{ppmw}} = 133 \text{ ppmv SO}_2 < 500 \text{ ppmv}$$

- 2) 10 CSR 10-6.270, *Acid Rain Source Permit Required*

This rule does not apply to Diesel Engines #1 and #2 (EU0010 and EU0020). §72.6(b)(2) exempts units constructed before November 15, 1990 that were never in service as generators with a nameplate capacity of greater than 25 MW.

- 3) 10 CSR 10-6.350, *Emission Limitations and Emissions Trading of Oxides of Nitrogen*
 10 CSR 10-6.360, *Control of NO_x Emissions from Electric Generating Units and Non-Electric Generating Boilers*

These rules do not apply to the diesel engines (EU0010 through EU0050) because the electrical generating units at this installation have nameplate capacity of less than 25 MW.

4) 10 CSR 10-6.390, *Control of NOx Emissions from Large Stationary Internal Combustion Engines*
 a) Diesel Engines #1 and #2 (EU0010 and EU0020)

This rule does not apply to Diesel Engines #1 and #2 (EU0010 and EU0020). Units that did not emit more than one (1) ton per day of NOx on average during the period from May 1 through September 30 of 1995, 1996, or 1997 are exempt per 10 CSR 10-6.390(1)(A). The following table demonstrates that Engines #1 and #2 (EU0010 and EU0020) did not emit greater than 1 ton/day on average during the period from May 1 through September 30 of 1995, 1996, and 1997:

EU #	Year	Hours Engine Ran May 1 - Sept 30	MHDR (1000 gal/hr)	NOx Emission Factor (lb/1000 gal)	Total NOx Emission (tons)	# of Days May 1 - Sept 30	Average Daily NOx Emissions (ton/day)
EU0010	1995	131	0.412	604	16.30	153	0.11
EU0010	1996	33.75	0.412	604	4.20	153	0.03
EU0010	1997	46.25	0.412	604	5.75	153	0.04
EU0020	1995	76.5	0.415	604	9.59	153	0.06
EU0020	1996	31.5	0.415	604	3.95	153	0.03
EU0020	1997	49.5	0.415	604	6.20	153	0.04

Notes:

1. # of hours engines ran reported by Neil Williams of Municipal Utilities Generating Plant
2. MHDR from EIQ
3. NOx emission factor from EPA FIRE database, SCC# 20100102

b) Diesel Engines #3, #4 and #5 (EU0030 through EU0050)

This rule applies to any stationary internal combustion engine which began operation after September 30, 1997. Diesel Engines #3, #4 and #5 (EU0030 through EU0050) are subject to this rule, but maintain an exemption from the emission limits per 10 CSR 10-6.390(1)(D). *See Permit Condition 3.*

5) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*

a) Cooling Towers (EU0060 through EU0080)

This rule does not apply to the Cooling Towers (EU0060 through EU0080) because fugitive emissions are exempt per 10 CSR 10-6.400(1)(B)7.

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 APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Response to Public Comments

On August 19, 2015, the Air Pollution Control Program received comments from Mr. Bob Cheever of the U.S. EPA, Region 7. The comments are addressed in the order in which they appear within the letter(s).

- 1.) The **Installation Description** in an operating permit should provide all relevant and sufficient information to allow for a complete and expeditious evaluation of the operating permit terms and conditions. The Installation Description in the Poplar Bluff utilities draft operating permit lacks the pertinent information necessary to make an accurate determination as to whether or not the draft permit accurately captures the applicable regulations. The Installation Description identifies the Poplar Bluff Utilities as a city owned utility company that provides electricity to the surrounding community through the use of five dual fired reciprocating internal combustion engines. A more accurate and representative Installation Description will identify the electricity producing emission units as internal combustion engine generator sets. Additionally, the regulatory requirements impacting internal combustion engine generator sets vary based on engine horsepower; type of ignition (spark or compression); whether the engine is new or existing; whether the engine is lean burn or rich burn; and the generator name plate capacity. Therefore, to enhance the ability of the public review of the Poplar Bluff Utilities operating permit, EPA recommends MDNR refer to emission units EU0010 through EU0050 as engine generator sets and to also include whether or not the engines are new or existing, the engine horsepower, ignition type and the name plate capacity of the generator.

APCP Response: The Installation Description in the draft was modified to read internal combustion engine generator sets. However, there is not room to describe in full all five generators and this information can be found in Section III, Emission Unit Specific Limitations.

- 2.) Each and every operating permit requirement must be enforceable from a practical matter and EPA's guidance on practical enforceability defines a practically enforceable permit condition as one which answers "who;" "what;" "where;" "when;" "how;" and "how often." *Emission Limitations* 1.) and 2.); and the *Operational Limitation/Equipment Specification* in **Permit Condition 1** are not practically enforceable. Additionally, the *Operational Limitations* and *Monitoring* requirement 1.), in **Permit Condition 2** and the *Continuous Compliance* requirements in **Permit Condition 4** are not enforceable from a practical matter. EPA, therefore, recommends MDNR amend Permit Conditions 1, 2 and 4 to ensure the requirements can be practically enforced.

APCP Response: The fuel sulfur limit under Operational Limitation/Equipment Specifications is the method of demonstrating compliance with the stated emission limits in Emission Limitations 1.) and 2.). The standard practice for controlling sulfur emissions is to limit the sulfur in the fuel being combusted.

The fuel sulfur limits in Permit Condition 2 are also a means of demonstrating compliance and are easily enforceable and are the accepted practice of permitting sulfur emitting combustion sources.

The performance testing requirements in Permit Condition 4 are easily enforceable, and the remaining provisions are taken verbatim from the Continuous Compliance requirements from 40 CFR 63 Subpart ZZZZ and are deemed practically enforceable from the prevailing authority.

- 3.) **Emission Limitation 1** in **Permit Condition 1** limits sulfur dioxide from any “new” (emphasis added) source operation and in this draft operating permit, is applied to two (2) emission units installed in 1973. The term “new” is vague and outwardly, would not appear to apply to emission units that are over 40 years old. Therefore, EPA suggests MDNR include a notation that defines “new.”

APCP Response: Permit draft modified to reflect that new sources are post 1971.

- 4.) **Permit Condition 2** is included in the draft Poplar Bluff Utilities operating permit to incorporate applicable Acid Rain Program source requirements. **Operational Limitation 2**) exempts emission units EU0030, EU0040, and EU0050 from some of the Acid Rain Program requirements. However, there is no explanation given for exemption. EPA recommends MDNR explain the basis for the Acid Rain Program exemption for EU0030, EU0040 and EU0050.

APCP Response: The exemption for these units are explained by reference in the bottom of the permit header. The draft was not modified.

- 5.) **Section V: General Permit Requirements**, in the draft Part 70 operating permit includes an applicable requirement 10 CSR 10-6.065(6)(C)1. I: *Reasonably Anticipated Operating Scenarios*. The draft operating permit indicates “NONE” for the requirement. However, the Part 70 operating permit renewal application, submitted by Poplar Bluff Municipal Utilities Generating Plant and received and found to be complete by MDNR on August 9, 2012, includes a completed Form OP-D04: Alternate Operating Scenario. On Form OP-D04, Poplar Bluff Utilities presents an alternate operating scenario they are requesting to be included in their operating permit. EPA recommends MDNR provide their basis for excluding Poplar Bluff Utilities requested alternate operating scenario.

APCP Response: The alternate operating scenario found in the application on Form OP-DO4, in this case does not apply to 10 CSR 10-6.065(6)(C)1. I: *Reasonably Anticipated Operating Scenarios* of the permit. Using different fuel mixtures does not constitute alternate operating scenarios.

- 6.) The **Statement of Basis** includes a section “**Other Regulatory Determinations.**” Item 1) indicates that 10 CSR 10-6.260: *Restriction of Emissions of Sulfur Compounds* applies to engines 1 – 5 (EU0010 through EU0050). However, Permit Condition 1, which incorporates the applicable requirements from 10 CSR 10-6.260, only references two engines; EU0010 and EU0020. EPA recommends MDNR clarify this apparent discrepancy.

APCP Response: The draft permit was modified in response to this comment.

- 7.) **Permit Condition 5**, incorporates the applicable requirements from 40 CFR part 63, Subpart ZZZZ; *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Engines* (RICE MACT). **Continuous Compliance Requirement 2.**) is written in a way that suggests the

compliance date is in the future. However, the compliance deadline was May 13, 2013; however, Poplar Bluff Municipal Utilities Generating Plant was granted a one-year extension until May 13, 2014. Therefore, Poplar Bluff Utilities has passed the date of compliance and EPA recommends MDNR reword this requirement to reflect the compliance methodology being employed.

Additionally, **Monitoring** requirement 1.) a) of **Permit Condition 5** requires the permittee to monitor continuously at all times the stationary RICE is operating. This requirement is too vague to be enforceable from a practical matter. EPA recommends MDNR specify what exactly is to be monitored continuously at all times the stationary RICE is operating. Finally, EPA suggests that MDNR add into **Reporting** requirement 7.); in **Permit Condition 5**, that report should be sent to the Missouri Air Compliance Coordinator at EPA's Region 7 office.

APCP Response: Although the compliance date has passed, the facility still retains the option under MACT ZZZZ to demonstrate compliance by either reducing CO emission by 70 percent or more, or by limiting the CO emissions to less than 23 ppmvd in accordance with Table 2d to Subpart ZZZZ, Item #3. It is standard practice to allow for compliance flexibility and is also good permitting practice to not place items in a permit that may cause enforcement issues due to time constraints that are inherent to modifying an operating permit when situations require a change in compliance strategy.

Mark Massingham
Poplar Bluff Municipal Utilities Generating Plant
PO Box 1268
Poplar Bluff, MO 63902-1268

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re: Poplar Bluff Municipal Utilities Generating Plant, 023-0050
Permit Number: OP2016-002

Dear Sir/Madam:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

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

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

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS:MDClericalFirstInitial