

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

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NOV 17 2006

CERTIFIED MAIL, 70052570000215846112  
RETURN RECEIPT REQUESTED

Mr. Larry V. Jones, Superintendent of Utilities  
Kennett Generating Plant  
401 South Anthony  
Kennett, MO 63857

Re: Kennett Generating Plant, 069-0063  
Permit Number: **OP2006-082**

Dear Mr. Jones:

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 you read and understand the requirements contained in your permit.

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

Sincerely,

AIR POLLUTION CONTROL PROGRAM



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

MJS:ssk

Enclosures

c: Ms. Tamara Freeman, US EPA Region VII  
Southeast Regional Office  
PAMS File: 2003-09-101



## PERMIT TO OPERATE

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

**Operating Permit Number:** OP2006-082

**Expiration Date:** NOV 16 2011

**Installation ID:** 069-0063

**Project Number:** 2003-09-101

**Installation Name and Address**

Kennett Generating Plant  
401 South Anthony  
Kennett, MO 63857  
Dunklin County

**Parent Company's Name and Address**

Kennett City Light, Gas and Water  
P.O. Box 40  
Kennett, MO 63857

**Installation Description:**

Kennett Generating Plant produces electricity for the surrounding community. The installation generates electricity through eleven (11) diesel generators ranging from 600 hp to 8725 hp and two (2) 4-stroke lean-burn reciprocating engines using natural gas. The installation also has two (2) Kewanee boilers that burn natural gas to help produce electricity. A 500,000-gallon petroleum storage tank and two (2) lubricating oil storage tanks (2,600 and 1,300 gallons each) are also located on the 12.6-acre installation.

NOV 17 2006

Effective Date

*Steven J. Jelen for JLK*

Director or Designee  
Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

Kennett Generating Plant produces electricity for the surrounding community. The installation generates electricity through eleven (11) diesel generators ranging from 600 hp to 8725 hp and two (2) 4-stroke lean-burn reciprocating engines using natural gas. The installation also has two (2) Kewanee boilers that burn natural gas to help produce electricity. A 500,000-gallon petroleum storage tank and two (2) lubricating oil storage tanks (2,600 and 1,300 gallons each) are also located on the 12.6-acre installation.

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2005	0.35	0.27	11.85	1.34	1.39	-	0.11
2004	0.18	0.11	9.91	1.15	1.18	-	0.10
2003	0.26	0.24	17.29	1.55	2.86	-	0.07
2002	0.17	0.17	12.40	1.18	1.70	-	0.07
2001	0.30	0.01	24.91	2.07	4.06	-	0.10

### EMISSION UNITS WITH LIMITATIONS

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

Emission Unit #	Description of Emission Unit	Emission Point Number
EU0001	600 hp Diesel only Generator; Installed 1942	EP01
EU0002	600 hp Diesel only Generator; Installed 1942	EP01
EU0003	1200 hp Diesel only Generator; Installed 1945	EP01
EU0004	3500 hp Diesel/N.G. Generator; Installed 1955	EP01 & EP04
EU0005	2000 hp Diesel only Generator; Installed 1949	EP01
EU0006	2800 hp Diesel/N.G. Generator; Installed 1951	EP01 & EP04
EU0007	3500 hp Diesel/N.G. Generator; Installed 1960	EP01 & EP04
EU0008	4350 hp Diesel/N.G. Generator; Installed 1962	EP01 & EP04
EU0009	8725 hp Diesel/N.G. Generator; Installed 1964	EP01 & EP04
EU0010	8725 hp Diesel/N.G. Generator; Installed 1973	EP01 & EP04
EU0011	8725 hp Diesel/N.G. Generator; Installed 1975	EP01 & EP04
EU0012	8800 hp N.G. Generator; Installed 2001	EP15
EU0013	8800 hp N.G. Generator; Installed 2001	EP16
EU0014	Burnham Natural Gas Boiler – 1.611 MMBtu/hr; Installed 2000	EP13
EU0015	Burnham Natural Gas Boiler – 1.611 MMBtu/hr; Installed 1999	EP14
EU0016	Eight (8) natural gas fired space heaters (indirect heating); Three (3) - 90,000 Btu/hr, One (1) - 30,000 Btu/hr, One (1) – 75,000 Btu/hr, One (1) – 60,000 Btu/hr, One (1) – 200,000 Btu/hr, and One (1) – 225,000 Btu/hr	EP17

### 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.

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Description of Emission Source

500,000 gallon petroleum storage tank; Installed 1973

**DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

- 1) Construction Permit Number 2000-11-010

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## 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.

<p style="text-align: center;"><b>Permit Condition PW001</b></p>
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10 CSR 10-6.360

**Control of NO<sub>x</sub> Emissions From Electric Generating Units & Non-Electric Generating Boilers  
Voluntary Limitation**

**Operational Limitation:**

The permittee shall only burn natural gas or fuel oil in all emission units located at this installation in order to qualify for the exemption under 10 CSR 10-6.360 *Control of NO<sub>x</sub> Emissions From Electric Generating Units and Non- Electric Generating Boilers*.

**Monitoring/Recordkeeping:**

Documentation supporting the fuel used is natural gas and/or fuel oil and fuel usage data.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

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### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

<b>EU0001 through EU00013</b>			
<b>INTERNAL COMBUSTION ENGINES WITH GENERATORS</b>			
Emission Unit	Description	Manufacturer/Model #	EQ Reference #
EU0001	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 4.4 MMBtu/hr; 600 hp Diesel only; Installed 1942	Fairbanks-Morse/33F12 SN#824077	EP01
EU0002	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 4.4 MMBtu/hr; 600 hp Diesel only; Installed 1942	Fairbanks-Morse/33F12 SN#824078	EP02
EU0003	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 9.42 MMBtu/hr; 1200 hp Diesel only; Installed 1945	Fairbanks-Morse/33F16 SN#864214	EP03
EU0004	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 25.0 MMBtu/hr; 3500 hp Diesel/N.G.; Installed 1955	Fairbanks-Morse/31AD18 SN#368162	EP04
EU0005	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 15.4 MMBtu/hr; 2000 hp Diesel only; Installed 1949	Fairbanks-Morse/33F16 SN#896063	EP05
EU0006	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 20.0 MMBtu/hr; 2800 hp Diesel/N.G.; Installed 1951	Fairbanks-Morse/31AD18 SN#939292	EP06
EU0007	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 25.0 MMBtu/hr; 3500 hp Diesel/N.G.; Installed 1960	Fairbanks-Morse/31AD18 SN#968759	EP07
EU0008	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 30.38 MMBtu/hr; 4350 hp Diesel/N.G.; Installed 1962	Nordberg/FSG13 16HSC SN#10300871	EP08
EU0009	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 62.5 MMBtu/hr; 8725 hp Diesel/N.G.; Installed 1964	Nordberg/TSGL- 2112-SC SN#2012-1150	EP09
EU0010	Reciprocating Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 62.5 MMBtu/hr; 8725 hp Diesel/N.G.; Installed 1973	Nordberg/TSGL- 2112-SC SN#2012-1286	EP10
EU0011	Dual Fuel Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 62.5 MMBtu/hr; 8725 hp Diesel/N.G.; Installed 1975	Nordberg/TSGL- 2112-SC SN#2012-1355	EP11
EU0012	Lean Burn Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 57.71 MMBtu/hr; 8800 hp N.G.; Installed 2001	Wartsila NSD/18V34SG SN#21060	EP15
EU0013	Lean Burn Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 57.51 MMBtu/hr; 8800 hp N.G.; Installed 2001	Wartsila NSD/18V34SG SN#21061	EP16

**Permit Condition (EU0001 through EU0013)-001**  
**10 CSR 10-6.260**  
**Restriction of Emission of Sulfur Compounds**

**Emission Limitation:**

- 1) No person shall cause or permit emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.
- 3) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

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

**Operational Limitation/Equipment Specifications:**

The emission unit shall be limited to fuel with a sulfur content of no more than 0.5% sulfur by weight.

**Monitoring:**

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. The installation shall maintain records of the amount of fuel burned (natural gas or fuel oil) and verify the sulfur content (see Attachments A & B). Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) If the requirements of condition 1 cannot be met, then compliance to the emission limitations shall be determined by source testing. The heating value of the fuel shall be determined as specified in 10 CSR 10-6.040(2). Source testing to determine compliance shall be performed as specified in 10 CSR 10-6.030(6). The actual heat input shall be determined by multiplying the heating value of the fuel by the amount of fuel burned during the source test period.
- 3) Other methods approved by the permitting agency in advance may be used to verify compliance.

**Recordkeeping:**

- 1) If monitoring option 1 is used to verify compliance, then the permittee shall maintain records on the premises of the analysis of all fuel used which shows weight percentage of sulfur in the fuel. Fuel

purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.

- 2) Attachments A & B contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 3) If monitoring option 2 is used to verify compliance, then the permittee shall maintain records on the premises of all source testing performed.
- 4) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

**Reporting:**

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of the emission limit or sulfur content limit established by 10 CSR 10-6.260, or any malfunction which causes an exceedance.

**Permit Condition (EU0001 through EU0013)-002**

**10 CSR 10-6.350**

**Emission Limitations and Emissions Trading of Oxides of Nitrogen<sup>1</sup>**

**Emission Limitation:**

- 1) In order to qualify for the exemption under 10 CSR 10-6.350(1)(B)1., the permittee shall not emit more than 25 tons of NO<sub>x</sub> from emission units EU0001 through EU0013 during the control period.<sup>2</sup>
- 2) Compliance with this rule shall not relieve the permittee of the responsibility to comply fully with applicable provisions of the Air Conservation Law and rules or any other requirements under local, state or federal law. Specifically, compliance with this rule shall not violate the permit conditions previously established under 10 CSR 10-6.060 or 10 CSR 10-6.065.

**Monitoring/Recordkeeping:**

- 1) Any gas- or oil-fired unit that qualifies for the low emitter exemption in 10 CSR 10-6.350(1)(B)1 or the low hours of operation exemption in 10 CSR 10-6.350(1)(B)2 shall:
  - a) Install, certify, operate, maintain, and quality assure a NO<sub>x</sub> and diluent CEMS;
  - b) Install, certify, operate, maintain, and quality assure fuel metering equipment pursuant to 40 CFR part 75, Appendix D and shall establish a NO<sub>x</sub>-to-load curve pursuant to 40 CFR part 75, Appendix E; or
  - c) Estimate or measure NO<sub>x</sub> emissions pursuant to the requirements in 40 CFR part 75, section 75.19.
- 2) The permittee shall maintain a rolling total of NO<sub>x</sub> emissions during the control period (May 1 of a calendar year through September 30 of the same calendar year).

**Reporting:**

If the exemption limit above is exceeded, the exemption shall not apply and the permittee must notify the staff director or designee within 30 days.

<sup>1</sup> The provisions of 10 CSR 10-6.350 (filed on February 15, 2000) are in the Missouri State Implementation Plan. The provisions of 10 CSR 10-6.350 (filed on February 15, 2000) will be enforceable until the provisions of 10 CSR 10-6.350 (amended on December 4, 2002) are adopted in the Missouri State Implementation Plan. When the provisions of 10 CSR 10-6.350 (amended on December 4, 2002) are adopted in the Missouri State Implementation Plan, the provisions of 10 CSR 10-6.350 (filed on February 15, 2000) will expire.

<sup>2</sup> The period beginning May 1 of a calendar year and ending on September 30 of the same calendar year.

<b>EU0012 and EU00013</b>			
<b>LARGE STATIONARY INTERNAL COMBUSTION ENGINES</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/Model#</b>	<b>EIQ Reference #</b>
EU0012	Lean Burn Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 57.71 MMBtu/hr; 8800 hp N.G.; Installed 2001	Wartsila NSD/18V34SG SN#21060	EP15
EU0013	Lean Burn Internal Combustion Engine with Generator; Maximum Hourly Design Rate (MHDR) = 57.51 MMBtu/hr; 8800 hp N.G.; Installed 2001	Wartsila NSD/18V34SG SN#21061	EP16

**Permit Condition (EU0012 and EU0013)-001**

10 CSR 10-6.390<sup>2</sup>

**Control of NOx Emission From Large Stationary Internal Combustion Engines**

**Emission Limitation:**

- A) An owner or operator of a large stationary internal combustion engine meeting the applicability of paragraph (1)(A)1. of this rule shall calculate the allowable NOx emission rate for each applicable engine using:

$$ER = (NO_{x\ act}/UR) \times 1.102 \times 10^{-6} \times 0.1$$

where,

ER = the allowable emission rate for each engine in grams per horsepower-hour;

NO<sub>x act</sub> = the highest actual NOx emissions, reported in tons per control period, for the period from May 1 through September 30 for one of the years 1995, 1996, or 1997 based on the best available emission information for each engine; and

UR = the utilization rate in horse-powerhours during the same period as NOx act

- B) An owner or operator of a large stationary internal combustion engine meeting the applicability of paragraph (1)(A)2. of this rule shall not operate an engine to exceed the permitted emission rate or the following emission rate, whichever is more stringent:

1. For rich-burn SI engines 3.0 grams per horsepower-hour; or
2. For lean-burn SI engines 3.0 grams per horsepower-hour;

- C) An owner or operator of a large stationary internal combustion engine may choose to establish a facility-wide NOx emissions cap in lieu of compliance with subsection (3)(A) of this rule. If the owner or operator elects to comply with the requirements of subsection (3)(A), the owner or operator shall submit a commitment in writing no later than May 1, 2005, to the director stating the intent to comply with that subsection. If the owner or operator commits to comply with this subsection rather than subsection (3)(A) of this rule, the owner or operator shall submit the following to the director:

- 1) The facility-wide NOx emissions from the year of data that would be used in paragraph (3)(A)1. of this rule on a unit-by unit basis;
- 2) The number of tons of NOx emission reductions that would be required in paragraph (3)(A)1. of this rule on a unit-by-unit basis;
- 3) A detailed inventory of all engines being used to comply with the NOx emission cap including the:
  - a) Uncontrolled emission rate of all engines at the facility;
  - b) Controlled emission rate for all engines being controlled under the NOx emissions cap;

<sup>2</sup> 10 CSR 10-6.390 is state-only requirement.

- 
- c) Capacity of each engine at the facility; and
  - d) Utilization rate of each engine at the facility; and
- 4) The controlled NO<sub>x</sub> emissions from the facility during the control period, May 1 through September 30.
- (D) To meet the requirements of subsection (3)(A) or (3)(B) of this rule, the owner or operator may take into account as a portion of the required NO<sub>x</sub> reductions, physical and quantifiable measures to increase energy efficiency, reduce energy demand, or increase use of renewable fuels.

**Monitoring Requirements:**

- 1) Any owner or operator meeting the applicability of section (1) of this rule shall not operate such equipment unless it is equipped with one of the following:
- a) A continuous emissions monitoring system (CEMS), which meets the applicable requirements of 40 CFR part 60, subpart A, Appendix B, and complies with the quality assurance procedures specified in 40 CFR part 60, Appendix F. The CEMS shall be used to demonstrate compliance with the applicable emission limit; or
  - b) A calculational and recordkeeping procedure based upon actual NO<sub>x</sub> emissions testing and correlations with operating parameters. The installation, implementation and use of such an alternate calculational and recordkeeping procedure must be approved by the director and EPA and incorporated into the SIP in writing prior to implementation.

The CEMS or approved alternate monitoring procedure shall be operated and maintained in accordance with an on-site CEMS or alternate monitoring plan approved by the director.

**Excess Emissions During Start-Up, Shutdown, or Malfunction:**

If the owner or operator provides notice of excess emissions pursuant to state rule 10 CSR 10-6.050(3)(B), the director will determine whether the excess emissions are attributable to start-up, shutdown or malfunction conditions, pursuant to rule 10 CSR 10-6.050(3)(C). If the director determines that the excess emissions are attributable to such conditions, and if such excess emissions cause a kiln to exceed the applicable emission limits in this rule, the director will determine whether enforcement action is warranted, as provided in rule 10 CSR 10-6.050(3)(C). If the director determines that the excess emissions are attributable to a start-up, shutdown, or malfunction condition and does not warrant enforcement action, those emissions would not be included in the calculation of ozone season NO<sub>x</sub> emissions.

**Reporting:**

The owner or operator subject to this rule shall comply with the following requirements:

- 1) The owner or operator shall submit to the director the identification number and type of each unit subject to this rule, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with this rule before May 1, 2007;
- 2) The owner or operator shall submit an annual report documenting for each controlled unit the total NO<sub>x</sub> emissions from May 1 through September 30 of each year to the director by November 1 of that year, beginning in 2007; and
- 3) The owner or operator of a unit subject to this rule and operating a CEMS shall submit an excess emissions monitoring systems performance report, in accordance with the requirements of 40 CFR 60.7(c) and 60.13.

**Recordkeeping:**

Any owner or operator of a unit subject to this rule shall maintain all records necessary to demonstrate compliance with this rule for a period of five (5) years at the plant at which the subject unit is located. The records shall be made available to the director upon request. The owner or operator shall maintain records of the following information for each day of the control period the unit is operated:

- 1) The identification number of each unit and the name and address of the plant where the unit is located for each unit subject to the requirements of this rule;
- 2) The calendar date of record;
- 3) The number of hours the unit is operated during each day including start-ups, shutdowns, malfunctions, and the type and duration of maintenance and repair;
- 4) The date and results of each emissions inspection;

- 5) A summary of any emissions corrective maintenance taken;
- 6) The results of all compliance tests; and
- 7) If a unit is equipped with a CEMS—
  - a) The identification of time periods during which NOx standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances; and
  - b) The identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

**Permit Condition (EU0012 and EU0013)-2**

10 CSR 10-6.060 Construction Permits Required  
**Construction Permit Number 122000-007**

**Emission Limitation:**

- 1) The permittee shall not emit nitrogen oxides (NOx) from EU0012 and EU0013 in excess of forty (40) tons in any consecutive 12-month period.
- 2) The permittee shall not emit formaldehyde from EU0012 and EU0013 above ten (10) tons in any consecutive 12-month period.

**Operational Limitation:**

Control of CO shall be maintained at all times when the two reciprocating engines EU0012 and EU0013 are in operation.

**Monitoring/Recordkeeping:**

- 1) Attachment C and Attachment D or equivalent forms approved by the Director shall be used for recordkeeping.
- 2) The permittee shall maintain all records required by
- 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:**

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of the emission limitations, or any malfunction which causes an exceedance.

**EU0014 and EU0015  
 BOILERS**

Emission Unit	Description	Manufacturer/ Model #	EIQ Reference #
EU0014	Natural Gas Fired Boiler; Maximum Hourly Design Rate (MHDR) = 1.611 MMBtu/hr; installed 2000	Burnham/4FW-154-40-G-GP SN#522899	EP13
EU0015	Natural Gas Fired Boiler; Maximum Hourly Design Rate (MHDR) = 1.611 MMBtu/hr; installed 1999	Burnham/4FW-154-40-G-GP SN#560042	EP14

**Permit Condition (EU0014 and EU0015)-001**

10 CSR 10-3.060

**Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating**

**Emission Limitation:**

The permittee shall not emit particulate matter in excess of 0.81 pounds per million BTU of heat input.

**Operation Limitation/Equipment Specifications:**

This emission unit shall be limited to burning pipeline grade natural gas.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain on the premises of the installation calculations demonstrating compliance with this rule (See Attachment E).
- 2) The calculation shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

**Permit Condition (EU0014 and EU0015)-002**

10 CSR 10-6.220

**Restriction of Emission of Visible Air Contaminants**

**Emission Limitation:**

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

**Monitoring:**

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

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment F), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions. (see Attachment G)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment H)
- 4) Attachments F, G and H contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.
- 6) All records shall be maintained for five years.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

<b>EU0016 SPACE HEATERS</b>			
Emission Unit	Description	Manufacturer/Model #	EIQ Reference #
EU0016	Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 90,000 Btu/hr; Installed 1989	Dayton/3E134C S/N 9050880108	EP17
	Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 90,000 Btu/hr; Installed 1991	Dayton/3E134C S/N 111259000000349	
	Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 90,000 Btu/hr; Installed 1988	Dayton/3E134C S/N 8111480381	
	Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 30,000 Btu/hr; Installed 1990	Dayton model 3E132C <input checked="" type="checkbox"/> S/N 0081390000000258	
	Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 75,000 Btu/hr; Installed 1989	Dayton model 3E227A <input type="checkbox"/> S/N Q8943216	
	Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 60,000 Btu/hr; Installed 1986	Dayton model 3E133C <input checked="" type="checkbox"/> S/N 9020680031 <input type="checkbox"/>	
	Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 200,000 Btu/hr; Installed 1986	Dayton model 3E232 S/N C8634563	
	Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 225,000 Btu/hr; Installed 1986	Dayton model 3E233 <input checked="" type="checkbox"/> S/N C8651843	

**Permit Condition EU0016-001**

10 CSR 10-3.060

**Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating**

**Emission Limitation:**

The permittee shall not emit particulate matter in excess of 0.81 pounds per million BTU of heat input.

**Operation Limitation/Equipment Specifications:**

This emission unit shall be limited to burning pipeline grade natural gas.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain on the premises of the installation calculations demonstrating compliance with this rule (See Attachment E).
- 2) The calculation shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

**Reporting:**

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

**Permit Condition EU0016 -002**

10 CSR 10-6.220

**Restriction of Emission of Visible Air Contaminants**

**Emission Limitation:**

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

**Monitoring:**

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-

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- b) Observations must be made once every two (2) weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
  - 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (see Attachment F), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions. (see Attachment G)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (see Attachment H)
- 4) Attachments F, G and H contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.
- 6) All records shall be maintained for five years.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
  - 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.
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## IV. Core Permit Requirements

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.

### **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 (a.) information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph (a.) list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file for renewal of this operating permit no sooner than eighteen months, nor later than six months, prior to the expiration date of this operating permit. The permittee shall retain the most current operating permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

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

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee 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 to satisfy the requirements of the Federal Clean Air Act, Title V.
- 3) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

#### **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**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

#### **10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

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

#### **10 CSR 10-3.030 Open Burning Restrictions**

- 1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- 2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- 3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
  - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
  - b) The schedule of burning operations;
  - c) The exact location where open burning will be used to dispose of the trade wastes;
  - d) Reasons why no method other than open burning is feasible; and
  - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- 4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Kennett Generating Station from the provisions of any other law, ordinance or regulation.
- 5) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

### **10 CSR 10-3.090 Restriction of Emission of Odors**

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 requirement is not federally enforceable.**

### **10 CSR 10-6.100, Alternate Emission Limits**

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

### **10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants 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 10-6.250, Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements**

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

### **Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.

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- d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
  - 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
    - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
    - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
    - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
    - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
    - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
    - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
  - 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
  - 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

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

#### **10 CSR 10-6.280 Compliance Monitoring Usage**

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

- iii) 10 CSR 10-6.070, "New Source Performance Standards";
- iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
- b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

## General Permit Requirements

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

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

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

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

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program, 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 must identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit; this includes deviations or Part 64 exceedances.
  - d) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.
  - e) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if you wish 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 that you can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
    - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit.
- iv) These supplemental reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- f) 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.
- g) The permittee may request confidential treatment of information submitted in any report of deviation.

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

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

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

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

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, will 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. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

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

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1<sup>st</sup>, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5<sup>th</sup> Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification,
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation,
  - c) Whether compliance was continuous or intermittent,
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period, and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

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

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7. shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,

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

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

- 1) Except as noted below, The permittee may make any change in its permitted 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 permitting authority and to the administrator no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under paragraph (6)(B)3. of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
  - d) The permit shield shall not apply to these changes.

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

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

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

This permit may be reopened with cause if:

- 1) The Missouri Department of Natural Resources (MDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,

- 
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
    - a) The permit has a remaining term of less than three years;
    - b) The effective date of the requirement is later than the date on which the permit is due to expire; or
    - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
  - 3) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

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

This permit is accompanied by a statement setting forth the legal and factual basis for the draft 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.

**Attachment A**

This attachment or an equivalent may be used for the recordkeeping requirements of Permit Conditions (EU0001 through EU0013) – 001.

For \_\_\_\_\_ Month of \_\_\_\_\_ Year.

Date	EU0001 – EU0003 and EU0005		EU0004, EU0006-EU0011		Date	EU0001 – EU0003 and EU0005		EU0004, EU0006-EU0011		EU0012 and EU0013	
	Diesel		Diesel	N.G.		N.G.	Diesel		Diesel	N.G.	N.G.
1					16						
2					17						
3					18						
4					19						
5					20						
6					21						
7					22						
8					23						
9					24						
10					25						
11					26						
12					27						
13					28						
14					29						
15					30						
					31						

**Attachment B**

This attachment or an equivalent may be used for the recordkeeping requirements of Permit Conditions (EU0001 through EU0013) – 001.

Sulfur content of fuel oil (based on fuel supplier certification): \_\_\_\_\_ % Sulfur

Sulfur content of natural gas (based on fuel supplier certification): \_\_\_\_\_ % Sulfur

For Month of \_\_\_\_\_ Year \_\_\_\_\_

Emission Unit	Fuel Usage For Month	Emission Factors		Monthly Emissions (tons)	
		SO <sub>x</sub>	NO <sub>x</sub>	SO <sub>x</sub>	NO <sub>x</sub>
EU0001 – EU0003 and EU0005 (diesel)		**1.01S <sub>1</sub> lb/MMBtu	Uncontrolled: 3.2 lb/MMBtu  *Controlled: 1.9 lb/MMBtu		
EU0004, EU0006-EU0011 (N.G. and diesel)		**0.05S <sub>1</sub> + 0.89S <sub>2</sub> lb/MMBtu	2.7 lb/MMBtu		
EU0012 and EU0013 (N.G.)		5.88 E-04 lb/MMBtu	90 - 105% Load: 4.08 E+00 lb/MMBtu  <90% Load: 8.47 E-01 lb/MMBtu		

\* Controlled NO<sub>x</sub> is by ignition timing retard.

\*\*S<sub>1</sub> = % sulfur in fuel oil; S<sub>2</sub> = % sulfur in natural gas. For example, if sulfur content is 1.5%, then S = 1.5.

To Calculate Monthly Emissions (tons):

Diesel Usage (gal) \* Density Diesel (lb/gal) / Diesel Heating Value (Btu/lb) / 1,000,000 \* Emission Factor / 2000

Natural Gas Usage (scf) \* NG Heating Value (Btu/scf) / 1,000,000 \* Emission Factor / 2000







## Attachment E

This attachment may be used to demonstrate compliance with 10 CSR 10-3.060, *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*

Emission Limit for EU0010 through EU0013 and EU0015 (new, i.e. installed after 4/3/1971):

$$E = 1.31(Q)^{-0.338} = 1.31(4.08)^{-0.338} = 0.81 \text{ lb/MMBtu}$$

where Q is the total heat input of all indirect heating sources at the installation.

The following equipment was used to obtain the total heat input (Q) for the above equation:

Equipment	Heat Input (mmBtu/hr)
EU0014 Kewanee Natural Gas Boiler	1.611
EU0015 Kewanee Natural Gas Boiler	1.611
EU0016 Natural gas fired space heater	0.09
EU0016 Natural gas fired space heater	0.09
EU0016 Natural gas fired space heater	0.09
EU0016 Natural gas fired space heater	0.03
EU0016 Natural gas fired space heater	0.075
EU0016 Natural gas fired space heater	0.06
EU0016 Natural gas fired space heater	0.2
EU0016 Natural gas fired space heater	0.225
<b>TOTAL</b>	<b>4.08</b>

The following table demonstrates compliance with the emission limit:

Emission Rate (lb/mmBtu) = MHDR \* Emission Factor / Heat Capacity (mmBtu/hr)

Emission Unit #	Heat Capacity (mmBTU/hr)	PM Emission Factor	Emission Factor Reference	Potential Emission Rate	Emission Rate Limit
EU0014 (N.G.)	1.611	0.0075	AP-42 Table 1.4-2	0.01 (lb/mmBtu)	0.81 (lb/mmBtu)
EU0015 (N.G.)	1.611	0.0075	AP-42 Table 1.4-2	0.013 (lb/mmBtu)	0.81 (lb/mmBtu)
EU0016 (N.G.)	0.09	0.0075	AP-42 Table 1.4-2	$6.75 \times 10^{-4}$ (lb/mmBtu)	0.81 (lb/mmBtu)
EU0016 (N.G.)	0.09	0.0075	AP-42 Table 1.4-2	$6.75 \times 10^{-4}$ (lb/mmBtu)	0.81 (lb/mmBtu)
EU0016 (N.G.)	0.09	0.0075	AP-42 Table 1.4-2	$6.75 \times 10^{-4}$ (lb/mmBtu)	0.81 (lb/mmBtu)
EU0016 (N.G.)	0.03	0.0075	AP-42 Table 1.4-2	$2.25 \times 10^{-4}$ (lb/mmBtu)	0.81 (lb/mmBtu)
EU0016 (N.G.)	0.075	0.0075	AP-42 Table 1.4-2	$5.63 \times 10^{-4}$ (lb/mmBtu)	0.81 (lb/mmBtu)
EU0016 (N.G.)	0.06	0.0075	AP-42 Table 1.4-2	$4.50 \times 10^{-4}$ (lb/mmBtu)	0.81 (lb/mmBtu)
EU0016 (N.G.)	0.2	0.0075	AP-42 Table 1.4-2	0.002 (lb/mmBtu)	0.81 (lb/mmBtu)
EU0016 (N.G.)	0.225	0.0075	AP-42 Table 1.4-2	0.002 (lb/mmBtu)	0.81 (lb/mmBtu)





### Attachment H

This attachment may be used to help meet the recordkeeping requirements of Permit Conditions: (EU0014 and EU0015)-002 and (EU0016 and EU0017)-002.

Method 9 Opacity Emissions Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY				
Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from \_\_\_\_\_ to \_\_\_\_\_ % opacity.

Was the emission unit in compliance at the time of evaluation?

YES     NO    \_\_\_\_\_  
 Signature of Observer

## 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 March 15, 2004
- 2) 2004 Emissions Inventory Questionnaire, received March 17, 2005;
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

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

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

None

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

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

10 CSR 10-6.220 *Restriction of Emissions of Visible Air Contaminants* does not apply to EU0001 through EU00013 because the rule exempts internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas.

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* does not apply to EU0014 and EU0015 (Boilers) because the rule exempts combustion equipment that uses exclusively pipeline grade natural gas.

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes* does not apply to EU0001 through EU00016 because the rule exempts the burning of fuel for indirect heating.

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes* does not apply to the direct heating natural gas fired space heaters [three (3) units] at this installation because it falls under the following exemption:

“Emission units that at maximum design capacity have a potential to emit less than one-half (0.5) pounds per hour of particulate matter”.

MHDR = 900,000 Btu/hr

EF (AP-42, Table 1.4-2) = 7.6 lb/10<sup>6</sup> scf = 0.0075 lb/MMBtu

Emission rate = 0.90 MMBtu/hr \* 0.0075 lb/MMBtu = 0.0068 lb/hr

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*, does not apply to storage vessels with a capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa). The permittee stores only #2 fuel oil in the tanks at this installation.

**Construction Permit Revisions**

None.

**NSPS Applicability**

None

**MACT Applicability**

None

**NESHAP Applicability**

None

**CAM Applicability**

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

The CAM rule applies to each pollutant specific emission unit that meets all of the following:

- Be subject to an emission limitation or standard, and
- Use a control device to achieve compliance, and
- Have 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.

**Other Regulatory Determinations**

In order to qualify for the exemption in 10 CSR 10-6.360 *Control of NOx Emissions From Electric Generating Units and Non-Electric Generating Boilers*, the permittee must take a federally enforceable emission limitation (via the Part 70 Operating Permit) that restricts the unit to burning only natural gas or fuel oil. Therefore, it was necessary to include a voluntary limitation in PW001.

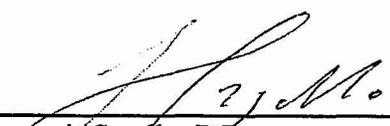
**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

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

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

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

Prepared by:

  
\_\_\_\_\_  
Slawomir Szydlo, P.E.  
Environmental Engineer