

STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

www.dnr.mo.gov

SEP 6 2007

CERTIFIED MAIL: 7005 2570 0002 1582 7074  
RETURN RECEIPT REQUESTED

Mr. Alan Winders  
City Administrator  
City of Vandalia Power Plant  
600 West State Street  
Vandalia, MO 63382

Re: City of Vandalia Power Plant  
Installation ID: 007-0041, Permit Number: OP2007-041

Dear Mr. Winders:

Enclosed with this letter is your intermediate operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations, cited in this document, is necessary for continued compliance. It is very important 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 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the Administrative Hearing Commission.

If you have any questions or need additional information regarding this permit, please contact Ms. Jill Wade at the Missouri Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by telephone at (573) 751-4817. Thank you for your time and consideration.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



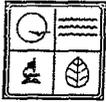
Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS: jwn

Enclosure

c: Ms. Tamara Freeman, U.S. EPA Region VII  
Northeast Regional Office  
PAMS File: 2003-05-055

  
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## INTERMEDIATE STATE PERMIT TO OPERATE

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

**Intermediate Operating Permit Number:** OP2007-041  
**Expiration Date:** SEP 3 2012  
**Installation ID:** 007-0041  
**Project Number:** 2003-05-055

**Installation Name and Address**

City of Vandalia Power Plant  
600 West State Street  
Vandalia, MO 63382  
Audrain County

**Parent Company's Name and Address**

City of Vandalia  
200 East Park Street  
Vandalia, MO 63382

**Installation Description:**

The City of Vandalia operates eight (8) diesel fuel internal combustion engines for the generation of electricity at the Vandalia Power Plant. The facility has accepted a voluntary, federally enforceable NO<sub>x</sub> emission limit of no more than 99.99 tons of NO<sub>x</sub> in any consecutive 12-month period to qualify for an Intermediate State Operating Permit. The NO<sub>x</sub> limitation effectively limits the amount of fuel oil combusted at this facility and therefore will automatically limit emissions of CO to no more than 99.99 tons in any consecutive 12-month period.

SEP 4 2007

Effective Date

  
\_\_\_\_\_  
Director or Designee  
Department of Natural Resources

## Table of Contents

<b>I. INSTALLATION DESCRIPTION AND EQUIPMENT LISTING .....</b>	<b>3</b>
INSTALLATION DESCRIPTION.....	3
EMISSION UNITS WITH LIMITATIONS .....	3
EMISSION UNITS WITHOUT LIMITATIONS.....	3
DOCUMENTS INCORPORATED BY REFERENCE.....	3
<b>II. PLANT WIDE EMISSION LIMITATIONS .....</b>	<b>4</b>
PERMIT CONDITION PW001 .....	4
10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s).....	4
10 CSR 10-6.060 Construction Permits Required .....	4
Construction Permit #0796-012, Issued June 11, 1996 .....	4
<b>III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS .....</b>	<b>5</b>
EU0010 AND EU0020 – ENGINES #1 AND #8.....	5
PERMIT CONDITION (EU0010 and EU0020)-001.....	5
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds.....	5
EU0030 THROUGH EU0080 – ENGINES #2, #3, #4, #5, #9 AND #10.....	6
PERMIT CONDITION (EU0030 and EU0040)-001.....	6
10 CSR 10-6.060 Construction Permits Required .....	6
Construction Permit #0792-018, Issued July 13, 1992 .....	6
PERMIT CONDITION (EU0030 and EU0060)-002.....	7
10 CSR 10-6.270 Acid Rain Source Permits Required .....	7
PERMIT CONDITION (EU0030 through EU0080)-003 .....	8
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds.....	8
<b>IV. CORE PERMIT REQUIREMENTS .....</b>	<b>10</b>
<b>V. GENERAL PERMIT REQUIREMENTS .....</b>	<b>16</b>
<b>VI. ATTACHMENTS .....</b>	<b>20</b>
ATTACHMENT A.....	21
ATTACHMENT B .....	22
ATTACHMENT C .....	23
Environmental Engineer.....	8
2003-05-055 .....	10

## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

The City of Vandalia operates eight (8) diesel fuel internal combustion engines for the generation of electricity at the Vandalia Power Plant. The facility has accepted a voluntary, federally enforceable NO<sub>x</sub> emission limit of no more than 99.99 tons of NO<sub>x</sub> in any consecutive 12-month period to qualify for an Intermediate State Operating Permit. The NO<sub>x</sub> limitation effectively limits the amount of fuel oil combusted at this facility and therefore will automatically limit emissions of CO to no more than 99.99 tons in any consecutive 12-month period.

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)
2006	0.05	0.05	0.72	0.06	0.16	---	---
2005	---	---	---	---	---	---	---
2004	---	---	---	---	---	---	---
2003	0.08	0.07	1.12	0.09	0.24	---	---
2002	---	---	---	---	---	---	---
2001	---	---	---	---	---	---	---

### EMISSION UNITS WITH LIMITATIONS

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

Emission Unit #	Description of Emission Unit
EU0010	Engine #1
EU0020	Engine #8
EU0030	Engine #2
EU0040	Engine #3
EU0050	Engine #4
EU0060	Engine #5
EU0070	Engine #9
EU0080	Engine #10

### EMISSION UNITS WITHOUT LIMITATIONS

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

#### Description of Emission Source

Two (2) 10,000-gallon fuel oil #2 storage tanks, manufactured before 1982

### DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) APCP Construction Permit #0792-018, issued July 13, 1992
- 2) APCP Construction Permit #0796-012, issued June 11, 1996

## 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 this permit is issued.

### PERMIT CONDITION PW001

10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)  
10 CSR 10-6.060 Construction Permits Required  
Construction Permit #0796-012, Issued June 11, 1996

#### Emission Limitation:

- 1) The permittee shall discharge into the atmosphere from the entire installation no more than 99.99 tons of nitrogen oxide (NO<sub>x</sub>) in any consecutive 12-month period. This voluntary limit supersedes the less restrictive NO<sub>x</sub> emission limit in construction permit #0796-012. [Voluntary Limitation]
- 2) The permittee shall discharge into the atmosphere from the entire installation no more than 99.99 tons of carbon monoxide (CO) in any consecutive 12-month period. This voluntary limit supersedes the less restrictive CO emission limit in construction permit #0796-012. [Voluntary Limitation]

#### Recordkeeping:

The City of Vandalia shall record the calculated monthly NO<sub>x</sub> and CO emission and the sum of the most recent 12-months of NO<sub>x</sub> and CO emissions (in tons) from this facility using the attached tables "Monthly Carbon Monoxide Emission Tracking Record" and "Monthly Nitrogen Dioxide Emission Tracking Record." (See Attachments A and B) These records shall be kept on-site, and shall cover, at a minimum, the previous 60-month period. These records shall be made immediately available for inspection to the Department of Natural Resources' personnel upon request. [CP #0796-012, Special Condition 2]

#### Reporting:

The permittee shall report to the department's Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City MO 65102, no later than ten (10) days after the end of the month if the 12-month cumulative NO<sub>x</sub> and CO totals show the Source exceeded the emission limitations listed in this permit condition. [CP #0796-012, Special Condition 3]

### III. Emission Unit Specific Emission Limitations

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

EU0010 AND EU0020 – ENGINES #1 AND #8			
Emission Unit	Description	Manufacturer/ Model #	2003 EIQ Reference #
EU0010	Engine #1: internal combustion engine; fired with fuel oil #2; rated at 1000 kW; MHDR 3.413 MMBtu/hr; installed 1959	Worthington/ Model #SHE-8	EP-08
EU0020	Engine #8: internal combustion engine; fired with fuel oil #2; rated at 800 kW; MHDR 2.73 MMBtu/hr; installed 1964	Worthington/ Model #SHE-7	EP-13

**PERMIT CONDITION (EU0010 and EU0020)-001**  
 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

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

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO <sub>2</sub> )	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m <sup>3</sup> ))	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
	30 µg/m <sup>3</sup>	1-hour average not to be exceeded more than once in any 2 consecutive days

**Operational Limitation/Equipment Specifications:**

The emission unit shall be limited to burning diesel fuel oil.

**Monitoring/Recordkeeping:**

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

**Reporting:**

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

<b>EU0030 THROUGH EU0080 – ENGINES #2, #3, #4, #5, #9 AND #10</b>			
<b>Emission Unit</b>	<b>Description</b>	<b>Manufacturer/Model #</b>	<b>2003 EIQ Reference #</b>
EU0030	Engine #2: internal combustion engine; fired with fuel oil #2; rated at 1000 kW; MHDR 3.413 MMBtu/hr; installed 1992	EMD/Model #16-567-BC	EP-09
EU0040	Engine #3: internal combustion engine; fired with fuel oil #2; rated at 1000 kW; MHDR 3.413 MMBtu/hr; installed 1992	EMD/Model #16-567-BC	EP-10
EU0050	Engine #4: internal combustion engine; fired with fuel oil #2; rated at 1000 kW; MHDR 3.413 MMBtu/hr; installed 1995	EMD/Model #16-567-B	EP-16
EU0060	Engine #5: internal combustion engine; fired with fuel oil #2; rated at 1000 kW; MHDR 3.413 MMBtu/hr; installed 1995	EMD/Model #16-567-B	EP-11
EU0070	Engine #9: internal combustion engine; fired with fuel oil #2; rated at 1250 kW; MHDR 4.266 MMBtu/hr; installed 1977	Worthington/Model #SEHG 08	EP-14
EU0080	Engine #10: internal combustion engine; fired with fuel oil #2; rated at 1000 kW; MHDR 3.413 MMBtu/hr; installed 1977	Worthington/Model #SEHG 08	EP-15

**PERMIT CONDITION (EU0030 and EU0040)-001**

10 CSR 10-6.060 Construction Permits Required  
 Construction Permit #0792-018, Issued July 13, 1992

**Operational Limitation:**

- 1) The two (2) General Motors EMD 16-567B engines, designated as Engine #2 and # 3 (EU0030 and EU0040), will be operated no more than 832 hours, each, per any consecutive 12-month period. [CP # 0792-018, Special Condition 1]
- 2) Failure to maintain operating hours below the level specified in Condition #1 will be a violation of 10 CSR 10-6.060, and will require a new operating permit review, possibly involving major source requirements. [CP # 0792-018, Special Condition 4]

**Recordkeeping:**

Records shall be kept, on a daily basis, of the operating of Engine #2 (EU0030). Such records will be maintained on site for a period of at least five years and made available for inspection. (See Attachment C) [CP # 0792-018, Special Condition 2]

**Reporting:**

Records demonstrating excess hours of operation shall be submitted to the Air Pollution Control Program Enforcement Section within ten (10) days. [CP # 0792-018, Special Condition 3]

**PERMIT CONDITION (EU0030 and EU0060)-002**

**10 CSR 10-6.270 Acid Rain Source Permits Required**

**NOTE:** US EPA issued "New Units Exemption" per §72.7 for Engines #2 and #3 (EU0030 and EU0040) effective January 1, 1995, and for Engines #4 and #5 (EU0050 and EU0060) effective January 1, 1996. This permit condition includes the requirements needed to maintain applicability for the "New Units Exemption."

**Emission Limitation:**

- 1) Engines #2, #3, #4, and #5 (EU0030 through EU0060) shall be limited to burning nongaseous fuel with an annual average sulfur content of 0.05 percent or less by weight. [§72.7(a)(3)]
- 2) Engines #2, #3, #4, and #5 (EU0030 through EU0060) shall be exempt from the Acid Rain Program, except for the provisions of §§72.2 through 72.7, and §§72.10 through 72.13. [§72.7(b)(1)]

**Monitoring:**

- 1) Compliance with the requirement that fuel burned during the year have an annual average sulfur content of 0.05 percent by weight or less shall be determined as follows using a method of determining sulfur content that provides information with reasonable precision, reliability, accessibility, and timeliness: [§72.7(d)]
  - a) For nongaseous fuel burned during the year, the requirement is met if the annual average sulfur content is equal to or less than 0.05 percent by weight. The annual average sulfur content, as a percentage by weight, shall be calculated using the equation: [§72.7(d)(3)]

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

where:

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

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

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

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

- 2) *Special Provisions.* The permittee, and to the extent applicable, the designated representative of the units shall: [§72.7(f)(1)]

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

**Recordkeeping:**

- 1) For a period of 5 years from the date the records are created, the permittee shall retain records demonstrating that the requirements of this permit condition are met. The five-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. [§72.7(f)(3)]
  - a) Such records shall include, for each delivery of fuel to the unit, the type of fuel, the sulfur content, and the sulfur content of each sample taken. [§72.7(f)(3)(i)]
  - b) The permittee shall bear the burden of proof that the requirements of this permit condition are met. [§72.7(f)(3)(ii)]

**Reporting:**

- 1) The designated representative for a unit that loses its exemption shall submit a complete Acid Rain permit application 60 days after the first date on which the unit is no longer exempt, notwithstanding §72.30(b) and (c). [§72.7(f)(4)(ii)]
- 2) The permittee shall report to the APCP Enforcement Section, P. O. Box 176, Jefferson City, MO 65102, no later than ten days after any deviation from or exceedance of any of the terms imposed by this regulation, or any malfunction which causes a deviation from or exceedance of this regulation.

**PERMIT CONDITION (EU0030 through EU0080)-003**

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

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

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO <sub>2</sub> )	0.03 parts per million (ppm) (80 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ))	Annual arithmetic mean
	0.14 ppm (365 $\mu\text{g}/\text{m}^3$ )	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 $\mu\text{g}/\text{m}^3$ )	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H <sub>2</sub> S)	0.05 ppm (70 $\mu\text{g}/\text{m}^3$ )	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 $\mu\text{g}/\text{m}^3$ )	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 $\mu\text{g}/\text{m}^3$	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 $\mu\text{g}/\text{m}^3$	1-hour average not to be exceeded more than once in any 2 consecutive days

**Operational Limitation/Equipment Specifications:**

The emission unit shall be limited to burning diesel fuel oil.

**Monitoring/Recordkeeping:**

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

**Reporting:**

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

## IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date 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 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 one 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 one list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo., to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

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

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

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

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than 18 months.

[10 CSR 10-6.065(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)3.B]

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

- 1) The permittee shall 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.
- 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 City of Vandalia Power Plant 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 Department of Natural Resources 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 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 10-6.250 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 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.

## V. General Permit Requirements

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

### 10 CSR 10-6.065, §(5)(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) April 1st for monitoring which covers the January through December time period.
    - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
    - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

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

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

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

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

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

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

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

None.

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

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

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

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

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

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

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

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

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

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

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources or Environmental Protection Agency (EPA) determines the permit contains a material mistake or 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) Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

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

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

## **VI. Attachments**

Attachments follow.







## STATEMENT OF BASIS

### Voluntary Limitations

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

### Permit Reference Documents

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

- 1) Intermediate Operating Permit Application, received May 9, 2003;
- 2) 2003 Emissions Inventory Questionnaire, received March 22, 2004; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

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

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

None.

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

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

- 1) 10 CSR 10-6.100, *Alternate Emission Limits*
  - a) This rule is not applicable because the installation is in an ozone attainment area.
- 2) 10 CSR 10-6.220, *Restriction of Emission of Visible Contaminants*
  - b) Although this rule was marked as applicable in the permit application, it was not included in the operating permit because according to §(1)(A), internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas are exempt.

### Construction Permit Revisions

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

- 1) APCP Construction Permit #0792-018 authorized the installation of Engines #2 and #3 (EU0030 and EU0040).

- a) Special Condition #2 required that records be maintained on site for a period of at least two (2) years. This was changed in the operating permit to five (5) years because according to 10 CSR 10-6.065(6)(C)1.C, retention of records of all required monitoring data and support information shall be at least a period of five (5) years.
  - b) This construction permit listed 10 CSR 10-3.080, *Restriction of Emission of Visible Contaminants*, as an applicable rule. This rule was rescinded on May 30, 2000 and replaced by 10 CSR 10-6.220. 10 CSR 10-6.220 was not included in the operating permit because according to §(1)(A), internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas are exempt.
  - c) This construction permit listed 10 CSR 10-3.100, *Restriction of Emission of Sulfur Compounds*, as an applicable rule. This rule was rescinded on July 30, 1997 and replaced by 10 CSR 10-6.260 which was included in the operating permit.
- 2) Air Pollution Control Program Construction Permit #0796-012 authorized the installation of Engines #4 and #5 (EU0050 and EU0060).
    - a) Special Condition #1 established plantwide nitrogen oxide (NO<sub>x</sub>) and carbon monoxide (CO) emission limits of 249 tons in any consecutive 12-month period. These limitations were superseded by the more restrictive, federally enforceable, voluntary limitations of no more than 99.99 tons of NO<sub>x</sub> and CO in any consecutive 12-month period. The permittee accepted these more restrictive limits to qualify for an Intermediate Operating Permit.
    - b) This construction permit listed 10 CSR 10-3.080, *Restriction of Emission of Visible Contaminants*, as an applicable rule. This rule was rescinded on May 30, 2000, and replaced by 10 CSR 10-6.220. 10 CSR 10-6.220 was not included in the operating permit because according to §(1)(A), internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas are exempt.

#### **New Source Performance Standards (NSPS) Applicability**

- 1) 40 CFR Part 60 Subpart K, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978* and 40 CFR Part 60 Subpart Ka, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*
  - a) These rules do not apply to the two (2) 10,000-gallon fuel oil storage tanks because their storage capacities are less than 40,000 gallons.
- 2) 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*
  - b) This rule does not apply to the two (2) 10,000-gallon fuel oil storage tanks because they were manufactured before 1982 and their storage capacities are less than 20,000 gallons.

None of the other New Source Performance Standards applies to this installation.

#### **Maximum Available Control Technology (MACT) Applicability**

None.

### National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

In the permit application and according to Air Pollution Control Program records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all the applicable requirements of the above rules related to that specific project.

None of the other NESHAPs apply to this installation.

### Other Regulatory Determinations

1) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

- a) This rule does not apply to Engines (EU0010 through EU0080) because according to §(1)(A), internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas are exempt.

2) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

- a) This rule applies to Engines (EU0010 through EU0080). The calculations below demonstrate these units will be in compliance with this rule.

General Equation

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

Where:

- All the sulfur in the fuel is converted to SO<sub>2</sub> emissions.
- For generators > 600 hp: SO<sub>2</sub> emission factor is 1.01S lb/MMBtu. [EPA AP-42, Table 3.4-1]
- Assume S = 0.5 (Note: Engines #2, #3, #4, and #5 are required by Part 72 to burn fuel with S = 0.05)
- The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil, the F factor is 10,320 wscf/MMBtu. [40 CFR Part 60 Appendix A Method 19 Table 19-2]
- Conversion factor = 1.660E-7 lb/scf per ppm. [40 CFR Part 60 Appendix A Method 19, Table 19-1]
- Conversion factor for ppmw to ppmv = 28.8/MW = 28.8/64 = 0.45 [EPA AP-42, App A]

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

3) 10 CSR 10-6.270, *Acid Permit Source Permits Required*

- a) This rule does not apply to Engines #1, #8, #9, and #10 (EU0010, EU0020, EU0070, and EU0080) because according to §72.6(b)(2), units that commenced commercial operation before

November 15, 1990, and did not, as of November 15, 1990, and do not currently, serve as generators with a nameplate capacity of greater than 25 MW are exempt.

- 4) 10 CSR 10-6.350, *Emission Limitations and Emission Trading of Oxides of Nitrogen*
  - b) This rule does not apply to Engines (EU0010 through EU0080) because according to §(1)(A), the rule applies only to an electric generating unit that serves a generator with a nameplate capacity of greater than twenty-five megawatts (25 MWe).
- 5) 10 CSR 10-6.360, *Control of NOx Emissions from Electric Generating Units and Non-Electric Generating Boilers*
  - a) This rule does not apply to Engines (EU0010 through EU0080) because according to §(1)(A), this rule does not apply to installations located in Audrain County.
- 6) 10 CSR 10-6.390, *Control of NOx Emissions from Large Stationary Internal Combustion Engines*
  - a) This rule does not apply to Engines (EU0010 through EU0080) because according to §(1), this rule does not apply to installations located in Audrain County.
- 7) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes*
  - a) This rule does not apply to Engines (EU0010 through EU0080) because according to §(2)(A), liquids and gases used solely as fuels are excluded in defining process weight.

**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 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).

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