

# OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation #26:

Permit #: 1717-AOP-R1

IS ISSUED TO:

Entergy-Arkansas, Inc.  
Lake Catherine  
Hwy. 270  
Jones Mill, AR 72105  
Hot Springs County  
CSN: 30-0011

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

April 16, 1999                      and                      April 15, 2004

AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

\_\_\_\_\_  
Keith A. Michaels

\_\_\_\_\_  
DateModified

**SECTION I: FACILITY INFORMATION**

**PERMITTEE:** Entergy-Arkansas, Inc.  
Lake Catherine

**CSN:** 30-0011

**PERMIT NUMBER:** 1717-AOP-R1

**FACILITY ADDRESS:** Hwy. 270  
Jones Mill, Arkansas 72105

**COUNTY:** Hot Springs

**CONTACT POSITION:** Edward L. Green

**TELEPHONE NUMBER:** (501) 377-4032

**REVIEWING ENGINEER:** Nancy Spencer Rogers

**UTM North-South (X):** 3810.0

**UTM East-West (Y):** 508.8

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## **SECTION II: INTRODUCTION**

Entergy-Arkansas, Inc.-Lake Catherine Plant of Highway 270, Jones Mill, Hot Spring County, Arkansas is modifying its current Title V air permit, Permit #1717-AOP-R0, (CSN: 30-0011). After the issuance of the initial permit in 1999, it was discovered that the plant had potential problems with the permitted NO<sub>x</sub> limits for short periods of time when the units were brought to maximum load. Also, it was found that the Unit 3 boiler was exceeding the SO<sub>2</sub> limits. These exceedances were based on low estimates of heat input. In this modification, the facility is increasing the estimated heat inputs for boilers and increasing the permitted emission limits. No actual modifications to the equipment are taking place.

### **Process Description**

Lake Catherine is a four-unit electric generating station which generates electric energy for sale. Electricity is produced by using natural gas as the primary fuel and No. 6 fuel oil as the secondary fuel in all boilers to produce steam. The steam is used to drive turbines which turn the electric generators. Currently all fuel is natural gas.

Unit 1 and 2 boilers exhaust out of one common stack (SN-01) and Unit 3 and 4 boilers exhaust out of stack (SN-02) and stack (SN-03), respectively. The No. 6 fuel oil is stored in six storage tanks on site. These tanks are designated as Fuel Oil Day Tank #1 (SN-04), Fuel Oil Day Tank #2 (SN-05), Fuel Oil Tank #3 (SN-06), Fuel Oil Tank #4 (SN-07), Fuel Oil Tank #5 (SN-08), and Fuel Oil Tank #6 (SN-09). The tanks and their connecting lines do not currently contain oil.

Other emissions-producing activities are necessary to maintain the power plant equipment and systems. These activities include, but are not limited to, painting, sandblasting, welding, boiler cleaning, and the use of temporary combustion devices to drive equipment during outages. Many of these maintenance activities are considered to be insignificant.

Permit #1717-AOP-R0 was the first air permit for the Lake Catherine Plant. These units were in existence prior to 1972, before the Air Code and SIP were promulgated, and have not undergone any modification. The units are considered to be “grandfathered”. The emission limits listed in the emission summary table are less than the potential to emit. The Lake Catherine facility is taking emission limits pursuant to Regulation 18 for fee purposes only. These limits are not being established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I or 40 CFR 51.166. The facility must meet the requirements under the Acid Rain Program and emissions from the facility must not violate the National Ambient Air Quality Standards (NAAQS).

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Emissions from the facility include sulfur dioxide, nitrogen oxides, and particulates. A summary of facility wide emissions is provided in the following table. Specific emission unit information is located by the indicated cross reference pages.

| EMISSION SUMMARY   |  |                  |                 |         |                      |
|--|--|------------------|-----------------|---------|----------------------|
| Source No.   | Description  | Pollutant        | Emission Rates* |         | Cross Reference Page |
|  |  |                  | lb/hr           | tpy     |                      |
| *The emission rates listed in this table are for fee purposes, however, each source is limited to these tpy rates. |  |                  |                 |         |                      |
| Total Allowable Emissions  |  | PM               | 631.2           | 259.2   | ---                  |
|  |  | PM <sub>10</sub> | 444.0           | 197.5   |                      |
|  |  | SO <sub>2</sub>  | 7965.0          | 1766.7  |                      |
|  |  | VOC              | 38.9            | 56.6    |                      |
|  |  | CO               | 2613.0          | 11371.5 |                      |
|  |  | NO <sub>x</sub>  | 4449.0          | 20118.2 |                      |
| SN-01<br>(C1)  | Unit 1- Natural Gas<br>(100 % Consumption)                                       | PM               | 3.5             | 15.2    | 8                    |
|  |  | PM <sub>10</sub> | 2.1             | 9.1     |                      |
|  |  | SO <sub>2</sub>  | 0.5             | 2.0     |                      |
|  |  | VOC              | 1.0             | 4.3     |                      |
|  |  | CO               | 209.0           | 913.0   |                      |
|  |  | NO <sub>x</sub>  | 381.0           | 1669.0  |                      |
|  | Unit 1- No. 6 Fuel Oil<br>(95% Natural Gas and 5% No. 6<br>Fuel Oil Consumption) | PM               | 55.0            | 26.5    |                      |
|  |  | PM <sub>10</sub> | 37.0            | 16.7    |                      |
|  |  | SO <sub>2</sub>  | 689.0           | 152.9   |                      |
|  |  | VOC              | 3.4             | 5.1     |                      |
|  |  | CO               | 209.0           | 913.4   |                      |
|  |  | NO <sub>x</sub>  | 294.0           | 1649.6  |                      |
|  | Unit 2-Natural Gas<br>(100 % Consumption)  | PM               | 3.5             | 15.2    |                      |
|  |  | PM <sub>10</sub> | 2.1             | 9.1     |                      |
|  |  | SO <sub>2</sub>  | 0.5             | 2.0     |                      |
|  |  | VOC              | 1.0             | 4.3     |                      |
|  |  | CO               | 209.0           | 913.0   |                      |
|  |  | NO <sub>x</sub>  | 381.0           | 1669.0  |                      |
|  | Unit 2-No. 6 Fuel Oil<br>(95% Natural Gas and 5% No. 6<br>Fuel Oil Consumption)  | PM               | 55.0            | 26.5    |                      |
|  |  | PM <sub>10</sub> | 37.0            | 16.7    |                      |
| SO <sub>2</sub>  |  | 689.0            | 152.9           |         |                      |
| VOC  |  | 3.4              | 5.1             |         |                      |
| CO   |  | 209.0            | 913.4           |         |                      |
| NO <sub>x</sub>  |  | 294.0            | 1649.6          |         |                      |

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| <b>EMISSION SUMMARY</b>  |   |                  |                        |            |                             |
|--|---|------------------|------------------------|------------|-----------------------------|
| <b>Source No.</b>  | <b>Description</b>  | <b>Pollutant</b> | <b>Emission Rates*</b> |            | <b>Cross Reference Page</b> |
|  |   |                  | <b>lb/hr</b>           | <b>tpy</b> |                             |
| *The emission rates listed in this table are for fee purposes, however, each source is limited to these tpy rates. |   |                  |                        |            |                             |
| SN-02<br>(C3)  | Unit 3-Natural Gas<br>(100 % Consumption)                                       | PM               | 5.8                    | 25.2       | 8                           |
|  |   | PM <sub>10</sub> | 3.6                    | 15.4       |                             |
|  |   | SO <sub>2</sub>  | 1.0                    | 4.4        |                             |
|  |   | VOC              | 1.7                    | 7.1        |                             |
|  |   | CO               | 421.0                  | 1844.0     |                             |
|  |   | NO <sub>x</sub>  | 631.0                  | 2764.0     |                             |
|  | Unit 3-No. 6 Fuel Oil<br>(95% Natural Gas and 5% No. 6<br>Fuel Oil Consumption) | PM               | 90.2                   | 43.8       |                             |
|  |   | PM <sub>10</sub> | 65.0                   | 28.7       |                             |
|  |   | SO <sub>2</sub>  | 1141.0                 | 254.2      |                             |
|  |   | VOC              | 5.6                    | 8.0        |                             |
|  |   | CO               | 421.0                  | 1844.0     |                             |
|  |   | NO <sub>x</sub>  | 487.0                  | 2732.8     |                             |
| SN-03<br>(C4)  | Unit 4-Natural Gas<br>(100 % Consumption)                                       | PM               | 16.5                   | 72.0       | 8                           |
|  |   | PM <sub>10</sub> | 16.5                   | 72.0       |                             |
|  |   | SO <sub>2</sub>  | 3.3                    | 14.4       |                             |
|  |   | VOC              | 7.8                    | 33.9       |                             |
|  |   | CO               | 1774.0                 | 7770.2     |                             |
|  |   | NO <sub>x</sub>  | 3200.0                 | 14016.0    |                             |
|  | Unit 4-No. 6 Fuel Oil<br>(95% Natural Gas and 5% No. 6<br>Fuel Oil Consumption) | PM               | 431.0                  | 162.4      |                             |
|  |   | PM <sub>10</sub> | 305.0                  | 135.4      |                             |
|  |   | SO <sub>2</sub>  | 5446.0                 | 1206.7     |                             |
|  |   | VOC              | 26.0                   | 37.9       |                             |
|  |   | CO               | 1774.0                 | 7770.7     |                             |
|  |   | NO <sub>x</sub>  | 3200.0                 | 14016.2    |                             |
| SN-04<br>(T1)  | Fuel Oil Day Tank #1  | VOC              | 0.1                    | 0.1        | 15                          |
| SN-05<br>(T2)  | Fuel Oil Day Tank #2  | VOC              | 0.1                    | 0.1        | 15                          |
| SN-06<br>(T3)  | Fuel Oil Tank #3  | VOC              | 0.1                    | 0.1        | 15                          |
| SN-07<br>(T4)  | Fuel Oil Tank #4  | VOC              | 0.1                    | 0.1        | 15                          |
| SN-08<br>(T5)  | Fuel Oil Tank #5  | VOC              | 0.1                    | 0.1        | 15                          |

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### **SECTION III: PERMIT HISTORY**

1717-AOP-R0 was the first operating air permit issued to Entergy- Arkansas, Inc. Lake Catherine. No physical changes in the method of operation at the facility occurred prompting this permit issuance.

The Lake Catherine facility had never been issued an air permit. These units were in existence prior to 1972, before the Air Code and SIP were promulgated, and have not undergone any modification. The units are considered to be “grandfathered.” The emission limits listed in the emission summary table are less than the potential to emit. The Lake Catherine facility is taking emission limits pursuant to Regulation 18 for fee purposes only. These limits are not being established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I or 40 CFR 51.166. These limits may be changed by the request of a permit modification if plant operating requirements change. Such a change may result in the facility paying higher permit fees. Appendix A outlines the potential to emit for the Lake Catherine facility. If this facility has a modification above the PSD significance level, Appendix A will be used as potential to emit pursuant to 40 CFR 52.21. The facility must meet the requirements of the Acid Rain Program and emissions from the facility must not violate the National Ambient Air Quality Standards (*NAAQS*).

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**SECTION IV: EMISSION UNIT INFORMATION**

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**SN-01, SN-02, and SN-03 Boilers**

**Source Description**

The Lake Catherine facility is a four-unit electric generating station which generates electric energy for sale. Unit 1 and Unit 2 boilers (SN-01) are 658 MMBtu/hr boilers. SN-02 or Unit 3 boiler is a 1090 MMBtu/hr boiler and SN-03 or Unit 4 is a boiler capable of 5850 MMBtu/hr (nominal rating 560 MWg (megawatts gross)). Electricity is produced by using natural gas as the primary fuel and No. 6 fuel oil as the secondary fuel in all four boilers to produce steam. The steam is used to drive the turbines which turn the electric generators.

The emission limits in this permit are established pursuant to Regulation 18.8. The limits are not established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, or 40 CFR 51.166. Therefore, the facility is not subject to PSD if the hours of operation are to be increased.

The boilers are permitted to operate under alternating scenarios. Scenario I represents combustion from natural gas and Scenario II represents combustion from natural gas and No. 6 fuel oil. Lake Catherine may also burn residual oil, and non-hazardous boiler chemical cleaning wastes. Currently all fuel is natural gas. There are no control devices associated with these units.

**Specific Conditions**

- Pursuant to §19.501 of Regulation 19 et seq, and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with SO<sub>2</sub> emissions shall be demonstrated through compliance with Specific Condition 12. Compliance with SN-01 and SN-02 NO<sub>x</sub> emissions shall be demonstrated through compliance with Specific Condition 14, while SN-03 NO<sub>x</sub> shall be demonstrated through compliance with Specific Condition 13. Compliance with PM<sub>10</sub>, CO, and VOC emissions shall be demonstrated through compliance with Specific Condition 7. Compliance is based on a 24 hour block average.

| SN-# | Description           | Pollutant        | lb/hr | tpy    |
|------|-----------------------|------------------|-------|--------|
| 01   | Unit 1-Natural Gas    | PM <sub>10</sub> | 2.1   | 9.1    |
|      |                       | SO <sub>2</sub>  | 0.5   | 2.0    |
|      |                       | VOC              | 1.0   | 4.3    |
|      |                       | CO               | 209.0 | 913.0  |
|      |                       | NO <sub>x</sub>  | 381.0 | 1669.0 |
|      | Unit 1-No. 6 Fuel Oil | PM <sub>10</sub> | 37.0  | 16.7   |
|      |                       | SO <sub>2</sub>  | 689.0 | 152.9  |
|      |                       | VOC              | 3.4   | 5.1    |
|      |                       | CO               | 209.0 | 913.4  |
|      |                       | NO <sub>x</sub>  | 294.0 | 1649.6 |

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| SN-# | Description           | Pollutant        | lb/hr  | tpy     |
|------|-----------------------|------------------|--------|---------|
| 01   | Unit 2-Natural Gas    | PM <sub>10</sub> | 2.1    | 9.1     |
|      |                       | SO <sub>2</sub>  | 0.5    | 2.0     |
|      |                       | VOC              | 1.0    | 4.3     |
|      |                       | CO               | 209.0  | 913.0   |
|      |                       | NO <sub>x</sub>  | 381.0  | 1669.0  |
|      | Unit 2-No. 6 Fuel Oil | PM <sub>10</sub> | 37.0   | 16.7    |
|      |                       | SO <sub>2</sub>  | 689.0  | 152.9   |
|      |                       | VOC              | 3.4    | 5.1     |
|      |                       | CO               | 209.0  | 913.4   |
|      |                       | NO <sub>x</sub>  | 294.0  | 1649.6  |
| 02   | Unit 3-Natural Gas    | PM <sub>10</sub> | 3.6    | 15.4    |
|      |                       | SO <sub>2</sub>  | 1.0    | 4.4     |
|      |                       | VOC              | 1.7    | 7.1     |
|      |                       | CO               | 421.0  | 1844.0  |
|      |                       | NO <sub>x</sub>  | 631.0  | 2764.0  |
|      | Unit 3-No. 6 Fuel Oil | PM <sub>10</sub> | 65.0   | 28.7    |
|      |                       | SO <sub>2</sub>  | 1141.0 | 254.2   |
|      |                       | VOC              | 5.6    | 8.0     |
|      |                       | CO               | 421.0  | 1844.0  |
|      |                       | NO <sub>x</sub>  | 487.0  | 2732.8  |
| 03   | Unit 4-Natural Gas    | PM <sub>10</sub> | 16.5   | 72.0    |
|      |                       | SO <sub>2</sub>  | 3.3    | 14.4    |
|      |                       | VOC              | 7.8    | 33.9    |
|      |                       | CO               | 1774.0 | 7770.2  |
|      |                       | NO <sub>x</sub>  | 3200.0 | 14016.0 |
|      | Unit 4-No. 6 Fuel Oil | PM <sub>10</sub> | 305.0  | 135.4   |
|      |                       | SO <sub>2</sub>  | 5446.0 | 1206.7  |
|      |                       | VOC              | 26.0   | 37.9    |
|      |                       | CO               | 1774.0 | 7770.7  |
|      |                       | NO <sub>x</sub>  | 3200.0 | 14016.2 |

2. Pursuant to §18.1004 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not exceed the emission rates set forth in the following table. Compliance with PM, emissions shall be demonstrated through compliance with Specific Condition 7.

| SN-# | Description           | Pollutant | lb/hr | tpy  |
|------|-----------------------|-----------|-------|------|
| 01   | Unit 1-Natural Gas    | PM        | 3.5   | 15.2 |
|      | Unit 1-No. 6 Fuel Oil | PM        | 55.0  | 26.5 |
| 01   | Unit 2-Natural Gas    | PM        | 3.5   | 15.2 |

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| SN-# | Description           | Pollutant | lb/hr | tpy   |
|------|-----------------------|-----------|-------|-------|
|      | Unit 2-No. 6 Fuel Oil | PM        | 55.0  | 26.5  |
| 02   | Unit 3-Natural Gas    | PM        | 5.8   | 25.2  |
|      | Unit 3-No. 6 Fuel Oil | PM        | 90.2  | 43.8  |
| 03   | Unit 4-Natural Gas    | PM        | 16.5  | 72.0  |
|      | Unit 4-No. 6 Fuel Oil | PM        | 431.0 | 162.4 |

3. Pursuant to 40 CFR 70.6 and §26.7 of Regulation 26, the permittee shall contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which the facility or source is operating.
4. Pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 40 percent opacity from SN-01, SN-02, and SN-03 as measured by EPA Reference Method 9 when firing natural gas. Compliance with the opacity shall be demonstrated by burning natural gas in the boilers and complying with Specific Condition 3.
5. Pursuant to §19.503 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed 40 percent opacity from SN-01, SN-02, and SN-03 as measured by EPA Reference Method 9 when firing No. 6 fuel oil. Compliance with this condition shall be demonstrated by complying with Specific Condition 6.
6. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall conduct daily observations of the opacity from SN-01 thru SN-03 when burning No. 6 fuel oil. If visible emissions are in excess of 40%, then the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method 9 and document the results that day. The facility shall certify weekly that observations were made each day and the results of the observations. The results of these observations shall be kept on site and made available for inspection upon request.
7. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall install, operate, and maintain O<sub>2</sub> monitors on the boilers. The permittee shall show a positive O<sub>2</sub> reading when the boilers are in operation.
8. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall update, twice per day, records which demonstrate compliance with Specific Condition 7. These records shall be

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kept on site, and shall be made available to Department personnel upon request. Each individual month's readings shall be submitted in accordance with General Condition 7.

9. Pursuant to §19.705 Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, fuel oil usage shall not exceed 22,230,000 gallons during any consecutive twelve month period. The permittee is accepting these limits for fee purposes only. These limits are not being established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I or 40 CFR 51.166.
10. Pursuant to §19.705 Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 9. These records may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7.
11. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition shall be demonstrated by burning 100% natural gas or No. 6 fuel oil as set forth in Specific Condition 9 and natural gas. The permittee is accepting these limits for fee purposes only. These limits are not being established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I or 40 CFR 51.166.

| SN-# | Description | Pollutant        | tpy    |
|------|-------------|------------------|--------|
| 01   | Unit 1      | PM               | 26.5   |
|      |             | PM <sub>10</sub> | 16.7   |
|      |             | SO <sub>2</sub>  | 152.9  |
|      |             | VOC              | 5.1    |
|      |             | CO               | 913.4  |
|      |             | NO <sub>x</sub>  | 1669.0 |
|      | Unit 2      | PM               | 26.5   |
|      |             | PM <sub>10</sub> | 16.7   |
|      |             | SO <sub>2</sub>  | 152.9  |
|      |             | VOC              | 5.1    |
|      |             | CO               | 913.4  |
|      |             | NO <sub>x</sub>  | 1669.0 |
| 02   | Unit 3      | PM               | 43.8   |
|      |             | PM <sub>10</sub> | 28.7   |
|      |             | SO <sub>2</sub>  | 254.2  |
|      |             | VOC              | 8.0    |
|      |             | CO               | 1844.0 |
|      |             | NO <sub>x</sub>  | 2764.0 |

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| SN-# | Description | Pollutant        | tpy     |
|------|-------------|------------------|---------|
| 03   | Unit 4      | PM               | 162.4   |
|      |             | PM <sub>10</sub> | 135.4   |
|      |             | SO <sub>2</sub>  | 1206.7  |
|      |             | VOC              | 37.9    |
|      |             | CO               | 7770.2  |
|      |             | NO <sub>x</sub>  | 14016.2 |

12. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall determine SO<sub>2</sub> emissions using the optional SO<sub>2</sub> emissions data protocol procedures in 40 CFR Part 75, Appendix D, section 2.3. The records may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7.
13. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall maintain records, using CEMS for NO<sub>x</sub> for Unit 4 (SN-03), which demonstrate compliance with the limit set forth in this permit. The records may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7.
14. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall determine NO<sub>x</sub> emissions for units 1, 2, and 3 (SN-01 and SN-02) using the optional NO<sub>x</sub> emissions data protocol procedure in 40 CFR Part 75, Appendix E, section 2.4. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7.
15. Pursuant to §19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, in the event that Units 1, 2, or 3 exceed the levels required to be peaking units as defined in 40 CFR 72.2, the permittee shall maintain records, using CEMS for NO<sub>x</sub> for Units 1 and 2, which demonstrate compliance with the limit set forth in this permit. The records may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7.

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16. Pursuant to §19.705 of Regulation 19 and 40 CFR Part 52, Subpart E, the permittee shall submit an excess emissions report for SO<sub>2</sub> and NO<sub>x</sub> for these sources every six (6) months. The report may be submitted to the Department with the report described in General Provision 7. The report shall include the magnitude of excess emissions computed from the 40 CFR Part 75 monitoring data in pounds per hour, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions.
17. Pursuant to §19.304 of Regulation 19 and 40 CFR 75.10 (a)(3), the permittee shall determine CO<sub>2</sub> emissions based on the measured carbon content of the fuel and the fuel and the procedures in appendix G of 40 CFR Part 75 to estimate CO<sub>2</sub> emissions (in ton/day) discharged to the atmosphere.
18. Pursuant to §19.304 of Regulation 19 and 40 CFR Part 72.2, SN 1, 2, and 3 are considered gas-fired units and are exempt from Part 75 opacity monitoring as per 40 CFR Part 75.10 (a) (4).
19. Pursuant to §19.304 of Regulation 19 and 40 CFR Part 74.14, in the event a gas-fired unit is recategorized as another type of unit by changing its fuel mix, the owner or operator shall install, operate, and certify a continuous opacity monitoring system. Each continuous opacity monitoring system shall meet the design, installation, equipment, and performance specifications in Performance Specifications 1 in appendix B to part 60.
20. Pursuant to §19.304 of Regulation 19 and 40 CFR 75.10, the permittee shall ensure that all continuous emission monitoring systems are in operation and monitoring all unit emissions at all times that the affected unit combusts any fuel, except during periods of calibration, quality assurance, preventative maintenance or repair.
21. Pursuant to §19.304 of Regulation 19 and 40 CFR Part 75, the permittee shall submit the required quarterly monitoring reports to EPA headquarters.
22. Pursuant to §19.304 of Regulation 19 and 40 CFR Part 75, the permittee shall perform Relative Accuracy tests.
23. Pursuant to §19.304 of Regulation and 40 CFR, Part 75.10(c), the permittee shall determine and record the heat input to each affected unit for every hour or part of an hour any fuel is combusted following the procedures in Appendix F of 40 CFR Part 75.

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**SN-04 thru SN-09**  
**Storage Tanks**

**Source Description**

No. 6 fuel oil is stored in six storage tanks on site. The tanks have a capacity ranging from 401,900 gallons to 11,681,200 gallons. These tanks are designated as Fuel Oil Day Tank #1 (SN-04), Fuel Oil Day Tank #2 (SN-05), Fuel Oil Tank #3 (SN-06), Fuel Oil Tank #4 (SN-07), Fuel Oil Tank #5 (SN-08), and Fuel Oil Tank #6 (SN-09). The tanks and their connecting lines do not currently contain oil.

**Specific Conditions**

24. Pursuant to §19.501 et seq of Regulation 19 and 40 CFR 52, Subpart E, the permittee shall not exceed the emission rates set forth in the following table.

| <b>SN-#</b> | <b>Description</b>   | <b>Pollutant</b> | <b>lb/hr</b> | <b>tpy</b> |
|-------------|----------------------|------------------|--------------|------------|
| 04<br>(T1)  | Fuel Oil Day Tank #1 | VOC              | 0.1          | 0.1        |
| 05<br>(T2)  | Fuel Oil Day Tank #2 | VOC              | 0.1          | 0.1        |
| 06<br>(T3)  | Fuel Oil Tank #3     | VOC              | 0.1          | 0.1        |
| 07<br>(T4)  | Fuel Oil Tank #4     | VOC              | 0.1          | 0.1        |
| 08<br>(T5)  | Fuel Oil Tank #5     | VOC              | 0.1          | 0.1        |
| 09<br>(T6)  | Fuel Oil Tank #6     | VOC              | 0.1          | 0.1        |

25. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and 8-4-311, and 40 CFR 70.6, the permittee shall store only No. 6 fuel oil in storage tanks SN-04 thru SN-09.
26. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and 8-4-311, and 40 CFR 70.6, the permittee shall not exceed the annual throughput of 213,192,120 gallons of No. 6 fuel oil in each of the storage tanks during any consecutive twelve month period.

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27. Pursuant to §19.705 of Regulation 19 and 40 CFR 52, Subpart E, the permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 26. These records may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7.

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## **COMPLIANCE PLAN AND SCHEDULE**

The Lake Catherine facility is in compliance with all applicable regulations. Lake Catherine will continue to operate in compliance with the identified regulatory provisions. The facility will also meet any future regulations that may apply on a timely basis.

### Existing Monitoring

The Lake Catherine facility currently monitors and reports quarterly data for SO<sub>2</sub> and NO<sub>x</sub> under Acid Rain requirements of 40 CFR 75.

**SECTION V: PLANTWIDE CONDITIONS**

1. Pursuant to Section 19.704 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the Director shall be notified in writing within thirty (30) days after construction has commenced, construction is complete, the equipment and/or facility is first placed in operation, and the equipment and/or facility first reaches the target production rate.
2. Pursuant to Section 19.410(B) of Regulation 19, 40 CFR Part 52, Subpart E, the Director may cancel all or part of this permit if the construction or modification authorized herein is not begun within 18 months from the date of the permit issuance if the work involved in the construction or modification is suspended for a total of 18 months or more.
3. Pursuant to Section 19.702(E), 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, each emission point for which an emission test method is specified in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Two copies of the compliance test results shall be submitted to the Department within thirty (30) days after the completed testing. The permittee shall provide:
  - (1) Sampling ports adequate for applicable test methods
  - (2) Safe sampling platforms
  - (3) Safe access to sampling platforms
  - (4) Utilities for sampling and testing equipment
4. Pursuant to Section 19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the equipment, control apparatus and emission monitoring equipment shall be operated within their design limitations and maintained in good condition at all times.
5. Compliance with the provisions of this permit shall be deemed compliance with

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applicable requirements of the Clean Air Act, as of the date of permit issuance.

The following have been specifically identified as applicable to the source based upon information submitted by the permittee in an application dated March 29, 1996.

| Description of Applicable Regulations                    | Regulation                         | Basis   |
|--|------------------------------------|---|
| Regulations of the Arkansas Operating Air Permit Program | Regulation 26<br>Section 3         | Facility is defined as a major source.  |
| Acid Rain Permit Regulations                             | 40 CFR 72<br>Subpart A-D           | Units meet the definition of an affected source.                                |
| SO <sub>2</sub> Allowance Allocations                    | 40 CFR 73<br>Subpart B             | Facility is on list of Phase II Allowance Allocations.                          |
| Continuous Emission Monitoring                           | 40 CFR 75<br>Subpart A-D, F, and G | Facility is subject to Acid Rain Requirements for the purpose of applicability. |
| Excess Emissions   | 40 CFR 77                          | Facility is subject to Acid Rain Requirements for the purpose of applicability. |

6. Pursuant to §7(a) of Regulation 26 and 40 CFR 70.6(a)(4), the permittee is prohibited from causing any emissions which exceed any allowances that the source lawfully holds under Title IV of the Act or the regulations promulgated thereunder. No permit revision is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement of this permit or the Act. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.
7. Pursuant to §19.705 and 40 CFR Part 52, the permittee shall not begin to demonstrate compliance with the conditions in this permit until thirty (30) days after the issued date of this permit.
8. Pursuant to Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, this permit subsumes and incorporates all previously issued air permits for this facility.

**SECTION VI: DE MINIMIS EMISSION SOURCES**

Pursuant to §26.3(d) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), the following sources are below the de minimis emission levels. Insignificant and trivial activities will be allowable after approval and federal register notice publication of a final list as part of the operating air permit program. Any activity for which a state or federal applicable requirement applies is not de minimis, even if this activity meets the criteria of §3(e) of Regulation 26 or is listed below. De minimis emission determinations rely upon the information submitted by the permittee in an application dated March 29, 1996.

**31** - Storage tanks with capacity less than 10,000 gallons storing organic liquids having a true vapor pressure less than or equal to 0.5 psia.

**1** - Storage tank with capacity less than 250 gallons storing organic liquids having a true vapor pressure less than or equal to 3.5 psia.

Pursuant to §26.3(d) of Regulation 26, the following emission units, operations, or activities have been determined by the Department to be insignificant activities. Activities included in this list are allowable under this permit and need not be specifically identified.

1. Combustion emissions from propulsion of mobile sources and emissions from refueling these sources unless regulated by Title II and required to obtain a permit under Title V of the federal Clean Air Act, as amended. This does not include emissions from any transportable units, such as temporary compressors or boilers. This does not include emissions from loading racks or fueling operations covered under any applicable federal requirements.
2. Air conditioning and heating units used for comfort that do not have applicable requirements under Title VI of the Act.
3. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing/industrial or commercial process.
4. Non-commercial food preparation or food preparation at restaurants, cafeterias, or caterers, etc.
5. Consumer use of office equipment and products, not including commercial printers or business primarily involved in photographic reproduction.
6. Janitorial services and consumer use of janitorial products.
7. Internal combustion engines used for landscaping purposes.
8. Laundry activities, except for dry-cleaning and steam boilers.

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9. Bathroom/toilet emissions.
10. Emergency (backup) electrical generators at residential locations.
11. Tobacco smoking rooms and areas.
12. Blacksmith forges.
13. Maintenance of grounds or buildings, including: lawn care, weed control, pest control, and water washing activities.
14. Repair, up-keep, maintenance, or construction activities not related to the sources' primary business activity, and not otherwise triggering a permit modification. This may include, but is not limited to such activities as general repairs, cleaning, painting, welding, woodworking, plumbing, re-tarring roofs, installing insulation, paved/paving parking lots, miscellaneous solvent use, application of refractory, or insulation, brazing, soldering, the use of adhesives, grinding, and cutting.<sup>1</sup>
15. Surface-coating equipment during miscellaneous maintenance and construction activities. This activity specifically does not include any facility whose primary business activity is surface-coating or includes surface-coating or products.
16. Portable electrical generators that can be "moved by hand" from one location to another.<sup>2</sup>
17. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning, or machining wood, metal, or plastic.
18. Brazing or soldering equipment related to manufacturing activities that do not result in emission of HAPs.<sup>3</sup>
19. Air compressors and pneumatically operated equipment, including hand tools.

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<sup>1</sup> Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must get a permit.

<sup>2</sup> "Moved by hand" means that it can be moved by one person without assistance of any motorized or non-motorized vehicle, conveyance, or device.

<sup>3</sup> Brazing, soldering, and welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals are more appropriate for treatment as insignificant activities based on size or production thresholds. Brazing, soldering, and welding equipment, and cutting torches related directly to plant maintenance and upkeep and repair or maintenance shop activities that emit HAP metals are treated as trivial and listed separately in this appendix.

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20. Batteries and battery charging stations, except at battery manufacturing plants.
21. Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOCs or HAPs.<sup>4</sup>
22. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and no volatile aqueous salt solutions, provided appropriate lids and covers are used and appropriate odor control is achieved.
23. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and non-volatile aqueous salt solutions, provided appropriate lids and covers are used and appropriate odor control is achieved.
24. Drop hammers or presses for forging or metalworking.
25. Equipment used exclusively to slaughter animals, but not including other equipment at slaughter-houses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
26. Vents from continuous emissions monitors and other analyzers.
27. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
28. Hand-held applicator equipment for hot melt adhesives with no VOCs in the adhesive.
29. Lasers used only on metals and other materials which do not emit HAPs in the process.
30. Consumer use of paper trimmers/binders.
31. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
32. Salt baths using non-volatile salts that do not result in emissions of any air pollutant covered by this regulation.
33. Laser trimmers using dust collection to prevent fugitive emissions.
34. Bench-scale laboratory equipment used for physical or chemical analysis not including lab fume hoods or vents.

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Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids are based on size and limits including storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.

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35. Routine calibration and maintenance of laboratory equipment or other analytical instruments.
36. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
37. Hydraulic and hydrostatic testing equipment.
38. Environmental chambers not using hazardous air pollutant gases.
39. Shock chambers, humidity chambers, and solar simulators.
40. Fugitive emissions related to movement of passenger vehicles, provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
41. Process water filtration systems and demineralizers.
42. Demineralized water tanks and demineralizer vents.
43. Boiler water treatment operations, not including cooling towers.
44. Emissions from storage or use of water treatment chemicals, except for hazardous air pollutants or pollutants listed under regulations promulgated pursuant to Section 112(r) of the Act, for use in cooling towers, drinking water systems, and boiler water/feed systems.
45. Oxygen scavenging (de-aeration) of water.
46. Ozone generators.
47. Fire suppression systems.
48. Emergency road flares.
49. Steam vents and safety relief valves.
50. Steam leaks.
51. Steam cleaning operations.
52. Steam and microwave sterilizers.
53. Site assessment work to characterize waste disposal or remediation sites.

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54. Miscellaneous additions or upgrades of instrumentation.
55. Emissions from combustion controllers or combustion shutoff devices but not combustion units itself.
56. Use of products for the purpose of maintaining motor vehicles operated by the facility, not including air cleaning units of such vehicles (i.e. antifreeze, fuel additives).
57. Stacks or vents to prevent escape of sanitary sewer gases through the plumbing traps.
58. Emissions from equipment lubricating systems (i.e. oil mist), not including storage tanks, unless otherwise exempt.
59. Residential wood heaters, cookstoves, or fireplaces.
60. Barbecue equipment or outdoor fireplaces used in connection with any residence or recreation.
61. Log wetting areas and log flumes.
62. Periodic use of pressurized air for cleanup.
63. Solid waste dumpsters.
64. Emissions of wet lime from lime mud tanks, lime mud washers, lime mud piles, lime mud filter and filtrate tanks, and lime mud slurry tanks.
65. Natural gas odoring activities unless the Department determines that emissions constitute air pollution.
66. Emissions from engine crankcase vents.
67. Storage tanks used for the temporary containment of materials resulting from an emergency reporting to an unanticipated release.
68. Equipment used exclusively to mill or grind coatings in roll grinding rebuilding, and molding compounds where all materials charged are in paste form.
69. Mixers, blenders, roll mills, or calendars for rubber or plastic for which no materials in powder form are added and in which no organic solvents, diluents, or thinners are used.
70. The storage , handling, and handling equipment for bark and wood residues not subject to fugitive dispersion offsite (this applies to the equipment only).

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71. Maintenance dredging of pulp and paper mill surface impoundments and ditches containing cellulosic and cellulosic derived biosolids and inorganic materials such as lime, ash, or sand.
72. Tall oil soap storage, skimming, and loading.
73. Water heaters used strictly for domestic (non-process) purposes.
74. Facility roads and parking areas, unless necessary to control offsite fugitive emissions.
75. Agricultural operations, including onsite grain storage, not including IC engines or grain elevators.
76. The following natural gas and oil exploration production site equipment: separators, dehydration units, natural gas fired compressors, and pumping units. This does not include compressors located on natural gas transmission pipelines.

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**SECTION VII: ACID RAIN**

ORIS Code: 170  
 Effective Date: January 1, 2000 through December 31, 2004

Acid Rain Permit Contents

1. SO<sub>2</sub> allowances allocated under this permit and NO<sub>x</sub> requirements for each affected unit.
2. Comments, notes, and justifications regarding permit decisions and charges made to the permit application forms during the review process, and any additional requirements or conditions.
3. The permit application submitted for this source, as corrected by the Arkansas Department of Pollution Control and Ecology. The owner and operators of the source must comply with the standard requirements and special provisions set forth in the application.

**1) SO<sub>2</sub> Allowance Allocations for each affected unit:**

Pursuant to §26.12 of Regulation 26 and Title IV of the Clean Air Act, the Arkansas Department of Pollution Control and Ecology issues this permit pursuant to Regulation 26. The following table identifies the SO<sub>2</sub> allowances allocated to Lake Catherine Steam Electric Station, Units 1 and 2.

| YEAR   |   | 2000 | 2001 | 2002 | 2003 | 2004 |
|--------|---|------|------|------|------|------|
| Unit 1 | SO <sub>2</sub> allowances under Table 2 or 3 of 40 CFR Part 73 | 0    | 0    | 0    | 0    | 0    |
|        | Repowering  | N/A  | N/A  | N/A  | N/A  | N/A  |

| YEAR   |   | 2000 | 2001 | 2002 | 2003 | 2004 |
|--------|---|------|------|------|------|------|
| Unit 2 | SO <sub>2</sub> allowances under Table 2 or 3 of 40 CFR Part 73 | 0    | 0    | 0    | 0    | 0    |
|        | Repowering  | N/A  | N/A  | N/A  | N/A  | N/A  |

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| YEAR      |   | 2000 | 2001 | 2002 | 2003 | 2004 |
|-----------|---|------|------|------|------|------|
| Unit<br>3 | SO <sub>2</sub> allowances under<br>Table 2 or 3 of 40<br>CFR Part 73 | 8    | 8    | 8    | 8    | 8    |
|           | Repowering  | N/A  | N/A  | N/A  | N/A  | N/A  |

| YEAR      |   | 2000 | 2001 | 2002 | 2003 | 2004 |
|-----------|---|------|------|------|------|------|
| Unit<br>4 | SO <sub>2</sub> allowances under<br>Table 2 or 3 of 40<br>CFR Part 73 | 155  | 155  | 155  | 155  | 155  |
|           | Repowering  | N/A  | N/A  | N/A  | N/A  | N/A  |

\*-The number of allowances held by an affected source in a unit account may differ from the number allocated by U.S. EPA under Table 2 or 3 of 40 CFR Part 73.

**2) Comments, Notes, and Justifications: None**

**3) Permit Application(s): Attached**

**SECTION VIII: GENERAL PROVISIONS**

1. Pursuant to 40 C.F.R. 70.6(b)(2), any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute.
2. Pursuant to 40 C.F.R. 70.6(a)(2) and §26.7 of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), this permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later.
3. Pursuant to §26.4 of Regulation #26, it is the duty of the permittee to submit a complete application for permit renewal at least six (6) months prior to the date of permit expiration. Permit expiration terminates the permittee's right to operate unless a complete renewal application was submitted at least six (6) months prior to permit expiration, in which case the existing permit shall remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due.
4. Pursuant to 40 C.F.R. 70.6(a)(1)(ii) and §26.7 of Regulation #26, where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq* (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions are incorporated into the permit and shall be enforceable by the Director or Administrator.
5. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(A) and §26.7 of Regulation #26, records of monitoring information required by this permit shall include the following:
  - a. The date, place as defined in this permit, and time of sampling or measurements;
  - b. The date(s) analyses were performed;
  - c. The company or entity that performed the analyses;
  - d. The analytical techniques or methods used;
  - e. The results of such analyses; and
  - f. The operating conditions existing at the time of sampling or measurement.
6. Pursuant to 40 C.F.R. 70.6(a)(3)(ii)(B) and §26.7 of Regulation #26, records of all required monitoring data and support information shall be retained for a period of at least

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5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

7. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(A) and §26.7 of Regulation #26, the permittee shall submit reports of all required monitoring every 6 months. If no other reporting period has been established, the reporting period shall end on the last day of the anniversary month of this permit. The report shall be due within 30 days of the end of the reporting period. Even though the reports are due every six months, each report shall contain a full year of data. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official as defined in §26.2 of Regulation #26 and must be sent to the address below.

Arkansas Department of Pollution Control and Ecology  
Air Division  
ATTN: Air Enforcement  
Post Office Box 8913  
Little Rock, AR 72219

8. Pursuant to 40 C.F.R. 70.6(a)(3)(iii)(B), §26.7 of Regulation #26, and Section 19.601 and 19.602 of Regulation #19, all deviations from permit requirements, including those attributable to upset conditions as defined in the permit shall be reported to the Department. An initial report shall be made to the Department within 24 hours of discovery of the occurrence. The initial report may be made by telephone and shall include:
  - a. The facility name and location,
  - b. The process unit or emission source which is deviating from the permit limit,
  - c. The permit limit, including the identification of pollutants, from which deviation occurs,
  - d. The date and time the deviation started,
  - e. The duration of the deviation,
  - f. The average emissions during the deviation,
  - g. The probable cause of such deviations,
  - h. Any corrective actions or preventive measures taken or being take to prevent such deviations in the future, and
  - i. The name of the person submitting the report.

A full report shall be made in writing to the Department within five (5) business days of discovery of the occurrence and shall include in addition to the information required by initial report a schedule of actions to be taken to eliminate future occurrences and/or to minimize the amount by which the permits limits are exceeded and to reduce the length of time for which said limits are exceeded. If the permittee wishes, they may submit a

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full report in writing (by facsimile, overnight courier, or other means) within 24 hours of discovery of the occurrence and such report will serve as both the initial report and full report.

9. Pursuant to 40 C.F.R. 70.6(a)(5) and §26.7 of Regulation #26, and A.C.A. §8-4-203, as referenced by §8-4-304 and §8-4-311, if any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable.
10. Pursuant to 40 C.F.R. 70.6(a)(6)(i) and §26.7 of Regulation #26, the permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation #26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.* and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Any permit noncompliance with a state requirement constitutes a violation of the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 *et seq.*) and is also grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
11. Pursuant to 40 C.F.R. 70.6(a)(6)(ii) and §26.7 of Regulation #26, it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
12. Pursuant to 40 C.F.R. 70.6(a)(6)(iii) and §26.7 of Regulation #26, this permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
13. Pursuant to 40 C.F.R. 70.6(a)(6)(iv) and §26.7 of Regulation #26, this permit does not convey any property rights of any sort, or any exclusive privilege.
14. Pursuant to 40 C.F.R. 70.6(a)(6)(v) and §26.7 of Regulation #26, the permittee shall furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may be required to furnish such records directly to the Administrator along with a claim of confidentiality.

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**Permit #: 1717-AOP-R1**

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15. Pursuant to 40 C.F.R. 70.6(a)(7) and §26.7 of Regulation #26, the permittee shall pay all permit fees in accordance with the procedures established in Regulation #9.
16. Pursuant to 40 C.F.R. 70.6(a)(8) and §26.7 of Regulation #26, no permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for elsewhere in this permit.
17. Pursuant to 40 C.F.R. 70.6(a)(9)(i) and §26.7 of Regulation #26, if the permittee is allowed to operate under different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the scenario under which the facility or source is operating.
18. Pursuant to 40 C.F.R. 70.6(b) and §26.7 of Regulation #26, all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the Act unless the Department has specifically designated as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements.
19. Pursuant to 40 C.F.R. 70.6(c)(1) and §26.7 of Regulation #26, any document (including reports) required by this permit shall contain a certification by a responsible official as defined in §26.2 of Regulation #26.
20. Pursuant to 40 C.F.R. 70.6(c)(2) and §26.7 of Regulation #26, the permittee shall allow an authorized representative of the Department, upon presentation of credentials, to perform the following:
  - a. Enter upon the permittee's premises where the permitted source is located or 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 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 Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements.
21. Pursuant to 40 C.F.R. 70.6(c)(5) and §26.7 of Regulation #26, the permittee shall submit a compliance certification with terms and conditions contained in the permit, including emission limitations, standards, or work practices. This compliance certification shall be

**Entergy-Arkansas, Inc. -Lake Catherine**  
**Permit #: 1717-AOP-R1**  
**CSN: 30-0011**

submitted annually and shall be submitted to the Administrator as well as to the Department. All compliance certifications required by this permit shall include the following:

- a. The identification of each term or condition of the permit that is the basis of the certification;
  - b. The compliance status;
  - c. Whether compliance was continuous or intermittent;
  - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
  - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and 504(b) of the Act.
22. Pursuant to §26.7 of Regulation #26, nothing in this permit shall alter or affect the following:
- a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
  - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
  - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
  - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
23. Pursuant to A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, this permit authorizes only those pollutant emitting activities addressed herein.
24. Pursuant to §7(a) of Regulation #26 and 40 CFR 70.6(a)(4), the permittee is prohibited from causing any emissions which exceed any allowances that the source lawfully holds under title IV of the Act or the regulations promulgated thereunder. No permit revision is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement of this permit or the Act. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under title IV of the Act.

## **Appendix A**

| EMISSION SUMMARY          |  |                  |                 |         |
|---------------------------|--|------------------|-----------------|---------|
| Source No.                | Description                                  | Pollutant        | Emission Rates* |         |
|                           |  |                  | lb/hr           | tpy     |
| Total Allowable Emissions |  | PM               | 631.2           | 2764.7  |
|                           |  | PM <sub>10</sub> | 444.0           | 1944.8  |
|                           |  | SO <sub>2</sub>  | 7965.0          | 34886.9 |
|                           |  | VOC              | 38.9            | 168.3   |
|                           |  | CO               | 2613.0          | 11375.7 |
|                           |  | NO <sub>x</sub>  | 4449.0          | 20118.2 |
| SN-01<br>(C1)             | Unit 1- Natural Gas<br>(100 % Consumption)   | PM               | 55.0            | 26.5    |
|                           |  | PM <sub>10</sub> | 37.0            | 16.7    |
|                           |  | SO <sub>2</sub>  | 689.0           | 152.9   |
|                           |  | VOC              | 3.4             | 5.1     |
|                           |  | CO               | 209.0           | 913.4   |
|                           |  | NO <sub>x</sub>  | 294.0           | 1649.6  |
|                           | Unit 1- No. 6 Fuel Oil<br>(100% Consumption) | PM               | 3.5             | 240.9   |
|                           |  | PM <sub>10</sub> | 2.1             | 162.1   |
|                           |  | SO <sub>2</sub>  | 0.5             | 3017.9  |
|                           |  | VOC              | 1.0             | 14.9    |
|                           |  | CO               | 209.0           | 915.5   |
|                           |  | NO <sub>x</sub>  | 381.0           | 1287.8  |
|                           | Unit 2-Natural Gas<br>(100 % Consumption)    | PM               | 55.0            | 26.5    |
|                           |  | PM <sub>10</sub> | 37.0            | 16.7    |
|                           |  | SO <sub>2</sub>  | 689.0           | 152.9   |
|                           |  | VOC              | 3.4             | 5.1     |
|                           |  | CO               | 209.0           | 913.4   |
|                           |  | NO <sub>x</sub>  | 294.0           | 1649.6  |
|                           | Unit 2-No. 6 Fuel Oil<br>(100% Consumption)  | PM               | 5.8             | 240.9   |
|                           |  | PM <sub>10</sub> | 3.6             | 162.1   |
|                           |  | SO <sub>2</sub>  | 1.0             | 3017.9  |
|                           |  | VOC              | 1.7             | 14.9    |
|                           |  | CO               | 421.0           | 915.5   |
|                           |  | NO <sub>x</sub>  | 381.0           | 1287.8  |
| SN-02<br>(C3)             | Unit 3-Natural Gas<br>(100 % Consumption)    | PM               | 90.2            | 43.8    |
|                           |  | PM <sub>10</sub> | 65.0            | 28.7    |
|                           |  | SO <sub>2</sub>  | 1141.0          | 254.2   |
|                           |  | VOC              | 5.6             | 8.0     |
|                           |  | CO               | 421.0           | 1844.0  |
|                           |  | NO <sub>x</sub>  | 487.0           | 2732.8  |
|                           | Unit 3-No. 6 Fuel Oil<br>(100% Consumption)  | PM               | 16.5            | 395.1   |
|                           |  | PM <sub>10</sub> | 16.5            | 284.7   |
|                           |  | SO <sub>2</sub>  | 3.3             | 4997.6  |
|                           |  | VOC              | 7.8             | 24.6    |
|                           |  | CO               | 1774.0          | 1844.0  |
|                           |  | NO <sub>x</sub>  | 3200.0          | 2133.1  |
| SN-03<br>(C4)             | Unit 4-Natural Gas<br>(100 % Consumption)    | PM               | 431.0           | 162.4   |
|                           |  | PM <sub>10</sub> | 305.0           | 135.4   |
|                           |  | SO <sub>2</sub>  | 5446.0          | 1206.7  |
|                           |  | VOC              | 26.0            | 37.9    |
|                           |  | CO               | 1774.0          | 7770.7  |
|                           |  | NO <sub>x</sub>  | 3200.0          | 14016.2 |

**EMISSION SUMMARY**

| Source No.    | Description                                 | Pollutant        | Emission Rates* |         |
|---------------|---|------------------|-----------------|---------|
|               |   |                  | lb/hr           | tpy     |
| SN-03<br>(C4) | Unit 4-No. 6 Fuel Oil<br>(100% Consumption) | PM               | 430.5           | 1887.8  |
|               |   | PM <sub>10</sub> | 305.0           | 1335.9  |
|               |   | SO <sub>2</sub>  | 5445.9          | 23853.5 |
|               |   | VOC              | 26.4            | 113.9   |
|               |   | CO               | 1774.0          | 7770.2  |
|               |   | NO <sub>x</sub>  | 3017.8          | 14016.0 |
| SN-04<br>(T1) | Fuel Oil Day Tank #1                        | VOC              | 0.1             | 0.1     |
| SN-05<br>(T2) | Fuel Oil Day Tank #2                        | VOC              | 0.1             | 0.1     |
| SN-06<br>(T3) | Fuel Oil Tank #3                            | VOC              | 0.1             | 0.1     |
| SN-07<br>(T4) | Fuel Oil Tank #4                            | VOC              | 0.1             | 0.1     |
| SN-08<br>(T5) | Fuel Oil Tank #5                            | VOC              | 0.1             | 0.1     |

# INVOICE REQUEST FORM

PDS- \_\_\_\_\_

Date October 11, 2001

|                                     |                      |
|-------------------------------------|----------------------|
| <input checked="" type="checkbox"/> | Air                  |
| <input type="checkbox"/>            | NPDES                |
| <input type="checkbox"/>            | Stormwater           |
| <input type="checkbox"/>            | State Permits Branch |
| <input type="checkbox"/>            | Solid Waste          |

CSN 30-0011

Facility Name Entergy Arkansas, Inc. - Lake Catherine

Invoice Mailing Address Entergy - Arkansas

425 W Capitol Ave, PO Box 551, Little Rock, Arkansas 72203

|                                     |              |
|-------------------------------------|--------------|
| <input type="checkbox"/>            | Initial      |
| <input checked="" type="checkbox"/> | Modification |
| <input type="checkbox"/>            | Annual       |

Permit Number 1717-AOP-R1  
Permit Description Title 5  
Permit Fee Code A

Amount Due \$ 1000.00

Engineer Nancy Spencer Rogers

Paid? GNo GYes Check # \_\_\_\_\_

Comments: Air Permit Fee Calculation

Fee = \$19.12\*

## Public Notice

Pursuant to the Arkansas Operating Air Permit Program (Regulation #26) Section 602, the Air Division of the Arkansas Department of Environmental Quality gives the following notice:

Entergy-Arkansas, Inc.-Lake Catherine Plant of Highway 270, Jones Mill, Hot Spring County, Arkansas is modifying its current Title V air permit, Permit #1717-AOP-R0, (CSN: 30-0011). After the issuance of the initial permit in 1999, it was discovered that the plant had potential problems with the permitted NO<sub>x</sub> limits for short periods of time when the units were brought to maximum load. Also, it was found that the Unit 3 boiler was exceeding the SO<sub>2</sub> limits. These exceedances were based on low estimates of heat input. In this modification, the facility is increasing the estimated heat inputs for boilers and increasing the permitted emission limits. No actual modifications to the equipment are taking place.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice.

Citizens wishing to examine the permit application and staff findings and recommendations may do so by contacting Suzanne Carswell, Information Officer. Citizens desiring technical information concerning the application or permit should contact Nancy Spencer Rogers, Engineer. Both Suzanne Carswell and Nancy Spencer Rogers can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, telephone: (501) 682-0744.

The draft permit and permit application are available for copying at the above address. A copy of the draft permit has also been placed at the Tri-Lakes Regional Library, 200 Woodbine, Hot Springs. This information may be reviewed during normal business hours.

Interested or affected persons may also submit written comments or request a hearing on the proposal, or the proposed modification, to the Department at the above address - Attention: Suzanne Carswell. In order to be considered, the comments must be submitted within thirty (30) days of publication of this notice. Although the Department is not proposing to conduct a public hearing, one will be scheduled if significant comments on the permit provisions are received. If a hearing is scheduled, adequate public notice will be given in the newspaper of largest circulation in the county in which the facility in question is, or will be, located.

The Director shall make a final decision to issue or deny this application or to impose special conditions in accordance with Section 2.1 of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8) and Regulation #26.

Dated this

Richard A. Weiss  
Interim Director