



INTERMEDIATE STATE PERMIT TO OPERATE

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

Intermediate Operating Permit Number: OP2010-110A
Expiration Date: November 1, 2015
Installation ID: 077-0163
Project Number: 2012-07-020

Installation Name and Address

Fulbright Treatment Plant
3920 North Farmer Road
Springfield, MO 65802
Greene County

Parent Company's Name and Address

City Utilities of Springfield
301 E. Central, P.O. Box 551
Springfield, MO 65801-0551

Installation Description:

Fulbright Treatment Plant is a drinking water facility owned and operated by City Utilities of Springfield, Missouri, a municipally-owned electric, gas, water, transit, and broadband utility company. McDaniel Lake, Fulbright Spring, and Well #1 provide the raw water resources. Raw water is treated to drinking water quality and pumped to storage facilities located both on-site and throughout the distribution system.

This amended permit includes the addition of a 923 hp emergency diesel fired generator engine which was installed in 2011. The unit is subject 40 CFR Part 60 Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. This amended permit also removes the conditions of 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes* and 10 CSR 10-4.040, *Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*

OCT 15 2012

Effective Date


Director of Designee
Department of Natural Resources

Table of Contents

I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING	3
INSTALLATION DESCRIPTION	3
II. PLANT WIDE EMISSION LIMITATIONS.....	5
PERMIT CONDITION PW001	5
10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A), Voluntary Limitation(s)	5
III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	6
PERMIT CONDITION 001	6
10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants	6
PERMIT CONDITION 002	7
10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds	7
PERMIT CONDITION 003	8
10 CSR 10-6.075, Maximum Achievable Control Technology Regulations	8
40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.....	8
PERMIT CONDITION 004	11
10 CSR 10-6.070, New Source Performance Regulations	11
40 CFR Part 60 Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines .	11
IV. CORE PERMIT REQUIREMENTS	13
V. GENERAL PERMIT REQUIREMENTS.....	20
VI. ATTACHMENTS	24
ATTACHMENT A	25
ATTACHMENT B	26
ATTACHMENT C	27
ATTACHMENT D	28
ATTACHMENT E.....	29
ATTACHMENT F.....	30
ATTACHMENT G	31

I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Fulbright Treatment Plant is a drinking water facility owned and operated by City Utilities of Springfield, Missouri, a municipally-owned electric, gas, water, transit, and broadband utility company. McDaniel Lake, Fulbright Spring, and Well #1 provide the raw water resources. Raw water is treated to drinking water quality and pumped to storage facilities located both on-site and throughout the distribution system.

This amended permit includes the addition of a 923 hp emergency diesel fired generator engine which was installed in 2011. The unit is subject 40 CFR Part 60 Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*. This amended permit also removes the conditions of 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*.

Reported Air Pollutant Emissions, tons per year						
Year	Particulate Matter ≤ Ten Microns (PM ₁₀)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Particulate Matter ≤ 2.5 Microns (PM _{2.5})
2011	0.02	0.02	0.25	0.02	0.08	0.01
2010	0.01	0.01	0.14	0.01	0.06	0.01
2009	0.02	0.02	0.32	0.02	0.11	0.01
2008	0.02	0.03	0.28	0.02	0.09	0.01
2007	0.05	0.08	0.95	0.05	0.26	0.04

EMISSION UNITS WITH LIMITATIONS

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

Emission Unit #	Description of Emission Unit
E01	403 HP Emergency Diesel Generator
E02	900 HP Emergency Diesel Pump
E03	800 HP Emergency Diesel Pump
E04	1000 HP Emergency Diesel Pump
E28	Soda Ash Hopper Unloading Chute
E29	Soda Ash Injection
E41	514 HP Emergency Diesel Engine (For 350 HP Water Pump) McDaniel Lake
E42	590 HP Emergency Diesel Engine (For 540 HP Water Pump) McDaniel Lake
E50	923 HP Emergency Backup Diesel Generator

EMISSION UNITS WITHOUT LIMITATIONS

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

<u>Emission Unit #</u>	<u>Description of Emission Source</u>
E06	Building Heat Boiler
E09	Carbon Additive Unloading
E10	Carbon Slurry Vent
E12	8-Membrane Roof System Breathing Vents
E13	2,500 Gallon Diesel Storage Tank
E14	2,500 Gallon Diesel Storage Tank
E20	Infrared Radiant Heaters (5)
E24	2-Chlorine Emergency Diaphragm Air Vents
E30	260 Gallon Above Ground Diesel Fuel Storage Tank
E31	Potassium Permanganate Unloading/Addition
E43	Diesel Storage Tank McDaniel Lake – 560 Gallons
E44	Diesel Storage Tank McDaniel Lake – 560 Gallons
E45	Carbon Additive Unloading/Water Injection
E46	Oxidant Additive Unloading
E51	6,000 Gallon Diesel Storage Tank

II. Plant Wide Emission Limitations

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

PERMIT CONDITION PW001

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

Emission Limitation:

The permittee shall emit less than 100 tons of Nitrogen Oxides (NO_x) per consecutive 12-month period from the entire installation.

Operational Limitation:

The permittee shall burn less than 329,603 gallons of diesel per consecutive 12-month period from the entire installation.

Monitoring/Recordkeeping:

1. The permittee shall maintain an accurate record of monthly diesel usage using Attachment E or an equivalent form generated by the permittee.
2. The permittee shall calculate their annual diesel usage by summing the monthly usage for the last twelve months. The annual diesel usage shall be calculated each month using the most recent twelve months' worth of monthly usage records.
3. Attachment F demonstrates that the installation is always in compliance with the 100 ton/yr NO_x emission limitation while burning less than 329,603 gallons of diesel fuel/yr. This calculation shall be kept with this permit as a demonstration of compliance with the emission limitation.
4. All records shall be kept for no less than five years and be made available immediately to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

1. If at any time the yearly operational limit of 329,603 gallons of diesel should be exceeded, 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 (10) days after the exceedance. Excess emissions and maintenance, start-up, or shutdown events which are expected to cause excess emissions are required to be reported under 10 CSR 10-6.050 (recordkeeping and reporting requirements can be found in the Core Permit Requirements).
2. The permittee shall report any deviations from the emission limitation, operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

III. Emission Unit Specific Emission Limitations

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

PERMIT CONDITION 001	
10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
E06	Building Heat Boiler
E20	Infrared Radiant Heaters (5)
E28	Soda Ash Hopper Unloading Chute
E29	Soda Ash Injection

Emission Limitation:

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

Monitoring:

1. The permittee shall conduct opacity readings on these emission units using the procedures contained in U.S. EPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions, the certified source representative would then conduct a Method 9 observation.
2. The following monitoring schedule must be maintained:
 - a) Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then
 - b) Observations must be made once every two weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
 - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
 - d) If at the time of this operating permit issuance the permittee has already progressed to conducting observations once every two weeks or one per month, the permittee may continue from that point forward in the monitoring schedule; however, if a violation is noted the permittee shall revert back to weekly monitoring.
3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:

1. The permittee shall maintain records of all observation results (see Attachments B & C, or equivalent forms generated by the permittee), noting:
 - a) Whether any air emissions (except for water vapor) were visible from the emission units,
 - b) All emission units from which visible emissions occurred, and
 - c) Whether the visible emissions were normal for the process.
2. The permittee shall maintain records of any equipment malfunctions using Attachment D.
3. The permittee shall maintain records of any U.S. EPA Method 9 opacity test performed in accordance with this permit condition.
4. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
5. All records must be maintained for five (5) years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation. Excess emissions and maintenance, start-up, or shutdown events which are expected to cause excess emissions are required to be reported under 10 CSR 10-6.050 (recordkeeping and reporting requirements can be found in the Core Permit Requirements).
2. The permittee shall report any deviations from the emission limitation, monitoring, recordkeeping, and reporting requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 002	
10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds	
Emission Unit	Description
E01	403 HP Emergency Diesel Generator Engine
E02	900 HP Emergency Diesel Pump Engine
E03	800 HP Emergency Diesel Pump Engine
E04	1000 HP Emergency Diesel Pump Engine
E41	514 HP Emergency Diesel Engine (For 350 HP Water Pump) McDaniel Lake
E42	590 HP Emergency Diesel Engine (For 540 HP Water Pump) McDaniel Lake

Emission Limitations:

No person shall cause or permit the emission into the atmosphere gases containing more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide or more than thirty-five milligrams per cubic meter (35 mg/cubic meter) of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three (3)-hour time period.

Monitoring/Recordkeeping:

1. The permittee shall maintain an accurate record of the sulfur content of fuel by maintaining fuel purchase receipts, analyzed samples, or fuel supplier certifications. A fuel sulfur content less than or equal to 0.5% demonstrates compliance.
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. All records shall be maintained for five (5) years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation. Excess emissions and maintenance, start-up, or shutdown events which are expected to cause excess emissions are required to be reported under 10 CSR 10-6.050 (recordkeeping and reporting requirements can be found in the Core Permit Requirements).
2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 003	
10 CSR 10-6.075, Maximum Achievable Control Technology Regulations	
40 CFR Part 63, Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
Emission Unit	Description
E01	403 HP Emergency Diesel Generator Engine
E02	900 HP Emergency Diesel Pump Engine
E03	800 HP Emergency Diesel Pump Engine
E04	1000 HP Emergency Diesel Pump Engine
E41	514 HP Emergency Diesel Engine (For 350 HP Water Pump) McDaniel Lake
E42	590 HP Emergency Diesel Engine (For 540 HP Water Pump) McDaniel Lake

Note: An existing emergency stationary CI RICE located at an area source of HAP emissions must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. [§63.6595(a)(1)]

Emergency stationary RICE means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used for peak shaving are not considered emergency stationary ICE. Stationary CI ICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f). Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE with a site-rating of more than 500 brake HP located at a major source of HAP emissions that were installed prior to June 12, 2006, may also operate an additional 50 hours per year in non-emergency situations. All other emergency stationary RICE must comply with the requirements specified in §63.6640(f).

Emission Limitations:

None.

Operational Limitations:

1. At all times the permittee must operate and maintain the affected engine in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available including review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the engine. [§63.6605(b)]
2. The permittee must meet the following requirements, except during periods of engine startup. [§63.6603 and Table 2d to Subpart ZZZZ]
 - a) Change the engine oil and oil filter every 500 hours of operation or annually, whichever comes first;
 - b) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first;
 - c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
3. The permittee shall only operate the engines within the following hour limitations
 - a) Unlimited use in emergency situations. [§63.6640(f)(1)(i)]
 - b) 50 hours per year for any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations. [§63.6640(f)(1)]
 - c) 100 hours per year for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The 50 hours allowed in 3.b) above count towards this 100 hour limitation. [§63.6640(f)(1)(ii)]
4. If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required above, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. [Table 2d to Subpart ZZZZ]
5. During periods of startup the permittee must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [§63.6625(h)]
6. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirements in 2.a), 2.b) and 2.c) of this condition. The oil analysis must be performed at every 500 hours of operation or annually. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil before continuing to use the engine. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [§63.6625(j)]
7. The permittee must install a non-resettable hour meter if one is not already installed. [§63.6625(f)]

Recordkeeping:

1. The permittee must keep the following records for this engine.
 - a) Records of the occurrence and duration of each malfunction of process equipment or any air pollution control and monitoring equipment and actions taken during periods of malfunction to minimize emissions including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.6655(a)(2) and §63.6655(a)(5)]
 - b) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
 - c) Records that the engine was operated and maintained according to the manufacturer's emission-related operation and maintenance instructions or that a maintenance plan has been developed to provide for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63.6655(d)]
 - d) Records of the hours of operation for the engine as measured by the non-resettable hour meter. The installation shall also maintain a recordkeeping form indicating out of the total hours measured by the meter: [§63.6655(f)]
 - i) How many hours were spent in emergency use and a brief description of the emergency situation.
 - ii) How many hours were spent in non-emergency operation.
 - e) These records must be made available for inspection upon request by Missouri Department of Natural Resources' personnel.
 - f) All records shall be maintained for five (5) years.

Reporting:

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation. Excess emissions and maintenance, start-up, or shutdown events which are expected to cause excess emissions are required to be reported under 10 CSR 10-6.050 (recordkeeping and reporting requirements can be found in the Core Permit Requirements).
2. The permittee shall report to the Missouri Department of Natural Resources failure to perform the work practice on the schedule required under "Operational Limitations No. 2" due to Federal, State or local law under which the risk was deemed unacceptable. This report should be submitted with the semi-annual reporting required in No. 3 of this section.
3. The permittee shall report any deviations from the operational limitations, recordkeeping and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit. These reports shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions, including actions taken to correct a malfunction. If there are no deviations from any operating limitations that apply, a statement that there were no deviations from the operating limitations during the reporting period must be included.

PERMIT CONDITION 004

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

Emission Unit	Description
E50	923 hp Caterpillar DM8518/C-18 ATAAC/FST00569 Emergency Diesel Generator Engine; Model Year 2011; Installed 2011; MHDR=5.976 MMBtu/hr

Emission Limitation:

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

Operational Limitation:

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

Compliance Requirements:

1. The permittee operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [§60.4211(a)(1)]
2. The permittee shall change only those emission-related settings that are permitted by the manufacturer [§60.4211(a)(2)]
3. The permittee shall meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply. [§60.4211(a)(3)]
4. The permittee must comply with 40 CFR Part 60 Subpart IIII by purchasing an engine certified to the emission standards in §60.4205(b), as applicable, for the same model year and engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [§60.4211(c)]
5. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the

manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Director for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited. [§60.4211(f)]

6. Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112, as applicable, determined from the following equation:

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

Where:

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

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

Monitoring:

The permittee must install a non-resettable hour meter prior to startup of the engine. [§60.4209(a)]

Recordkeeping:

1. The permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [§60.4214(b)]
2. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
3. All records shall be maintained for five years.

Reporting:

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

IV. Core Permit Requirements

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

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
 - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
 - i) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
 - b) Yard waste, with the following exceptions:
 - i) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
- 3) 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) Fulbright Treatment 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 Fulbright Treatment Plant fails to comply with the provisions or any condition of the open burning permit.
 - a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) 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(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)3.B]

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

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

10 CSR 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

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

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) The permittee may be required by the director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall submit a full EIQ for the 2011, 2014, 2017, and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
- 5) In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060 section (5) or (6) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.
- 6) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 7) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.

- 8) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 9) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

Monitoring:

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

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.

- 2) Should no violation of this regulation be observed during this period then-
 - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - b) If a violation is noted, monitoring reverts to weekly.
 - c) Should no violation of this regulation be observed during this period then-
 - i) The permittee may observe once per month.
 - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If at the time of this operating permit issuance the permittee has already progressed to conducting observations once every two (2) weeks or once per month, the permittee may continue from that point forward in the monitoring schedule; however, if a violation is noted the permittee shall revert back to weekly monitoring.
- 4) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

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

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

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

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

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

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

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

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement

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

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed

refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

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

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
- Monitoring methods outlined in 40 CFR Part 64;
 - Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - 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:
- Monitoring methods outlined in 40 CFR Part 64;
 - A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - 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:
- Applicable monitoring or testing methods, cited in:
 - 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - 10 CSR 10-6.040, "Reference Methods";
 - 10 CSR 10-6.070, "New Source Performance Standards";
 - 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

V. General Permit Requirements

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

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

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

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

- 1) Recordkeeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) April 1st for monitoring which covers the January through December time period.
 - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

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

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

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

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

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

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

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

None

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

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

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

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

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

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

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

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

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

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

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

This permit may be reopened for cause if:

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

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

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

VI. Attachments

Attachments follow.

Attachment C

Method 9 Opacity Emissions Observations								
Company					Observer			
Location					Observer Certification Date			
Date					Emission Unit			
Time					Control Device			
Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
SUMMARY OF AVERAGE OPACITY								
Set Number	Time				Opacity			
	Start	End		Sum	Average			

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation? _____
 YES NO Signature of Observer

Attachment F
 Plantwide NO_x Compliance Demonstration

Emission Unit	Description	MHDR	Emission Factor	Potential to Emit (tons NO_x/yr)
E06 and E20	Natural Gas Combustion	0.001048 MMscf/hr	100 lbs/MMscf	0.46
E01, E02, E03, E04, E41, and E42	Diesel Combustion	329,603 gallons/yr	604 lbs/1000 gallons*	99.54
Plantwide Potential to Emit NO_x (tons/yr):				100.00

*The permittee requested to demonstrate compliance with the NO_x emission limitation through a Plantwide Diesel Fuel Usage operational limitation. The permittee did not wish to monitor the fuel used within each engine, but the total fuel used by the installation, which is why the 604 lbs/1000 gallons is used for all of the engines rather than 438 lbs/1000 gallons for the larger engines and 604 lbs/1000 gallons for the smaller engines.

The natural gas combustion units were evaluated at the manufacturer's maximum hourly design rate.

The diesel combustion units were evaluated at the voluntary 329,603 gallons Plantwide Diesel Fuel Usage annual operational limitation, not at the manufacturer's maximum hourly design rate. This calculation demonstrates that the permittee will always be in compliance with their Plantwide NO_x emission limitation if they are in compliance with 329,603 gallons/yr Plantwide Diesel Fuel Usage operational limitation.

Attachment G
 10 CSR 10-6.400 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*.

Allowable PM Emission Rate (E) for Process Weights (P) of less than or equal to 30 tons/hr is calculated by:

$$E \text{ (lb/hr)} = 4.1(P)^{0.67}$$

Potential PM Emission Rate = MHDR (tons/hr) x Emission Factor (lb/ton)

$$\text{Potential PM Concentration} = \frac{\text{Potential PM Emission Rate (lb/hr)} \times 7000 \text{ (gr/lb)}}{\text{Stack Flowrate (scf/min)} \times 60 \text{ (min/hr)}}$$

Emission Unit	Description	MHDR (tons/hr)	PM Emission Factor (lbs/ton)	Potential PM Emission Rate (lb/hr)	PM Emission Limit (lb/hr)
E28	Soda Ash Hopper Unloading Chute	26.7	0.1	2.67	37.03

The emission unit is in compliance with the PM emission rate limitation without the use of their control device, therefore, CAM is not applicable.

STATEMENT OF BASIS

Voluntary Limitations

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

Permit Reference Documents

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

- 1) Intermediate Operating Permit Application, received July 9, 2012
- 2) 2011 Emissions Inventory Questionnaire, received April 27, 2012
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition
- 4) No Construction Permit Required Project #2005-02-040, Completed March 8, 2005
- 5) No Construction Permit Required Project #2011-04-051, Completed May 31, 2011

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

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.
None.

Other Air Regulations Determined Not to Apply to the Operating Permit

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

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

This regulation is not applicable to E29 as the emissions from this unit are fugitive. The regulation is not applicable to E09, E10, and E31 as these emission sources have the potential to emit less than 0.5 lbs PM/hr. This regulation is not applicable to E28 because its uncontrolled potential to emit particulate matter is less than the amount allowed by process weight (see Attachment G).

10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating.

This rule does not apply because the indirect heating equipment (E06 and E20) is fueled by natural gas.
[10 CSR 10-6.405(1)(C)]

Construction Permits

- 1) No Construction Permit Required Project #2005-02-040, Completed March 8, 2005
This determination was made for the like kind replacement of a 400 hp emergency diesel engine.
- 2) No Construction Permit Required Project #2011-04-051, Completed May 31, 2011
This determination was made for the construction of an emergency diesel generator (E50).

New Source Performance Standards (NSPS) Applicability

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

This rule applies to the 923 hp emergency diesel emergency compression ignition engine because it was manufactured after July 11, 2005. [§60.4200(a)(2)(i)]

Engines E01, E02, E03, E04, E41, and E42 were installed prior to this compliance date and are not subject to this rule.

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

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

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

These regulations do not apply to the storage tanks. The smallest size tank covered by these regulations is 19,813 gallons. The storage tanks at this installation have capacities less than the applicability threshold.

Maximum Achievable Control Technology (MACT) Applicability

40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* is applicable to engines E01 403 HP Emergency Diesel Generator, E02 900 HP Emergency Diesel Pump, E03 800 HP Emergency Diesel Pump, E04 1,000 HP Emergency Diesel Pump, E41 514 HP Emergency Diesel Engine (For 350 HP Water Pump) McDaniel Lake, and E42 590 HP Emergency Diesel Engine (For 540 HP Water Pump) McDaniel Lake and has been applied within this permit.

The requirements of this rule are not applicable to E50 923 HP Emergency Diesel Generator because it is meeting the requirements of 40 CFR Part 60 subpart III.

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

This rule does not apply to the boilers because they are gas-fired boilers.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

None.

Other Regulatory Determinations

10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds* is applicable to the installation and has been applied within this permit. The only applicable emission units at this time are E01, E02, E03, E04, E41, and E42. E06 and E20 only burn natural gas which exempts them from this regulation. This rule is not applicable to the 923 hp generator engine (E50) because it is subject to sulfur limitations under 10 CSR 10-6.070.

Greenhouse Gas Emissions

On May 13, 2010, EPA issued the GHG Tailoring Rule which set the major source threshold for CO₂e to be 100,000 tons per year within 40 CFR Part 70. As of July 1, 2011, all Title V operating permits are required to include GHG emissions. Potential emissions of greenhouse gases (CO₂e) for this installation are calculated to be 1,949 tons, classifying the installation as a minor source of GHGs.

An updated Potential to Emit for the installation is shown below:

Pollutant	Potential to Emit (tons/yr)
CO	6.62
HAPs	0.11
Chlorine (7782-50-5)	0.10
NO _x	29.13
PM ₁₀	23.73
PM ₂₅	1.08
SO _x	3.51
VOC	2.85
CO ₂ e	1,949

Note: This Potential to Emit accounts for all of the potential emissions from the emission units with and without limitations listed on pages 3 and 4 of this permit. All of the emission units were evaluated at 8,760 annual hours of operation, except for emergency engines E01, E02, E03, E04, E41, and E42 which were evaluated/estimated at 500 annual hours of operation per EPA guidance document *Calculating Potential to Emit (PTE) for Emergency Generators* (dated September 6, 1995) due to their emergency status. The 500 hours of annual operation is only used to estimate potential emissions from the emergency engines and does not in any way limit their usage. The only limits on the usage of the emergency engines come from 40 CFR Part 63, Subpart ZZZZ and the Plantwide 100 tons/yr NO_x emission limitation. The installation has been limited to 100 tons/yr NO_x (329,603 gallons/yr of diesel combustion) to ensure that they remain below the major source threshold and do not violate this Intermediate Operating Permit in the event of an emergency requiring the engines to be operated greater than 500 hours annually. The installation has no federally enforceable controls; therefore, the PTE does not include any control efficiencies.

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

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

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

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

Prepared by:

Colin Janssen, EIT
B.S. Civil Engineering

CERTIFIED MAIL: 70041350000314154066
RETURN RECEIPT REQUESTED

David M. Fraley, Ph.D.
Fulbright Treatment Plant
P.O. Box 551
Springfield, MO 65801

Re: Fulbright Treatment Plant, 077-0163
Permit Number: OP2010-110A

Dear Dr. Fraley:

Enclosed with this letter is your amended intermediate operating permit. The following changes have been made:

10 CSR 10-6.400 is no longer listed as an applicable requirement for the Soda Ash Hopper Unloading Chute (E28) since this unit meets the requirements of 10 CSR 10-6.400(1)(B)16.

10 CSR 10-4.040 is no longer listed as an applicable requirement because it has been rescinded and replaced by 10 CSR 10-6.405.

The 923 hp diesel fired emergency engine installed in 2011 has been included and the requirements of 40 CFR Part 60 Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* have been applied.

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.

Please note this amendment does not alter or change any other requirements required by Operating Permit OP2010-110. You are reminded that your current operating permit will expire on November 1, 2015.

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

Dr. David Fraley
Page Two

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

Sincerely,

AIR POLLUTION CONTROL PROGRAM

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

MJS/cjk

Enclosures

c: Southwest Regional Office
PAMS File: 2012-07-020