



## 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:** OP2013-040  
**Expiration Date:** JUN 23 2018  
**Installation ID:** 097-0110  
**Project Number:** 2009-01-026

**Installation Name and Address**

Carthage Water & Electric Plant  
P.O. Box 644  
Carthage, MO 64836  
Jasper County

**Parent Company's Name and Address**

Carthage Water & Electric Plant  
P.O. Box 644  
Carthage, MO 64836

**Installation Description:**

Carthage Water & Electric Plant is an electrical generating peaking plant that services the area of Carthage, Missouri. Electricity is generated from a combination of nine dual-fired internal combustion engines. The installation is a major source of Greenhouse Gases (GHG), Nitrogen Oxides (NO<sub>x</sub>), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), Particulate Matter ≤ Ten Microns (PM<sub>10</sub>), and Particulate Matter ≤ 2.5 Microns (PM<sub>2.5</sub>). The installation is an area source of Hazardous Air Pollutants (HAP).

JUN 24 2013

Effective Date

  
Director or Designee  
Department of Natural Resources



## 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:** OP2013-040  
**Expiration Date:**  
**Installation ID:** 097-0110  
**Project Number:** 2009-01-026

**Installation Name and Address**

Carthage Water & Electric Plant  
P.O. Box 644  
Carthage, MO 64836  
Jasper County

**Parent Company's Name and Address**

Carthage Water & Electric Plant  
P.O. Box 644  
Carthage, MO 64836

**Installation Description:**

Carthage Water & Electric Plant is an electrical generating peaking plant that services the area of Carthage, Missouri. Electricity is generated from a combination of nine dual-fired internal combustion engines. The installation is a major source of Greenhouse Gases (GHG), Nitrogen Oxides (NO<sub>x</sub>), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), Particulate Matter  $\leq$  Ten Microns (PM<sub>10</sub>), and Particulate Matter  $\leq$  2.5 Microns (PM<sub>2.5</sub>). The installation is an area source of Hazardous Air Pollutants (HAP).

---

Effective Date

---

Director or Designee  
Department of Natural Resources

## Table of Contents

<b>I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING .....</b>	<b>3</b>
<b>II. PLANT WIDE EMISSION LIMITATIONS.....</b>	<b>5</b>
<b>III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .....</b>	<b>6</b>
PERMIT CONDITION 001 .....	6
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	
PERMIT CONDITION 002.....	9
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	
40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
PERMIT CONDITION 003.....	9
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	
40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
PERMIT CONDITION 004.....	24
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
PERMIT CONDITION 005.....	25
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
<b>IV. CORE PERMIT REQUIREMENTS .....</b>	<b>27</b>
<b>V. GENERAL PERMIT REQUIREMENTS.....</b>	<b>34</b>
<b>VI. ATTACHMENTS .....</b>	<b>39</b>
ATTACHMENT A .....	40
Fugitive Emission Observations	
ATTACHMENT B .....	41
Inspection/Maintenance/Repair/Malfunction Log	

## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

Carthage Water & Electric Plant is an electrical generating peaking plant that services the area of Carthage, Missouri. Electricity is generated from a combination of nine dual-fired internal combustion engines. The installation is a major source of GHG, NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, and PM<sub>2.5</sub>. The installation is an area source of HAP.

Reported Air Pollutant Emissions, tons per year					
Pollutants	2011	2010	2009	2008	2007
Particulate Matter ≤ Ten Microns (PM <sub>10</sub> )	4.42	4.66	2.82	3.76	0.80
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )	0.76	0.64	0.30	0.42	0.80
Sulfur Oxides (SO <sub>x</sub> )	1.72	1.19	0.65	0.87	1.64
Nitrogen Oxides (NO <sub>x</sub> )	70.67	75.05	28.00	39.55	84.30
Volatile Organic Compounds (VOC)	3.56	3.54	1.40	1.96	4.09
Carbon Monoxide (CO)	6.28	8.08	2.60	3.79	8.42
Ammonia (NH <sub>3</sub> )	0.42	0.59	0.26	0.41	0.64

### 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.

Emission Unit	Description	Construction Date
E07, EN 06	2 cycle, dual fuel, rich burn Engine 6 – 25.1 MMBtu/hr dual fuel and 23.4 MMBtu/hr diesel	1946
E07, EN 07	2 cycle, dual fuel, rich burn Engine 7 – 29.9 MMBtu/hr dual fuel and 25.7 MMBtu/hr diesel	1949
E07, EN 08	2 cycle, rich burn Engine 8 – 30.3 MMBtu/hr diesel	1952
E07, EN 09	2 cycle, dual fuel, rich burn Engine 9 – 38.3 MMBtu/hr dual fuel and 44.4 MMBtu/hr diesel	1957
E07, EN 10	2 cycle, dual fuel, rich burn Engine 10 – 56.5 MMBtu/hr dual fuel and 58.2 MMBtu/hr diesel	1965
E07, EN 11	4 cycle, dual fuel, rich burn Engine 11 – 35 MMBtu/hr dual fuel and 40 MMBtu/hr diesel	1970
E07, EN 12	4 cycle, dual fuel, rich burn Engine 12 – 35 MMBtu/hr dual fuel and 40 MMBtu/hr diesel	1971
E07, EN 13	4 cycle, dual fuel, rich burn Engine 13 – 52.9 MMBtu/hr dual fuel and 53.8 MMBtu/hr diesel	1974
E07, EN 14	4 cycle, dual fuel, rich burn Engine 14 – 52.9 MMBtu/hr dual fuel and 53.8 MMBtu/hr diesel	1974
E12, EN16	Emergency Engine 16 – 0.7 MMBtu/hr diesel	2008
E14	Water Treatment Plant Lime Silo - 0.125 ton/hr	-

**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.

Emission Unit	Description	Construction Date
E01	15,000 gallon Cylinder Oil Tank 5 and 15,000 gallon Lube Oil Tank 6	1964
E02	1,000,000 gallon Fuel Oil Tank	1973
E06	Two 489 gallon, two 391 gallon, one 252 gallon, two 309 gallon, and two 516 gallon Fuel Oil Day Tanks	1946 - 1976
E08	Space Heating - 3.68 MMBtu/hr total, natural gas	1968
E11	1,000,000 gallon Fuel Oil Tank	2005
E13, E11CT	Engine #11 Cooling Tower - 18,000 gallon/hr	-
E13, E12CT	Engine #12 Cooling Tower - 18,000 gallon/hr	-
E13, E13CT	Engine #13 Cooling Tower - 29,040 gallon/hr	-
E13, E14CT	Engine #14 Cooling Tower - 29,040 gallon/hr	-
E13, LFCT	Large Flour Cooling Tower - 240,000 gallon/hr	-
E13, LMCT	Large Marley Cooling Tower - 336,000 gallon/hr	-

## **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.

None.

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the CFR and 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.

<b>PERMIT CONDITION 001</b>	
10 CSR 10-6.070 New Source Performance Regulations	
40 CFR Part 60, Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	
<b>Emission Unit</b>	<b>Description</b>
E12, EN16	Emergency Engine 16 – 99 HP, 2008

**Standards:**

1. 2007 model year and later emergency stationary CI ICE shall 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. Emergency stationary CI ICE that conduct performance tests in-use shall meet the NTE standards as indicated in §60.4212. [§60.4205(e)]
3. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4205 over the entire life of the engine. [§60.4206]
4. Stationary CI internal combustion engine manufacturers shall certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the following emission standards: [§60.4202(a)]
  - a) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in §89.112 and §89.113 for all pollutants beginning in model year 2007. [§60.4202(a)(2)]
5. Engines manufactured by stationary CI internal combustion engine manufacturers shall meet the emission standards as required in §60.4202 during the certified emissions life of the engines. [§60.4203]
6. After December 31, 2008, the permittee may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines. [§60.4208(a)]

**Fuel Requirements:**

The permittee shall only use diesel fuel that meets the requirements of §80.510(b) for nonroad diesel fuel. [§60.4207(b)]

**Monitoring:**

1. The permittee shall meet the monitoring requirements of §60.4209. In addition, the permittee shall also meet the monitoring requirements specified in §60.4211. [§60.4209]
  - a) The permittee shall install a non-resettable hour meter prior to startup of the engine. [§60.4209(a)]

**Compliance Requirements:**

1. The permittee shall do all of the following, except as permitted under §60.4211(g): [§60.4211(a)]
  - a) 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)]
  - b) Change only those emission-related settings that are permitted by the manufacturer; and [§60.4211(a)(2)]
  - c) Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as applicable. [§60.4211(a)(3)]
2. 2007 model year and later stationary CI internal combustion engines shall comply with the emission standards specified in §60.4205(b). The permittee shall comply by purchasing an engine certified to the emission standards in §60.4205(b), as applicable, for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in §60.4211(g). [§60.4211(c)]
3. The permittee shall operate the emergency stationary ICE according to the requirements in §60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR Part 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §60.4211(f)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in §60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII and shall meet all requirements for non-emergency engines. [§60.4211(f)]
  - a) There is no time limit on the use of emergency stationary ICE in emergency situations. [§60.4211(f)(1)]
  - b) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in §60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph. [§60.4211(f)(2)]
    - i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [§60.4211(f)(2)(i)]
    - ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [§60.4211(f)(2)(ii)]
    - iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of five percent or greater below standard voltage or frequency. [§60.4211(f)(2)(iii)]
  - c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in §60.4211(f)(2). Except as provided in §60.4211(f)(3)(i), the 50 hours per calendar

year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [§60.4211(f)(3)]

i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

[§60.4211(f)(3)(i)]

(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [§60.4211(f)(3)(i)(A)]

(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [§60.4211(f)(3)(i)(B)]

(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [§60.4211(f)(3)(i)(C)]

(4) The power is provided only to the facility itself or to support the local transmission and distribution system. [§60.4211(f)(3)(i)(D)]

(5) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [§60.4211(f)(3)(i)(E)]

4. If the permittee does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows: [§60.4211(g)]

a) The permittee shall keep a maintenance plan and records of conducted maintenance to demonstrate compliance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if the permittee does not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or the permittee changes the emission-related settings in a way that is not permitted by the manufacturer, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within one year of such action. [§60.4211(g)(1)]

### **General Provisions:**

The permittee shall refer to Table 8 to 40 CFR Part 60, Subpart IIII for 40 CFR Part 60, Subpart A applicability.

### **Notification, Reports, and Records:**

1. Emergency stationary internal combustion engine are not required to submit an initial notification. [§60.4214(b)]
2. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee shall retain keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached. [§60.4214(c)]
3. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

- The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 002</b>	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
Emission Unit	Description
E12, EN16	Emergency Engine 16 – 99 HP, 2008

**Requirements:**

The permittee shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for this engine under 40 CFR Part 63, Subpart ZZZZ. [§63.6590(c)]

**Reporting:**

The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 003</b>	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
Emission Unit	Description
E07, EN 06	2 cycle, dual fuel, rich burn Engine 6 - 25.1 MMBtu/hr dual fuel and 23.4 MMBtu/hr diesel
E07, EN 07	2 cycle, dual fuel, rich burn Engine 7 - 29.9 MMBtu/hr dual fuel and 25.7 MMBtu/hr diesel
E07, EN 08	2 cycle, rich burn Engine 8 - 30.3 MMBtu/hr diesel
E07, EN 09	2 cycle, dual fuel, rich burn Engine 9 - 38.3 MMBtu/hr dual fuel and 44.4 MMBtu/hr diesel
E07, EN 10	2 cycle, dual fuel, rich burn Engine 10 - 56.5 MMBtu/hr dual fuel and 58.2 MMBtu/hr diesel
E07, EN 11	4 cycle, dual fuel, rich burn Engine 11 - 35 MMBtu/hr dual fuel and 40 MMBtu/hr diesel
E07, EN 12	4 cycle, dual fuel, rich burn Engine 12 - 35 MMBtu/hr dual fuel and 40 MMBtu/hr diesel
E07, EN 13	4 cycle, dual fuel, rich burn Engine 13 - 52.9 MMBtu/hr dual fuel and 53.8 MMBtu/hr diesel
E07, EN 14	4 cycle, dual fuel, rich burn Engine 14 - 52.9 MMBtu/hr dual fuel and 53.8 MMBtu/hr diesel

**Compliance Date:**

- The permittee shall comply with the applicable emission limitations, operating limitations, and other requirements by no later than May 3, 2013. [§63.6595(a)(1)]
- The permittee shall meet the applicable notification requirements in §63.6645 and in 40 CFR Part 63, Subpart A. [§63.6595(c)] *Note: EPA Region VII has recently relocated. The address for EPA Region VII listed in §63.13 is their previous address. Notifications should be submitted to EPA Region VII's new address at 11201 Renner Boulevard, Lenexa, Kansas 66219.*

**Emission and Operating Limitations:**

- Compliance with the numerical emission limitations established in 40 CFR Part 63, Subpart ZZZZ is based on the results of testing the average of three one-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to 40 CFR Part 63, Subpart ZZZZ. [§63.6603]

- a) The permittee shall comply with the requirements in Table 2d to 40 CFR Part 63, Subpart ZZZZ and the operating limitations in Table 2b to 40 CFR Part 63, Subpart ZZZZ that apply. [§63.6603(a)]

**Table 2d to 40 CFR Part 63, Subpart ZZZZ**

For each . . .	The permittee shall meet the following requirement, except during periods of startup . . .	During periods of startup the permittee shall . . .
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O <sub>2</sub> ; or	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.
	b. Reduce CO emissions by 70 percent or more.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year.	Install NSCR to reduce HAP emissions from the stationary RICE.	

**Table 2b to 40 CFR Part 63, Subpart ZZZZ**

For each . . .	The permittee shall meet the following operating limitation, except during periods of startup . . .
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain the catalyst so that the pressure drop across the catalyst does not change by more than two 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. <sup>1</sup>
3. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	Comply with any operating limitations approved by the Administrator.

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of §63.8(f) for a different temperature range.

**Fuel Requirements:**

Existing non-emergency, non-black start CI stationary RICE with a displacement of less than 30 liters per cylinder that use diesel fuel shall only use diesel fuel that meets the requirements in §80.510(b) for nonroad diesel fuel. [§63.6604(a)]

**General Compliance Requirements:**

1. The permittee shall be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR Part 63, Subpart ZZZZ that apply at all times. [§63.6605(a)]
2. At all times the permittee shall 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.6605(b)]

**Testing and Initial Compliance Requirements:**

1. Existing stationary RICE located at an area source of HAP emissions are subject to the requirements of §63.6612. [§63.6612]
  - a) The permittee shall conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to 40 CFR Part 63, Subpart ZZZZ that apply within 180 days after the compliance date that is specified for the stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2). [§63.6612(a)]
  - b) The permittee is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the following conditions: [§63.6612(b)]
    - i) The test must have been conducted using the same methods specified in 40 CFR Part 63, Subpart ZZZZ, and these methods must have been followed correctly. [§63.6612(b)(1)]
    - ii) The test must not be older than two years. [§63.6612(b)(2)]
    - iii) The test must be reviewed and accepted by the Administrator. [§63.6612(b)(3)]
    - iv) Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes. [§63.6612(b)(4)]
2. The permittee shall conduct subsequent performance tests as specified in Table 3 of 40 CFR Part 63, Subpart ZZZZ. [§63.6615]
3. The permittee shall conduct each performance test in Tables 3 and 4 of 40 CFR Part 63, Subpart ZZZZ that applies. [§63.6620(a)]
4. Each performance test shall be conducted according to the requirements that 40 CFR Part 63, Subpart ZZZZ specifies in Table 4 to 40 CFR Part 63, Subpart ZZZZ. The permittee does not need to start up a non-operational engine solely to conduct the performance test. The permittee may conduct the performance test when the engine is started up again.
5. The permittee shall conduct three separate test runs for each performance test required in §63.6620, as specified in §63.7(e)(3). Each test run must last at least one hour, unless otherwise specified in 40 CFR Part 63, Subpart ZZZZ. [§63.6620(d)]
6. The permittee shall use Equation 1 of §63.6620 to determine compliance with the percent reduction requirement:

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

Where:

$C_i$  = concentration of CO at the control device inlet,  
 $C_o$  = concentration of CO at the control device outlet, and  
R = percent reduction of CO emissions. [§63.6620(e)(1)]

7. The permittee shall normalize the CO concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent O<sub>2</sub>, or an equivalent percent CO<sub>2</sub>. If pollutant concentrations are to be corrected to 15 percent O<sub>2</sub> and CO<sub>2</sub> concentration is measured in lieu of O<sub>2</sub> concentration

measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as follows:  
[§63.6620(e)(2)]

- a) Calculate the fuel-specific F<sub>o</sub> value for the fuel burned during the test using values obtained from Method 19, §5.2, and the following equation:

$$F_o = \frac{0.209F_d}{F_c} \text{ (Equation 2)}$$

Where:

F<sub>o</sub> = Fuel factor based on the ratio of O<sub>2</sub> volume to the ultimate CO<sub>2</sub> volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O<sub>2</sub>, percent/100.

F<sub>d</sub> = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup> /J (dscf/10<sup>6</sup> Btu).

F<sub>c</sub> = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup> /J (dscf/10<sup>6</sup> Btu) [§63.6620(e)(2)(i)]

- b) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent O<sub>2</sub>, as follows:

$$X_{CO_2} = \frac{5.9}{F_o} \text{ (Equation 3)}$$

Where:

X<sub>CO<sub>2</sub></sub> = CO<sub>2</sub> correction factor, percent.

5.9 = 20.9 percent O<sub>2</sub> —15 percent O<sub>2</sub>, the defined O<sub>2</sub> correction value, percent.

[§63.6620(e)(2)(ii)]

- c) Calculate the CO gas concentration adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

$$C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \text{ (Equation 4)}$$

Where:

C<sub>adj</sub> = Calculated concentration of CO adjusted to 15 percent O<sub>2</sub>.

C<sub>d</sub> = Measured concentration of CO uncorrected.

X<sub>CO<sub>2</sub></sub> = CO<sub>2</sub> correction factor, percent.

%CO<sub>2</sub> = Measured CO<sub>2</sub> concentration measured, dry basis, percent. [§63.6620(e)(3)(iii)]

8. If the permittee is not using an oxidation catalyst, the permittee shall petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. The permittee shall not conduct the initial performance test until after the petition has been approved by the Administrator. [§63.6620(f)]
9. If the permittee petitions the Administrator for approval of operating limitations, the petition shall include the following information: [§63.6620(g)]
- a) Identification of the specific parameters the permittee proposes to use as operating limitations; [§63.6620(g)(1)]
- b) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions; [§63.6620(g)(2)]
- c) A discussion of how the permittee will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; [§63.6620(g)(3)]
- d) A discussion identifying the methods the permittee will use to measure and the instruments the permittee will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and [§63.6620(g)(4)]

- e) A discussion identifying the frequency and methods for recalibrating the instruments the permittee will use for monitoring these parameters. [§63.6620(g)(5)]
10. If the permittee petitions the Administrator for approval of no operating limitations, the petition shall include the following information: [§63.6620(h)]
- a) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time; [§63.6620(h)(1)]
  - b) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions; [§63.6620(h)(2)]
  - c) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions; [§63.6620(h)(3)]
  - d) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations; [§63.6620(h)(4)]
  - e) For the parameters, a discussion identifying the methods the permittee could use to measure them and the instruments the permittee could use to monitor them, as well as the relative accuracy and precision of the methods and instruments; [§63.6620(h)(5)]
  - f) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments the permittee could use to monitor them; and [§63.6620(h)(6)]
  - g) A discussion of why, from the permittee's point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations. [§63.6620(h)(7)]
11. The engine percent load during a performance test shall be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination shall be included in the notification of compliance status. The following information shall be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [§63.6620(i)]

**Table 5 to 40 CFR Part 63, Subpart ZZZZ**

For each . . .	Complying with the requirement to . . .	The permittee has demonstrated initial compliance if . . .
1. Existing nonemergency stationary CI RICE >500 HP located at an area source of HAP.	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS.	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and
		ii. The permittee has installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. The permittee has recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

<p>2. Existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP.</p>	<p>a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS.</p>	<p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and          ii. The permittee has installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and          iii. The permittee has recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.</p>
<p>3. Existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP.</p>	<p>a. Reduce CO emissions and not using oxidation catalyst.</p>	<p>i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and          ii. The permittee has installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and          iii. The permittee has recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>4. Existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP.</p>	<p>a. Limit the concentration of CO, and not using oxidation catalyst.</p>	<p>i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and          ii. The permittee has installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and          iii. The permittee has recorded the approved operating parameters (if any) during the initial performance test.</p>
<p>5. Existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP.</p>	<p>a. Reduce CO emissions, and using a CEMS</p>	<p>i. The permittee has installed a CEMS to continuously monitor CO and either O<sub>2</sub> or CO<sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and          ii. The permittee has conducted a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B; and          iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first four-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the four-hour period.</p>
<p>6. Existing non-emergency stationary CI RICE &gt;500 HP located at an area source of HAP.</p>	<p>a. Limit the concentration of CO, and using a CEMS.</p>	<p>i. The permittee has installed a CEMS to continuously monitor CO and either O<sub>2</sub> or CO<sub>2</sub> at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and          ii. The permittee has conducted a performance evaluation of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B; and          iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first four-hour period after successful validation of the CEMS.</p>

		Compliance is based on the average concentration measured during the four-hour period.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year.	a. Install NSCR	i. The permittee has conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more;
		ii. The permittee has installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or the permittee has installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250°F.

**Table 4 to 40 CFR Part 63, Subpart ZZZZ**

For each ...	Complying with the requirement to ...	The permittee shall ...	Using ...	According to the following requirements ...
1. CI stationary RICE.	a. Reduce CO emissions	i. Measure the O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR Part 60, Appendix A, or ASTM Method D6522-00 (Reapproved 2005). <sup>a,c</sup>	(a) Measurements to determine O <sub>2</sub> shall be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005) <sup>a,b,c</sup> or Method 10 of 40 CFR Part 60, Appendix A.	(a) The CO concentration shall be at 15 percent O <sub>2</sub> , dry basis.
3. Stationary RICE.	a. limit the concentration of CO in the stationary RICE exhaust.	i. Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A § 63.7(d)(1)(i).	(a) if using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR Part 60, Appendix A, or ASTM Method D6522-00 (Reapproved 2005). <sup>a</sup>	(a) measurements to determine O <sub>2</sub> concentration shall be made at the same time and location as the measurements for CO concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR Part 60, Appendix A, or Test Method 320 of 40 CFR Part 63, Appendix A, or ASTM D 6348-03. <sup>a</sup>	(a) measurements to determine moisture content shall be made at the same time and location as the measurements for CO concentration.
		v. measure CO at the exhaust of the stationary RICE.	(1) Method 10 of 40 CFR Part 60, Appendix A, ASTM Method D6522-00 (2005), <sup>a,c</sup>	(a) CO concentration shall be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of

			Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03. <sup>a</sup>	the average of the three one-hour or longer runs.
--	--	--	--	---

<sup>a</sup>Incorporated by reference, see §63.14. The permittee may also obtain copies from University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

<sup>b</sup>The permittee may also use Method 320 of 40 CFR Part 63, Appendix A, or ASTM D6348-03.

<sup>c</sup>ASTM-D6522-00 (2005) may be used to test both CI and SI stationary RICE.

**Table 3 to 40 CFR Part 63, Subpart ZZZZ**

For each . . .	Complying with the requirement to . . .	The permittee shall . . .
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE.	Limit or reduce CO emissions and not using a CEMS.	Conduct subsequent performance tests every 8,760 hours or three years, whichever comes first.

**Monitoring, Installation, Collection, Operation, and Maintenance Requirements:**

1. If the permittee elects to install a CEMS as specified in Table 5 of 40 CFR Part 63, Subpart ZZZZ, the permittee shall install, operate, and maintain a CEMS to monitor CO and either O<sub>2</sub> or CO<sub>2</sub> according to the requirements in §63.6625(a)(1) through (4). If the permittee is meeting a requirement to reduce CO emissions, the CEMS shall be installed at both the inlet and outlet of the control device. If the permittee is meeting a requirement to limit the concentration of CO, the CEMS shall be installed at the outlet of the control device. [§63.6625(a)]
  - a) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR Part 60, Appendix B. [§63.6625(a)(1)]
  - b) The permittee shall conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR Part 60, Appendix B as well as daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1. [§63.6625(a)(2)]
  - c) As specified in §63.8(c)(4)(ii), each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. The permittee shall have at least two data points, with each representing a different 15-minute period, to have a valid hour of data. [§63.6625(a)(3)]
  - d) The CEMS data shall be reduced as specified in §63.8(g)(2) and recorded in ppm or ppb (as appropriate for the applicable limitation) at 15 percent O<sub>2</sub> or the equivalent CO<sub>2</sub> concentration. [§63.6625(a)(4)]
2. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 CFR Part 63, Subpart ZZZZ, the permittee shall install, operate, and maintain each CPMS according to the following requirements: [§63.6625(b)]
  - a) The permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in §63.6625(b)(1)(i) through (v) and in §63.8(d). As specified in §63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in §63.6625(b)(1) through (5) in the site-specific monitoring plan. [§63.6625(b)(1)]

- i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; [§63.6625(b)(1)(i)]
- ii) Sampling interface (*e.g.*, thermocouple) location such that the monitoring system will provide representative measurements; [§63.6625(b)(1)(ii)]
- iii) Equipment performance evaluations, system accuracy audits, or other audit procedures; [§63.6625(b)(1)(iii)]
- iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (3); and [§63.6625(b)(1)(iv)]
- v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i). [§63.6625(b)(1)(v)]
- b) The permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan. [§63.6625(b)(2)]
- c) The CPMS shall collect data at least once every 15 minutes (see also §63.6635). [§63.6625(b)(3)]
- d) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8°C (5°F) or one percent of the measurement range, whichever is larger. [§63.6625(b)(4)]
- e) The permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually. [§63.6625(b)(5)]
- f) The permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. [§63.6625(b)(6)]
3. Existing non-emergency, non-black start CI engine greater than or equal to 300 HP that are not equipped with a closed crankcase ventilation system shall comply with either §63.6625(g)(1) or (2). The permittee shall 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)]
  - a) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or [§63.6625(g)(1)]
  - b) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals. [§63.6625(g)(2)]
4. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d to 40 CFR Part 63, Subpart ZZZZ apply. [§63.6625(h)]

**Initial Compliance:**

1. The permittee shall demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies according to Table 5 of 40 CFR Part 63, Subpart ZZZZ. [§63.6630(a)]
2. During the initial performance test, the permittee shall establish each operating limitation in Table 2b of 40 CFR Part 63, Subpart ZZZZ that applies. [§63.6630(b)]
3. The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. [§63.6630(c)]

4. The initial compliance demonstration required for existing non-emergency 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year shall be conducted according to the following requirements: [§63.6630(e)]
  - a) The compliance demonstration shall consist of at least three test runs. [§63.6630(e)(1)]
  - b) Each test run shall be of at least 15 minute duration, except that each test conducted using the method in Appendix A to 40 CFR Part 63, Subpart ZZZZ shall consist of at least one measurement cycle and include at least two minutes of test data phase measurement. [§63.6630(e)(2)]
  - c) If the permittee is demonstrating compliance with the CO concentration or CO percent reduction requirement, the permittee shall measure CO emissions using one of the CO measurement methods specified in Table 4 of 40 CFR Part 63, Subpart ZZZZ, or using Appendix A to 40 CFR Part 63, Subpart ZZZZ. [§63.6630(e)(3)]
  - d) The permittee shall measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of 40 CFR Part 63, Subpart ZZZZ. Measurements to determine O<sub>2</sub> concentration shall be made at the same time as the measurements for CO or THC concentration. [§63.6630(e)(5)]
  - e) If the permittee is demonstrating compliance with the CO percent reduction requirement, the permittee shall measure CO emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device. [§63.6630(e)(6)]

**Continuous Compliance Requirements:**

1. The permittee shall monitor and collect data according to §63.6635. [§63.6635(a)]
2. 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)]
3. 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)]
4. The permittee shall demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 2b and 2d to 40 CFR Part 63, Subpart ZZZZ that apply according to methods specified in Table 6 to 40 CFR Part 63, Subpart ZZZZ. [§63.6640(a)]
5. The permittee shall report each instance in which the permittee did not meet each emission limitation or operating limitation in Tables 2b and 2d to 40 CFR Part 63, Subpart ZZZZ that apply. These instances are deviations from the emission and operating limitations in 40 CFR Part 63, Subpart ZZZZ. These deviations shall be reported according to the requirements in §63.6650. If the permittee changes catalyst, the permittee shall 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 shall also conduct a performance test to demonstrate that the permittee is meeting the required emission limitation applicable to the stationary RICE. [§63.6640(b)]
6. The annual compliance demonstration required for existing non-emergency 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year shall be conducted according to the following requirements: [§63.6640(c)]
  - a) The compliance demonstration must consist of at least one test run. [§63.6640(c)(1)]

- b) Each test run must be of at least 15 minute duration, except that each test conducted using the method in Appendix A to 40 CFR Part 63, Subpart ZZZZ shall consist of at least one measurement cycle and include at least two minutes of test data phase measurement. [§63.6640(c)(2)]
  - c) If the permittee is demonstrating compliance with the CO concentration or CO percent reduction requirement, the permittee shall measure CO emissions using one of the CO measurement methods specified in Table 4 of 40 CFR Part 63, Subpart ZZZZ, or using Appendix A to 40 CFR Part 63, Subpart ZZZZ. [§63.6640(c)(3)]
  - d) The permittee shall measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of 40 CFR Part 63, Subpart ZZZZ. Measurements to determine O<sub>2</sub> concentration shall be made at the same time as the measurements for CO or THC concentration. [§63.6640(c)(5)]
  - e) If the permittee is demonstrating compliance with the CO percent reduction requirement, the permittee shall measure CO emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device. [§63.6640(c)(6)]
  - f) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of 40 CFR Part 63, Subpart ZZZZ, the stationary RICE shall be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE shall be retested within seven days of being restarted and the emissions shall meet the levels specified in Table 6 of 40 CFR Part 63, Subpart ZZZZ. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE shall again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the permittee demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of 40 CFR Part 63, Subpart ZZZZ. [§63.6640(c)(7)]
7. The permittee shall also report each instance in which the permittee did not meet the requirements in Table 8 to 40 CFR Part 63, Subpart ZZZZ that apply. [§63.6640(e)]

**Table 6 to 40 CFR Part 63, Subpart ZZZZ**

For each . . .	Complying with the requirement to . . .	The permittee shall demonstrate continuous compliance by . . .
3. Existing non-emergency stationary CI RICE >500 HP.	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS.	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to one-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and
		ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the four-hour averaging period, or that the emission remain at or below the CO concentration limit; and
		iii. Conducting an annual RATA of the CEMS using PS 3 and 4A of 40 CFR Part 60, Appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR Part 60, Appendix F, Procedure 1.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE.	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation	i. Conducting performance tests every 8,760 hours or three years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that the emissions remain at or below the CO concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and

	catalyst.	<p>iii. Reducing these data to four-hour rolling averages; and</p> <p>iv. Maintaining the four-hour rolling averages within the operating limitations for the catalyst inlet temperature; and</p> <p>v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.</p>
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE.	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and not using oxidation catalyst.	<p>i. Conducting performance tests every 8,760 hours or three years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that emissions remain at or below the CO concentration limit; and</p> <p>ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and</p> <p>iii. Reducing these data to four-hour rolling averages; and</p> <p>iv. Maintaining the four-hour rolling averages within the operating limitations for the operating parameters established during the performance test.</p>
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year.	a. Install NSCR	<p>i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O<sub>2</sub>, or the average reduction of emissions of THC is 30 percent or more; and either</p> <p>ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to four-hour rolling averages; and maintaining the four-hour rolling averages within the limitation of greater than or equal to 750°F and less than or equal to 1250°F for the catalyst inlet temperature; or</p> <p>iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250°F.</p>

**General Provisions:**

The permittee shall refer to Table 8 to 40 CFR Part 63, Subpart ZZZZ for 40 CFR Part 63, Subpart A applicability.

**Notifications, Reports, and Records:**

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. If the permittee is required to conduct a performance test, 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. If the permittee is required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to 40 CFR Part 63, Subpart ZZZZ, the permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii). [§63.6645(h)]
  - a) For each initial compliance demonstration required in Table 5 to 40 CFR Part 63, Subpart ZZZZ that does not include a performance test, the permittee shall submit the Notification of

- Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. [§63.6645(h)(1)]
- b) For each initial compliance demonstration required in Table 5 to 40 CFR Part 63, Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 to 40 CFR Part 63, Subpart ZZZZ, the permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2). [§63.6645(h)(2)]
  4. The permittee shall submit each report in Table 7 of 40 CFR Part 63, Subpart ZZZZ that applies. [§63.6650(a)]
  5. 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 40 CFR Part 63, Subpart ZZZZ and according to the following requirements: [§63.6650(b)]
    - a) For semi-annual Compliance reports, the first Compliance report shall cover the period beginning on the compliance date that is specified for the affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for the source in §63.6595. [§63.6650(b)(1)]
    - b) For semi-annual Compliance reports, the first Compliance report shall be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for the affected source in §63.6595. [§63.6650(b)(2)]
    - c) For semi-annual Compliance reports, each subsequent Compliance report shall cover the semi-annual reporting period from January 1 through June 30 or the semi-annual reporting period from July 1 through December 31. [§63.6650(b)(3)]
    - d) For semi-annual Compliance reports, each subsequent Compliance report shall be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semi-annual reporting period. [§63.6650(b)(4)]
    - e) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR Part 70, and if the permitting authority has established dates for submitting semi-annual reports pursuant to §70.6(a)(3)(iii)(A), the permittee may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in §63.6650(b)(1) through (b)(4). [§63.6650(b)(5)]
  6. The Compliance report shall contain the following information: [§63.6650(c)]
    - a) Company name and address. [§63.6650(c)(1)]
    - b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [§63.6650(c)(2)]
    - c) Date of report and beginning and ending dates of the reporting period. [§63.6650(c)(3)]
    - d) If a malfunction occurred during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report shall also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction. [§63.6650(c)(4)]
    - e) If there are no deviations from any emission or operating limitations that apply, a statement that there were no deviations from the emission or operating limitations during the reporting period. [§63.6650(c)(5)]

- 
- f) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period. [§63.6650(c)(6)]
  7. For each deviation from an emission or operating limitation that occurs for a stationary RICE where the permittee is not using a CMS to comply with the emission or operating limitations in 40 CFR Part 63, Subpart ZZZZ, the Compliance report shall contain the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(d)]
    - a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [§63.6650(d)(1)]
    - b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [§63.6650(d)(2)]
  8. For each deviation from an emission or operating limitation occurring for a stationary RICE where the permittee is using a CMS to comply with the emission and operating limitations in 40 CFR Part 63, Subpart ZZZZ, the permittee shall include the information in §63.6650(c)(1) through (4) and the following information: [§63.6650(e)]
    - a) The date and time that each malfunction started and stopped. [§63.6650(e)(1)]
    - b) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. [§63.6650(e)(2)]
    - c) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8). [§63.6650(e)(3)]
    - d) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period. [§63.6650(e)(4)]
    - e) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period. [§63.6650(e)(5)]
    - f) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. [§63.6650(e)(6)]
    - g) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period. [§63.6650(e)(7)]
    - h) An identification of each parameter and pollutant (CO) that was monitored at the stationary RICE. [§63.6650(e)(8)]
    - i) A brief description of the stationary RICE. [§63.6650(e)(9)]
    - j) A brief description of the CMS. [§63.6650(e)(10)]
    - k) The date of the latest CMS certification or audit. [§63.6650(e)(11)]
    - l) A description of any changes in CMS, processes, or controls since the last reporting period. [§63.6650(e)(12)]
  9. Each affected source that has obtained a Title V operating permit pursuant to 40 CFR Part 70 shall report all deviations as defined in 40 CFR Part 63, Subpart ZZZZ in the semi-annual monitoring report required by §70.6 (a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of 40 CFR Part 63, Subpart ZZZZ along with, or as part of, the semi-annual monitoring report required by §70.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in 40 CFR Part 63, Subpart 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 affected source may have to report deviations from permit requirements to the permit authority. [§63.6650(f)]
10. The permittee shall keep the records described in §63.6655(a)(1) through (5), (b)(1) through (3) and (c). [§63.6655(a)]
    - a) A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in §63.10(b)(2)(xiv). [§63.6655(a)(1)]
    - b) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [§63.6655(a)(2)]
    - c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). [§63.6655(a)(3)]
    - d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]
    - e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.6655(a)(5)]
  11. For each CEMS or CPMS, the permittee shall keep the following records: [§63.6655(b)]
    - a) Records described in §63.10(b)(2)(vi) through (xi). [§63.6655(b)(1)]
    - b) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3). [§63.6655(b)(2)]
    - c) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable. [§63.6655(b)(3)]
  12. The permittee shall retain the records required in Table 6 of 40 CFR Part 63, Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies. [§63.6655(d)]
  13. Records shall be in a form suitable and readily available for expeditious review according to §63.10(b)(1). [§63.6660(a)]
  14. As specified in §63.10(b)(1), the permittee shall retain each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6660(b)]
  15. 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)]
  16. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
  17. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

**Table 7 to 40 CFR Part 63, Subpart ZZZZ**

For each ...	The permittee shall submit a ...	The report shall contain ...	The permittee shall submit the report ...
1. Existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semi-annually according to the requirements in §63.6650(b)(1) - (5)
		b. If a deviation occurred from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	
		c. If a malfunction occurred during the reporting period, the information in §63.6650(c)(4).	
3. Existing non-emergency, non-black start 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year.	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semi-annually according to the requirements in §63.6650(b)(1) - (5).

<b>PERMIT CONDITION 004</b>	
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
Emission Unit	Description
E07, EN 06	2 cycle, dual fuel, rich burn Engine 6 - 25.1 MMBtu/hr dual fuel and 23.4 MMBtu/hr diesel
E07, EN 07	2 cycle, dual fuel, rich burn Engine 7 - 29.9 MMBtu/hr dual fuel and 25.7 MMBtu/hr diesel
E07, EN 08	2 cycle, rich burn Engine 8 - 30.3 MMBtu/hr diesel
E07, EN 09	2 cycle, dual fuel, rich burn Engine 9 - 38.3 MMBtu/hr dual fuel and 44.4 MMBtu/hr diesel
E07, EN 10	2 cycle, dual fuel, rich burn Engine 10 - 56.5 MMBtu/hr dual fuel and 58.2 MMBtu/hr diesel
E07, EN 11	4 cycle, dual fuel, rich burn Engine 11 - 35 MMBtu/hr dual fuel and 40 MMBtu/hr diesel
E07, EN 12	4 cycle, dual fuel, rich burn Engine 12 - 35 MMBtu/hr dual fuel and 40 MMBtu/hr diesel

**Emission Limitation:**

The permittee shall not cause or permit the emission into the atmosphere gases containing more than 2,000 ppmv of SO<sub>2</sub> or more than 70 mg/m<sup>3</sup> of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period.

**Operational Limitation:**

The permittee shall not combust any diesel/fuel oil #2 containing sulfur in excess of 0.2 percent.

**Monitoring/Recordkeeping:**

1. The permittee shall retain fuel purchase receipts indicating the sulfur content of the diesel/fuel oil.
2. The permittee shall maintain records of any equipment malfunctions, using Attachment B or an equivalent form generated by the permittee.
3. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
4. 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 of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 005</b>	
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
<b>Emission Unit</b>	<b>Description</b>
E07, EN 13	4 cycle, dual fuel, rich burn Engine 13 - 52.9 MMBtu/hr dual fuel and 53.8 MMBtu/hr diesel
E07, EN 14	4 cycle, dual fuel, rich burn Engine 14 - 52.9 MMBtu/hr dual fuel and 53.8 MMBtu/hr diesel
E12, EN16	Emergency Engine 16 - 0.7 MMBtu/hr diesel

**Emission Limitation:**

The permittee shall not cause or permit the emission into the atmosphere gases containing more than 500 ppmv of SO<sub>2</sub> or more than 35 mg/m<sup>3</sup> of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period.

**Operational Limitation:**

The permittee shall not combust any diesel/fuel oil #2 containing sulfur in excess of 0.05 percent.

**Monitoring/Recordkeeping:**

1. The permittee shall retain fuel purchase receipts indicating the sulfur content of the diesel/fuel oil.
2. The permittee shall maintain records of any equipment malfunctions, using Attachment B or an equivalent form generated by the permittee.
3. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
4. 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 of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

2. The permittee shall report any deviations from the requirements of this permit condition in the semi-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 regulations or codes. Consult the appropriate sections in the CFR, the 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. 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 residential premises having not more than four dwelling units, provided that the refuse originates on the same premises.
  - b) Yard waste.
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 permittee fails to comply with the conditions or any provisions of the permit.
4. The permittee 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 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 the permittee fails to comply with the provisions or any condition of the open burning permit.
5. Reporting and Recordkeeping. 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 §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 §60.2245 - §60.2260, sources shall 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 §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 §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 §§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 18 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 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 PM emissions to go beyond the premises of origin in quantities that the PM may be found on surfaces beyond the property line of origin. The nature or origin of the PM 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 PM 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:**

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

**Recordkeeping:**

1. The permittee shall document all readings on Attachment A, or its equivalent, noting the following:
  - a) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
  - b) Whether equipment malfunctions contributed to an exceedance.
  - c) 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. 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 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 40 CFR Part 82, Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in 40 CFR Part 82, 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 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 CFR and 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 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) 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, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or 40 CFR 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 10 CSR 10-6.065(6)(C)7.A 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 semi-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(6)(C)1.D Risk Management Plan Under §112(r)**

1. 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 §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:
  - a) June 21, 1999;
  - b) Three years after the date on which a regulated substance is first listed under §68.130; or
  - c) 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)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 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 EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and 40 CFR 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 §303 of the Act or §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 EPA and the Air Pollution Control Program 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**

1. 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's 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.

2. §502(b)(10) changes. Changes that, under §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), recordkeeping, 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's 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 Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program 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 Air Pollution Control Program 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 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, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. 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 Robert E. Williams, General Manager. 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 permittee 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 permittee 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**

1. This permit may be reopened for cause if:
  - a) The Missouri Department of Natural Resources receives notice from the EPA that a petition for disapproval of a permit pursuant to §70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
  - b) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
  - c) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
    - i) The permit has a remaining term of less than three years;
    - ii) The effective date of the requirement is later than the date on which the permit is due to expire; or
    - iii) 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,
  - d) 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
  - e) 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(6)(E)1.C Statement of Basis**

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

## **VI. Attachments**

Attachments follow.





## STATEMENT OF BASIS

### 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 January 15, 2009;
2. 2011, 2010, 2009, 2008, and 2007 Emissions Inventory Questionnaires; and
3. U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

### Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program 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* is not applicable because the installation is in an ozone attainment area.

10 CSR 10-6.390 *Control of NO<sub>x</sub> Emissions From Large Stationary Internal Combustion Engines* is not applicable to the installation and has not been applied within this permit. The installation does operate large stationary internal combustion engines; however, the installation is Jasper counties which is not one of the applicable counties in 10 CSR 10-6.390(1).

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Process* is not applicable to the installation and has not been applied within this permit. E08 Space Heating as indirect heating is exempt from this regulation per 10 CSR 10-6.400(1)(B)6. E13 Cooling Towers as fugitive emissions are exempt from this regulation per 10 CSR 10-6.400(1)(B)7. E14 Water Treatment Plant Lime Silo is exempt from this regulation per 10 CSR 10-6.400(1)(B)12 as potential PM emissions are less than 0.5 lb/hr. E07 and E12 Engines do not meet the definition of *process weight* in 10 CSR 10-6.400(2)(A) which excludes liquids and gas used solely as fuels and introduced for the purposes of combustion.

10 CSR 10-6.405 *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating* is not applicable to the installation and has not been applied within this permit. 10 CSR 10-6.405 exempts installation's fueled only by natural gas and fuel oil #2 containing less than 1.2 percent sulfur.

### Construction Permits

All of the equipment at the installation is either grandfathered or was installed under a construction permit exemption. The installation has no construction permits from the Air Pollution Control Program.

### New Source Performance Standards Applicability

40 CFR Part 60, Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modifications Commenced After June 11, 1973, and Prior to May 19, 1978*, is not applicable to the installation and has not been applied within this permit. E01 15,000 gallon Cylinder Oil Tank 5 and 15,000 gallon Lube Oil Tank 6 were installed in 1964 prior to the

applicable dates of this standard. E02 1,000,000 gallon Fuel Oil Tank is not subject to the standard as fuel oil #2 is excluded from the definition of *petroleum liquids* in §60.111. E06 two 489 gallon, two 391 gallon, one 252 gallon, two 309 gallon, and two 516 gallon Fuel Oil Day Tanks are not applicable to this standard per §60.110(a) as they each have a capacity of less than 40,000 gallons.

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*, is not applicable to the installation and has not been applied within this permit. E11 1,000,000 gallon Fuel Oil Tank is not applicable to this standard per §60.110b as the tank exceeds 151 m<sup>3</sup> capacity and stores a liquid with a maximum true vapor pressure less than 15.0 kPa [AP-42 Table 7.1-2 lists the true vapor pressure of fuel oil #2 to be 0.016 psi (0.11 kPa) at 90°F].

40 CFR Part 60, Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* is applicable to E12, EN16 Emergency Engine 16 and has been applied within this permit (see Permit Condition 001). This regulation is not applicable to E07 Engines 6 – 14 as they were installed between 1946 and 1974, prior to the construction date of July 11, 2005, in §60.4200(a)(2).

#### **Maximum Achievable Control Technology Applicability**

40 CFR Part 63, Subpart Q – *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers* is not applicable to the installation and has not been applied within this permit. The installation does not meet the applicability requirements of §63.400(a) as the installation is not a major source of HAP.

40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* is applicable to all of the engines at the installation and has been applied within this permit (see Permit Conditions 002 and 003).

#### **National Emission Standards for Hazardous Air Pollutants Applicability**

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

#### **Compliance Assurance Monitoring Applicability**

40 CFR Part 64 - *Compliance Assurance Monitoring* applies to each 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 major source for greenhouse gases (GHG). Major stationary sources are required by the Clean Air Act to obtain Part 70 operating permits. While Part 70 permits generally do not establish new emissions limits, they consolidate applicable requirements, as defined in Missouri State Regulations 10 CSR 10-6.020(2)(A)23, into a comprehensive air permit. At the time of permit issuance, there were no applicable GHG requirements for this source.

### Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (tpy) <sup>1</sup>
CO	1,376.58
CO <sub>2e</sub>	269,946.92
NO <sub>x</sub>	5,183.02
PM	168.82
PM <sub>10</sub>	148.74
PM <sub>25</sub>	145.99
SO <sub>x</sub>	81.84
VOC	170.92
HAP	2.58
Benzene (71-43-2)	1.26
Hexane (110-54-3)	0.03

<sup>1</sup>Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted:

- The dual-fired engines 6, 7, and 9 – 14 were evaluated based upon their worst-case fuel for each pollutant.
- Emergency Engine 16 was evaluated at 500 hours of annual operation due to its emergency use only designation.

### Other Regulatory Determinations

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants* is applicable E14 Water Treatment Plant Lime Silo, E13 Cooling Towers, and E08 Space Heaters, but has not been applied within this permit. E14 and E08 have potential PM emissions of less than 0.5 lb/hr while being properly maintained and operated; therefore, they are assumed to be in compliance. E13 are subject to this regulation; however, the large amounts of water vapor emitted make it difficult to determine if/how much visible contaminant is being emitted. The Air Pollution Control Program is not requiring any monitoring, recordkeeping, or reporting for E08, E13, or E14 at this time, but should visible emissions become an issue, these requirements may be added in the future. All of the internal combustion engines at the installation (E07 and E12) are exempt from this regulation per 10 CSR 10-6.220(1)(A).

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is applicable to all of the internal combustion engines (E07 and E12) and has been applied within this permit (see Permit Conditions 004 and 005). E08 Space Heating is exempt from this regulation per 10 CSR 10-6.260(1)(A)2 as they exclusively combust pipeline grade natural gas.

### 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:

---

Alana L. Rugen, EIT  
Environmental Engineer II

Mr. Robert E. Williams  
Carthage Water & Electric Plant  
P.O. Box 644  
Carthage, MO 64836

Re: Carthage Water & Electric Plant, 097-0110  
Permit Number: **OP2013-040**

Dear Mr. Williams:

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.

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 30 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 do not hesitate to contact Alana Rugen at the 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:ark

Enclosures

c: Southwest Regional Office  
PAMS File: 2009-01-026

**MEMORANDUM**

DATE: April 26, 2013  
TO: 2009-01-026, Carthage Water & Electric Plant (097-0110)  
FROM: Alana L. Rugen, EIT  
Environmental Engineer II  
SUBJECT: Response to Comments

The draft Part 70 Operating Permit for Carthage Water & Electric Plant (097-0110) was placed on public notice as of March 26, 2013, for a 30-day comment period. The public notice was published on the Department of Natural Resources' Air Pollution Control Program's web page at: <http://www.dnr.mo.gov/env/apcp/PermitPublicNotices.htm> on Tuesday, March 26, 2013.

On April 24, 2013, the Air Pollution Control Program received comments from EPA Region 7's Mark A. Smith, Air Permitting and Compliance Branch Chief, the comments will be addressed within this Response to Comments document.

\*\*\*\*\*

**EPA Comment #1:**

Permit Condition 003 requires the permittee to meet applicable notification requirements in §63.6645 and in 40 CFR Part 63, Subpart A. The notification requirements in 40 CFR part 63, Subpart A and detailed in §63.9 require the permittee to submit notification to the appropriate Regional Office of the EPA as listed in §63.13. §63.13 shows the Region 7 EPA offices located at 901 N. 5<sup>th</sup> Street, Kansas City, Kansas 66101. However, the EPA Region 7 office is now located at 11201 Renner Boulevard, Lenexa, Kansas 66219.

EPA recommends MDNR include a notation to the permittee, in Permit Condition 003, which addresses this location change so that the applicable notifications are received by EPA in a timely manner.

**Missouri Air Pollution Control Program Response to EPA Comment #1:**

The Air Pollution Control Program has added the following note to Permit Condition 003 Compliance Date #2:

*Note: EPA Region 7 has recently relocated. The address for EPA Region 7 listed in §63.13 is their previous address. Notifications should be submitted to EPA Region 7's new address at 11201 Renner Boulevard, Lenexa, Kansas 66219.*

\*\*\*\*\*

**EPA Comment #2:**

The draft *Compliance Requirements* of **Permit Condition 001** include four requirements directed at the stationary CI internal combustion engine manufacturer. The inclusion of requirements for the CI internal combustion engine manufacturer in an operating permit written for a municipal utility seems out of place.

EPA recommends that MDNR modify the Compliance Requirements for Permit Condition 001 by removing the engine manufacturer requirements.

**Missouri Air Pollution Control Program Response to EPA Comment #2:**

The Air Pollution Control Program included these requirements as the permittee is required to purchase an engine certified to these standards; however, as EPA feels the inclusion is unnecessary, the requirements have been removed.

ALR/kjc