

**STATEMENT OF BASIS**

*for the issuance of Draft Air Permit # 263-AOP-RI*

**1. PERMITTING AUTHORITY:**

Arkansas Department of Pollution Control and Ecology  
8001 National Drive  
Post Office Box 8913  
Little Rock, Arkansas 72219-8913

**2. APPLICANT:**

Entergy Services, Inc. - White Bluff Facility  
1100 White Bluff Road  
Redfield, Arkansas 72132

**3. PERMIT WRITER:**

John Bailey

**4. PROCESS DESCRIPTION AND SIC CODE:**

SIC Description: Coal/Oil Fired Electric Power Plant  
SIC Code: 4911

**5. SUBMITTALS:** May 1, 1998

**6. REVIEWER'S NOTES:** This permit modification serves to include barge unloading operations. Entergy will receive coal by barge, which will result in particulate emissions from a variety of transfer points and from hauling the delivered coal via truck from the barge to the on-site coal storage piles.

Also four tanks and two generators will be added to the insignificant activities list.

**7. COMPLIANCE STATUS:** The following summarizes the current compliance status of the facility including active/pending enforcement actions and recent compliance activities and issues: No issues are pending.

**8. APPLICABLE REGULATIONS:**

|   |          |                          |
|---|----------|--------------------------|
| NSPS (Y/N)                                      | <u>Y</u> | If yes, subpart <u>D</u> |
| NESHAP (Y/N)                                    | <u>N</u> | If yes, subpart _____    |
| PSD applicability (Y/N)                         | <u>Y</u> |                          |
| Is facility on 28 list (100 tpy)? (Y/N)         | <u>Y</u> |                          |
| Was netting performed to avoid PSD review (Y/N) | <u>N</u> |                          |

Permit #: 263-AOP-R1  
 CSN #: 35-0110  
 Page 2 of 6

Subject to 112 (g) requirements (Y/N)          N      
 Subject to CAM requirements (Y/N)            N      
 Other applicable regulations

**9. EMISSION CHANGES:**

The following table summarizes plantwide emission changes associated with this permitting action.

| <b>Plantwide Permitted Emissions (ton/yr)</b> |                                  |                                  |               |
|---|----------------------------------|----------------------------------|---------------|
| <b>Pollutant</b>                              | <b>Air Permit<br/>263-AOP-R0</b> | <b>Air Permit<br/>263-AOP-R1</b> | <b>Change</b> |
| PM  | 3790.3                           | 3807.2                           | 16.9          |
| PM <sub>10</sub>                              | 790.9                            | 794.0                            | 3.1           |
| SO <sub>2</sub>                               | 91875.6                          | 91874.5                          | -1.1          |
| VOC   | 310.6                            | 310.3                            | -0.3          |
| CO  | 28475.1                          | 28473.1                          | -2            |
| NO <sub>x</sub>                               | 53496.9                          | 53488.9                          | -8            |
| Lead  | 9.6                              | 9.6                              | 0             |

\* Some criteria pollutants decrease as a result of removal of insignificant activities.

**10. MODELING:**

**A. Criteria Pollutants**

Examination of the source type, location, plot plan, land use, emission parameters, and other available information indicate that modeling is not warranted at this time for VOC.

| <b>Pollutant</b> | <b>Emission<br/>Rate<br/>(lb/hr)</b> | <b>NAAQS<br/>Standard<br/>(µg/m<sup>3</sup>)</b> | <b>Averaging<br/>Time</b> | <b>Highest<br/>Concentration<br/>(µg/m<sup>3</sup>)</b> | <b>% of<br/>NAAQS</b> |
|------------------|--------------------------------------|--|---------------------------|---|-----------------------|
| PM <sub>10</sub> | 189.9                                | 50   | Annual                    | .0038   | 0%                    |
|                  |                                      | 150  | 24-hour                   | 0.39  | 0%                    |
| SO <sub>2</sub>  | 20980.2                              | 80   | Annual                    | 0.42  | 1%                    |
|                  |                                      | 1,300  | 3-hour                    | 313.1   | 24%                   |
|                  |                                      | 365  | 24-hour                   | 42.59   | 12%                   |

| Permit #: 263-AOP-R1<br>CSN #: 35-0110<br>Pollutant<br>Page 3 of 6 | Emission Rate (lb/hr) | NAAQS Standard ( $\mu\text{g}/\text{m}^3$ ) | Averaging Time | Highest Concentration ( $\mu\text{g}/\text{m}^3$ ) | % of NAAQS |
|--|-----------------------|---|----------------|--|------------|
| NO <sub>x</sub>  | 12243.7               | 100   | Annual         | 0.25   | 0%         |
| CO   | 6508.5                | 10,000                                      | 8-hour         | 123.56   | 1%         |
|  |                       | 40,000                                      | 1-hour         | 176.51   | 0%         |

## 11. CALCULATIONS:

| SN          | Emission Factor Source (AP-42, Testing, etc) | Emission Factor and units (lbs/ton, lbs/hr, etc) | Control Equipment Type (if any) | Control Equipment Efficiency | Comments (Emission factor controlled/uncontrolled, etc) |
|-------------|--|--|---------------------------------|------------------------------|---|
| 1-2         | AP-42  | Table 1.1-3,4,15<br>Table 1.3-1,3                | WESP                            | 99.5                         |   |
| 5, 8, and 9 | AP-42  | Table 1.3-1,3                                    |                                 |                              |   |
| 7 and 14-16 | Tanks Program                                |  |                                 |                              |   |
| 17 & 18     | AP-42  | Table 13.4-1                                     |                                 |                              |   |
| 3, 4, 6&19  | AP-42  | Table 13.2.1<br>Table 13.2.4                     | Fabric Filter (SN-04)           | 94%                          |   |

## 12. MONITORING OR CEMS

The following are parameters that must be monitored with CEMS or other monitoring equipment (temperature, pressure differential, etc), frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

| SN      | Parameter or Pollutant to be Monitored | Method of Monitoring (CEM, Pressure Gauge, etc) | Frequency*   | Report (Y/N)** |
|---------|--|---|--------------|----------------|
| 01 & 02 | SO <sub>2</sub>                        | CEMS  | Continuously | Y              |
| 01 & 02 | NO <sub>x</sub>                        | CEMS  | Continuously | Y              |
| 01 & 02 | Opacity                                | CEMS  | Continuously | Y              |

\* Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)  
 \*\* Indicates whether the parameter needs to be included in reports.

**13. RECORD KEEPING REQUIREMENTS**

The following are items (such as throughput, fuel usage, VOC content of coating, etc) that must be tracked and recorded, frequency of recording and whether records are needed to be included in any annual, semiannual or other reports.

| SN      | Recorded Item                               | Limit (as established in permit) | Frequency *                        | Report (Y/N)** |
|---------|---|----------------------------------|------------------------------------|----------------|
| 01 & 02 | Sulfur Content                              | 0.5% by weight                   | 5000 to 10000 barrel lot delivered | N              |
| 07      | Fuel Oil                                    | 112,000,000                      | annual                             | N              |
| 08 & 09 | Hours Operated                              | 500 hrs                          | annual                             | N              |
| 14      |   | 9,308 gallons                    | annual                             | Y              |
| 15      | Through put                                 | 180,000 gallons                  | annual                             | Y              |
| 16      |   | 15,600 gallons                   | annual                             | Y              |
| 17 & 18 | Total dissolved solids<br>Circulating water | 3000 ppm<br>19,560 kgal/hr       | annual                             | Y              |
| 19      | Coal  | 500,000 tons                     | annual                             | Y              |

\* Indicate frequency of recording required for the item (Continuously, hourly, daily, etc.)  
 \*\* Indicates whether the item needs to be included in reports

**14. OPACITY**

| SN      | Opacity % | Justification (NSPS limit, Dept. Guidance, etc) | Compliance Mechanism (daily observation, weekly, control equipment operation, etc) |
|---------|-----------|---|--|
| 01 & 02 | 20        | 40 CFR 60.42 (a)(2)                             | Continuously   |
| 03      | 20        | Department Guidance                             | Wet Suppression  |
| 04      | 20        | Department Guidance                             | Maintenance Plan   |
| 06      | 20        | Department Guidance                             | Weekly   |
| 17 & 18 | 20        | Department Guidance                             | Operate within Design Specification  |
| 19      | 20        | Department Guidance                             | Wet Suppression  |

**15. DELETED CONDITIONS:**

All conditions pertaining to the four insignificant tanks were deleted. This is appropriate due to the fact that these tanks do not have the potential to emit more than 5 tpy of any pollutant (A-13). See comments on this draft for calculated potential.

All conditions pertaining to the two insignificant generators were deleted. These generator fall under (A-12). They are not operated more than 90 days per year. See comments for this draft for past operational history.

**16. VOIDED, SUPERSEDED OR SUBSUMED PERMITS**

List all active permits for this facility which are voided/superseded/subsumed by issuance of this permit.

|            |
|------------|
| Permit #   |
| 263-AOP-R0 |

**17. CONCURRENCE BY:**

The following supervisor concurs with the permitting decision:

Permit #: 263-AOP-R1

CSN #: 35-0110

Page 6 of 6

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*Tom Rheume, P.E.*