ADEQ

A R K A N S A S
Department of Environmental Quality

NOV 2 9 2007

Mr. Tracy Johnson
Plant Manager
Entergy Arkansas - Lake Catherine
425 West Capitol Ave
Little Rock, AR 72203

Re: Administrative Permit Amendment AFIN 30-00011, Permit No. 1717-AOP-R3

Dear Mr.: Johnson

The enclosed Amended Permit No. 1717-AOP-R3 has been completed in accordance with the provisions of Section §19.407 of Regulation 19, of the Arkansas Plan of Implementation for Air Pollution Control.

The following changes have been made:

- Added Appendix "C" to Table of Contents.
- Added the following statement to Plantwide Condition #8: "A copy of the facility's Acid Rain Permit is attached in an appendix to this Title V permit".
- Attached Appendix "C" – Acid Rain Program – Acid Rain Permit Application.
- Corrected ADEQ address in General Condition #8.

Please replace your permit with this revised version.

Sincerely,

Mike Bates
Chief
Air Division

Enclosures

cc: Enforcement
Central Records

NOV 2 9 2005

ADEQ
OPERATING
AIR PERMIT

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

Permit No. : 1717-AOP-R3
Renewal #1
IS ISSUED TO:
Entergy Arkansas, Inc. - Lake Catherine Plant
141 West County Line Road
Malvern, AR 72104
Hot Spring County
AFIN: 30-00011

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:

January 5, 2005 AND January 4, 2010

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates
Chief, Air Division

NOV 2 9 2007
Date Amended

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List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate Matter
PM_{10}	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective February 15, 1999
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR Part 75, Acid Rain Program

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	771.9	436.6
		PM_{10}	571.3	324.1
		SO_2	8695.1	1927.2
		VOC	58.3	205.0
		CO	407.0	1558.9
		NO_X	4786.0	20963.0
HAPs*		Acenaphthene*	0.03	0.03
		Fluoranthene*	0.03	0.03
		Fluorene*	0.03	0.03
		Formaldehyde*	1.76	7.42
		Hexane*	14.5	63.3
		Hydrogen Chloride	18.3	79.7
		Phenanthrene*	0.03	0.03
		POM*	0.07	0.28
		2,3,7,8-TCD*	0.03	0.03
		Toluene*	0.33	1.4
		Antimony**	0.28	1.19
		Arsenic**	0.08	0.31
		Beryllium**	0.04	0.03
		Cadmium**	0.04	0.1
		Cobalt**	0.32	1.36

		Manganese**	0.17	0.68
		Mercury**	0.03	0.04
		Nickel**	4.32	19.02
		Selenium**	0.05	0.17
01 (C1)	Unit 1 – Natural Gas (100% Consumption)	PM	5.3	23.0
		PM_{10}	4.0	17.3
		SO_2	0.5	2.2
		VOC	3.8	16.7
		CO	58.0	255.0
		NO_X	381.0	1669.0
	Unit 1 – No. 6 Fuel Oil (95% Natural Gas and 5% No. 6 Fuel Oil Consumption)	PM	62.0	35.6
		PM_{10}	45.2	26.5
		SO_2	689.0	153.0
		VOC	4.6	16.8
		CO	58.0	246.2
		NO_X	381.0	1630.5
	Unit 2 – Natural Gas (100% Consumption)	PM	5.3	23.0
		PM_{10}	4.0	17.3
		SO_2	0.5	2.2
		VOC	3.8	16.7
		CO	58.0	255.0
		NO_X	381.0	1669.0
	Unit 2 – No. 6 Fuel Oil (95% Natural Gas and 5% No. 6 Fuel Oil Consumption)	PM	62.0	35.6
		PM_{10}	45.2	26.5
		SO_2	689.0	153.0
		VOC	4.6	16.8
		CO	58.0	246.2
		NO_X	381.0	1630.5
01	Unit 1 & Unit 2 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.3	1.3
		Hexane*	2.5	11.0
		Hydrogen Chloride	3.2	13.7
		Phenanthrene*	0.01	0.01
		POM*	0.01	0.05
		2,3,7,8-TCD*	0.01	0.01
		Toluene*	0.06	0.24
		Antimony**	0.05	0.21
		Arsenic**	0.02	0.05
		Beryllium**	0.01	0.01
		Cadmium**	0.01	0.02
		Cobalt**	0.06	0.24
		Manganese**	0.03	0.12
		Mercury**	0.01	0.01

		Nickel**	0.75	3.3
		Selenium**	0.01	0.03
02 (C3)	Unit 3 – Natural Gas (100% Consumption)	PM	8.7	38.1
		PM_{10}	6.5	29.0
		SO_2	1.0	4.4
		VOC	6.3	28.0
		CO	96.0	422.0
		NO_X	631.0	2764.0
	Unit 3 – No. 6 Fuel Oil (95% Natural Gas and 5% No. 6 Fuel Oil Consumption)	PM	105.4	59.3
		PM_{10}	78.4	44.2
		SO_2	1194.1	265.7
		VOC	7.9	27.9
		CO	96.0	407.8
		NO_X	631.0	2704.0
02	Unit 3 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.26	1.1
		Hexane*	2.1	9.1
		Hydrogen Chloride	2.7	11.9
		Phenanthrene*	0.01	0.01
		POM*	0.01	0.04
		2,3,7,8-TCD*	0.01	0.01
		Toluene*	0.05	0.21
		Antimony**	0.04	0.18
		Arsenic**	0.01	0.05
		Beryllium**	0.02	0.01
		Cadmium**	0.01	0.02
		Cobalt**	0.05	0.2
		Manganese**	0.03	0.1
		Mercury**	0.01	0.01
		Nickel**	0.65	2.82
		Selenium**	0.01	0.03
03 (C4)	Unit 4 – Natural Gas (100% Consumption)	PM	45.0	197.1
		PM_{10}	33.4	146.0
		SO_2	3.5	15.4
		VOC	32.2	141.0
		CO	140.4	615.0
		NO_X	3393.0	14861.0
	Unit 4 – No. 6 Fuel Oil (95% Natural Gas and 5% No. 6 Fuel Oil Consumption)	PM	542.5	306.1
		PM_{10}	402.5	226.9
		SO_2	6123.0	1355.5
		VOC	40.6	142.9
		CO	195.0	626.9
		NO_X	3393.0	14391.6

03	Unit 4 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	1.2	5.02
		Hexane*	9.9	43.2
		Hydrogen Chloride	12.4	54.1
		Phenanthrene*	0.01	0.01
		POM*	0.05	0.19
		2,3,7,8-TCD*	0.01	0.01
		Toluene*	0.22	0.95
		Antimony**	0.19	0.80
		Arsenic**	0.05	0.21
		Beryllium**	0.01	0.01
		Cadmium**	0.02	0.06
		Cobalt**	0.21	0.92
		Manganese**	0.11	0.46
		Mercury**	0.01	0.02
		Nickel**	2.92	12.9
		Selenium**	0.03	0.11
04	Fuel Oil Day Tank #1	VOC	0.1	0.1
05	Fuel Oil Day Tank #2	VOC	0.1	0.1
06	Fuel Oil Tank #3	VOC	0.1	0.1
07	Fuel Oil Tank #4	VOC	0.1	0.1
08	Fuel Oil Tank #5	VOC	0.1	0.1
09	Fuel Oil Tank #6	VOC	0.1	0.1

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

** HAPs included in the PM/PM_{10} totals. Other HAPs are not included in any other totals unless specifically stated.

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).

1717-AOP-R1 was issued on May 8, 2001. After the issuance of the initial permit (1717-AOP-R0), it was discovered that the facility had potential problems with the permitted NO_x limits for short periods of time when the units were brought to maximum load. Also, it was found that Boiler #3 was exceeding the SO_2 limits. The exceedances were caused by low estimates of the heat input of the boilers. This modification allowed the facility to increase the estimated heat input for boilers and increased the permitted emission limits. No physical modifications were made to equipment at the facility.

Permit 1717-AO-R2 was issued on January 24, 2005. This was the first renewal of the Title V permit issued to this facility. There were no changes made in the physical operation of the facility, but the CO emissions were revised to reflect the use of AP-42 emission factors. Entergy believes these values to be more representative than the previous method used. Also, the particulate matter emission rates now account for both condensable and filterable fractions of particulate matter emissions. Also, hazardous air pollutants were listed in the permit for the first time.

SECTION IV: SPECIFIC CONDITIONS

SN-01, SN-02, 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, §18.801.. 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

1. The permittee shall not exceed the emission rates set forth in the following table. Compliance with SO_2 emissions shall be demonstrated through compliance with Specific Condition 12. Compliance with SN-01 and SN-02 NO_X emissions shall be demonstrated through compliance with Specific Condition 14, while SN-03 NO_X shall be demonstrated through compliance with Specific Condition 13. Compliance with PM_{10}, CO, and VOC emissions shall be demonstrated through compliance with Specific Condition 7. Compliance is based on a 24 hour block average. [Regulation 19, §19.501 et seq., effective February 15, 1999 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
01	Unit 1 – Natural Gas	PM_{10}	4.0	17.3
		SO_2	0.5	2.2
		VOC	3.8	16.7
		CO	58.0	255.0
		NO_x	381.0	1669.0
	Unit 1 – No. 6 Fuel Oil	PM_{10}	45.2	26.5
		SO_2	689.0	153.0

		VOC	4.6	16.8
		CO	58.0	246.2
		NO_x	381.0	1630.5
	Unit 2 – Natural Gas	PM_{10}	4.0	17.3
		SO_2	0.5	2.2
		VOC	3.8	16.7
		CO	58.0	255.0
		NO_x	381.0	1669.0
	Unit 2 – No. 6 Fuel Oil	PM_{10}	45.2	26.5
		SO_2	689.0	153.0
		VOC	4.6	16.8
		CO	58.0	246.2
		NO_x	381.0	1630.5
02	Unit 3 – Natural Gas	PM_{10}	6.5	29.0
		SO_2	1.0	4.4
		VOC	6.3	28.0
		CO	96.0	422.0
		NO_x	631.0	2764.0
	Unit 3 – No. 6 Fuel Oil	PM_{10}	78.4	44.2
		SO_2	1194.1	265.7
		VOC	7.9	27.9
		CO	96.0	407.8
		NO_x	631.0	2704.0
03	Unit 4 – Natural Gas	PM_{10}	33.4	146.0
		SO_2	3.5	15.4
		VOC	32.2	141.0
		CO	140.4	615.0
		NO_x	3393.0	14861.0
	Unit 4 – No. 6 Fuel Oil	PM_{10}	402.5	226.9
		SO_2	6123.0	1355.5
		VOC	40.6	142.9
		CO	195.0	626.9
		NO_x	3393.0	14391.6

2. 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. The HAP emissions listed for these sources are based upon published emission factors at the time of permit issuance. Any change in these emission factors will not constitute a violation of the HAP emission rates listed below. [Regulation 18, §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Unit 1 – Natural Gas	PM	5.3	23.0
	Unit 1 – No. 6 Fuel Oil	PM	62.0	35.6
	Unit 2 – Natural Gas	PM	5.3	23.0
	Unit 2 – No. 6 Fuel Oil	PM	62.0	35.6
	Unit 1 & Unit 2 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.3	1.3
		Hexane*	2.5	11.0
		Hydrogen Chloride	3.2	13.7
		Phenanthrene*	0.01	0.01
		POM*	0.01	0.05
		2,3,7,8-TCD*	0.01	0.01
		Toluene*	0.06	0.24
		Antimony**	0.05	0.21
		Arsenic**	0.02	0.05
		Beryllium**	0.01	0.01
		Cadmium**	0.01	0.02
		Cobalt**	0.06	0.24
		Manganese**	0.03	0.12
		Mercury**	0.01	0.01
		Nickel**	0.75	3.3
		Selenium**	0.01	0.03
02	Unit 3 – Natural Gas	PM	8.7	38.1
	Unit 3 – No. 6 Fuel Oil	PM	105.4	59.3
	Unit 3 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.26	1.1
		Hexane*	2.1	9.1
		Hydrogen Chloride	2.7	11.9
		Phenanthrene*	0.01	0.01
		POM*	0.01	0.04
		2,3,7,8-TCD*	0.01	0.01
		Toluene*	0.05	0.21
		Antimony**	0.04	0.18
		Arsenic**	0.01	0.05
		Beryllium**	0.02	0.01
		Cadmium**	0.01	0.02

		Cobalt**	0.05	0.2
		Manganese**	0.03	0.1
		Mercury**	0.01	0.01
		Nickel**	0.65	2.82
		Selenium**	0.01	0.03
03	Unit 4 – Natural Gas	PM	45.0	197.1
	Unit 4 – No. 6 Fuel Oil	PM	542.5	306.1
	Unit 4 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	1.2	5.02
		Hexane*	9.9	43.2
		Hydrogen Chloride	12.4	54.1
		Phenanthrene*	0.01	0.01
		POM*	0.05	0.19
		2,3,7,8-TCD*	0.01	0.01
		Toluene*	0.22	0.95
		Antimony**	0.19	0.80
		Arsenic**	0.05	0.21
		Beryllium**	0.01	0.01
		Cadmium**	0.02	0.06
		Cobalt**	0.21	0.92
		Manganese**	0.11	0.46
		Mercury**	0.01	0.02
		Nickel**	2.92	12.9
		Selenium**	0.03	0.11

3. 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. [Regulation 26, §26.701 and 40 CFR 70.6]

4. 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. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

5. 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. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

6. 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. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]

7. The permittee shall install, operate, and maintain O_2 monitors on the boilers. The permittee shall show a positive O_2 reading when the boilers are in operation. [Regulation 19, §19.703, 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]

8. The permittee shall update, twice per day, records which demonstrate compliance with Specific Condition 7. These records shall be 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 Provision 7. [Regulation 19, §19.703, 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]

9. 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. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6]

10. 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. [Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

11. 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. [Regulation 19, §19.501 et seq and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	tpy
01	Unit 1	PM	35.6
		PM_{10}	26.5
		SO_2	153.0
		VOC	16.8
		CO	255.0
		NO_x	1669.0

	Unit 2	PM	35.6
		PM_{10}	26.5
		SO_2	153.0
		VOC	16.8
		CO	255.0
		NO_x	1669.0
02	Unit 3	PM	59.3
		PM_{10}	44.2
		SO_2	265.7
		VOC	28.0
		CO	422.0
		NO_x	2764.0
03	Unit 4	PM	306.1
		PM_{10}	226.9
		SO_2	1355.5
		VOC	142.9
		CO	626.9
		NO_x	14861.0

12. The permittee shall determine SO_2 emissions using the optional SO_2 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. [Regulation 19, §19.703, 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]

13. The permittee shall determine NO_X emissions for units 1, 2, 3 and 4 (SN-01, SN-02 and SN-03) using the optional NO_X 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. [Regulation 19, §19.703, 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]

14. In the event that Units 1, 2, 3 or 4 exceed the levels required to be peaking units as defined in 40 CFR 72.2, the permittee shall maintain records, using CEMS for NO_X for the applicable unit(s), which demonstrate compliance with the limit set forth in this permit. If CEMS is required, it will be installed in accordance with 40 CFR Part 75, Appendix E, §1.1 which requires a NO_x CEMS to be installed and certified no later than December 31st of the calendar year following the year in which the peaking status was lost. 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. [Regulation 19, §19.703, 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]

15. The permittee shall submit an excess emissions report for SO_2 and NO_x 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. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

16. The permittee shall determine CO_2 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_2 emissions (in ton/day) discharged to the atmosphere. [Regulation 19, §19.304 and 40 CFR 75.10 (a)(3)]

17. 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). [Regulation 19, §19.304 and 40 CFR 72.2]

18. 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. [Regulation 19, §19.304 and 40 CFR 74.14]

19. The permittee shall ensure that all required 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. A copy of the CEM monitoring requirements can be found in Appendix B of this permit. [Regulation 19, §19.703 and 40 CFR 75.10]

20. The permittee shall submit the required quarterly monitoring reports to EPA headquarters. [Regulation 19, §19.304 and 40 CFR Part 75.10]

21. The permittee shall perform Relative Accuracy tests if applicable. [Regulation 19, §19.304 and 40 CFR 75]

22. 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. [Regulation 19, §19.304 and 40 CFR 75.10 (c)]

23. The permittee shall conduct a one-time stack test to verify compliance with the CO emission rates listed for these sources (SN-01, 02, 03). This test shall be completed within the first 180 operating days after issuance of this permit. A copy of the results of these tests shall be kept on site and made available to Department personnel upon

request. The test results shall be submitted to the Department in accordance with General Provision 7. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]

Acid Rain Program

24. The affected units (SN-01 through SN-03) are subject to and shall comply with applicable provisions of the Acid Rain Program (40 CFR Parts 72, 73, and 75).

25. Pursuant to 40 CFR Part 75 (Appendix B)- Continuous Emission Monitoring Subpart G, the submission of the NO_X, SO_2, and O_2 or CO_2 monitoring plan is required at least 45 days prior to the CEMS certification testing. Notice of CEMS certification testing is required at least 21 days prior to the CEMS certification testing. A copy of 40 CFR Part 75 is included in Appendix E.

26. Pursuant to 40 CFR Part 75 Subpart G - Continuous Emission Monitoring, a monitoring plan is required to be submitted for NO_X, SO_2, and O_2 or CO_2 monitoring.

27. Pursuant to 40 CFR Part 75 Subpart A, the initial NO_X, and O_2 or CO_2 CEMS certification testing is to occur no later than 90 days after the unit commences commercial operation except the testing must occur prior to the date this unit is declared commercial in accordance with DOE Form EIA-860.

SN-04 through 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. Fuel Oil Day Tank #1 (SN-04) is occasionally used for temporary waste water storage.

Specific Conditions

28. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Conditions 29 and 30. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
04	VOC	0.1	0.1
05	VOC	0.1	0.1
06	VOC	0.1	0.1
07	VOC	0.1	0.1
08	VOC	0.1	0.1
09	VOC	0.1	0.1

29. The permittee shall store only No. 6 fuel oil in storage tanks SN-05 thru SN-09. SN-04 may be used for temporary waste water storage. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and 8-4-311, and 40 CFR 70.6]

30. 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. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and 8-4-311, and 40 CFR 70.6]

31. The permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 30. 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. [Regulation 19, §19.705 and 40 CFR 52, Subpart E]

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Entergy Arkansas, Inc. - Lake Catherine Plant will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

Existing Monitoring

The Lake Catherine facility currently monitors and reports quarterly data for SO_2 and NO_X under Acid Rain requirements of 40 CFR 75.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 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]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
   a. Sampling ports adequate for applicable test methods;
   b. Safe sampling platforms;
   c. Safe access to sampling platforms; and
   d. Utilities for sampling and testing equipment.

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Permit Shield

7. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the

following as applicable requirements based upon the information submitted by the permittee in an application dated October 15, 2003.

Applicable Regulations

Source No.	Regulation	Description
01-03	Regulation 26 Section 3	Regulations of the Arkansas Operating Air Permit Program
40 CFR 72 Subpart A-D	Acid Rain Permit Regulations	Acid Rain Permit Regulations
40 CFR 73 Subpart B	SO_2 Allowance Allocations	SO_2 Allowance Allocations
40 CFR 75 Subpart A-D, F, and G	Continuous Emission Monitoring	Continuous Emission Monitoring
40 CFR 77	Excess Emissions	Excess Emissions

Acid Rain (Title IV)

8. The Director prohibits the permittee to cause any emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated under the Act. No permit revision is required for increases in emissions allowed by allowances acquired pursuant to the acid rain program, if 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. However, the source may not use allowances as a defense for noncompliance with any other applicable requirement of this permit or the Act. The permittee will account for any such allowance according to the procedures established in regulations promulgated under Title IV of the Act. A copy of the facility's Acid Rain Permit is attached in an appendix to this Title V permit. [Regulation 26, §26.701 and 40 CFR 70.6(a)(4)]

Page Amended

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated October 15, 2003.

Description	Category
Kerosene Fired Steam Cleaner	Group A, 1
Gasoline Powered Oil Skimmer	
Units 1 & 2 BFW Pump LO Reservoir	Group A, 2
Units 1 & 2 BFW Pump LO Reservoir	
Units 1 & 2 BFW Pump LO Reservoir	
Unit 3 BFW Pump LO Reservoir	
Unit 3 BFW Pump LO Reservoir	
Unit 3 BFW Pump LO Reservoir	
Unit 4 FD Fan LO Reservoir	
Unit 4 BFW LO Reservoir	
Unit 4 BFW LO Reservoir	
Unit 4 BFW LO Reservoir	
Unit 4 BFW LO Reservoir	
Unit 4 BFP LO Reservoir	
Emergency Diesel Generator Tank	
Used Oil Storage Tank	
Used Kerosene Drum	
Waste Oil/ Solvent Storage	
Oil/Water Separator (Oil Section)	
Units 1, 2, & 3 Lube Oil Batch Tank #1	Group A, 3
Units 1, 2, & 3 Lube Oil Batch Tank #2	
Units 1, 2, & 3 Lube Oil Batch Tank #3	

Unit 1 Lube Oil Reservoir	
Unit 1 Lube Oil Filter Tank	
Unit 2 Lube Oil Reservoir	
Unit 2 Lube Oil Filter Tank	
Unit 3 Lube Oil Reservoir	
Unit 3 Lube Oil Filter Tank	
Unit 3 Seal Oil Tank	
Unit 4 LO Filter Tank	
Unit 4 Seal Oil Tank	
Unit 4 FD Fan LO Reservoir	
Fuel Oil Additive Tank	
Oil Drum Storage	
Diesel Tank	
Diesel Emergency Generator	Group A, 12
Unit 4 LO Batch Tanks (2 - 12,000 gal)	Group A, 13
Unit 4 LO Reservoir (12,000 gal)	
500 gallon Gasoline Tank	
Degreaser	
Unit 3 Welding Area (1 machine)	
Diesel Fuel Oil Dispensing Station	
Unleaded Gasoline Dispensing Station	
Unit 4 Bead Blaster	
Grit Blaster	
Aerosol Lubricant Fugitives	
Aerosol Degreaser Fugitives	
Aerosol Insecticides	
Welding Shop (2 machines)	
Aerosol Puncture Station	

SECTION VIII: GENERAL PROVISIONS

1. 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. [40 CFR 70.6(b)(2)]

2. 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. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will 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. [Regulation 26, §26.406]

4. 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, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]
   a. The date, place as defined in this permit, and time of sampling or measurements;
   b. The date(s) analyses performed;
   c. The company or entity performing 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. The permittee must retain the records of all required monitoring data and support information for at least five (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. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
5301 Northshore Dr.
North Little Rock, AR 72118-5317

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit. The permittee shall make an initial report to the Department by the next business day after the 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 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 taken to prevent such deviations in the future, and
   i. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report. [40 CFR 70.6(a)(3)(iii)(B), Regulation 26, §26.701(C)(3)(b), Regulation 19, §19.601 and §19.602] *Page Amended*

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will 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. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

10. 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, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]

11. 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 to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]

14. The permittee must 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 must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]

17. If the permit allows 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 operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]
    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 required 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 assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]
    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;
    e. and Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)] The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance; the applicable requirements of the acid rain program, consistent with §408(a) of the Act or, the ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

APPENDIX A

Maximum Capacity Emission Rates				
			100% Natural Gas (tpy)	100% Fuel Oil (tpy)
01 (C1)	Unit 1	PM	23.0	271.6
		PM_{10}	17.3	198.0
		SO_2	2.2	3017.8
		VOC	16.7	20.1
		CO	255.0	96.4
		NO_X	1669.0	903.2
	Unit 2	PM	23.0	271.6
		PM_{10}	17.3	198.0
		SO_2	2.2	3017.8
		VOC	16.7	20.1
		CO	255.0	96.4
		NO_X	1669.0	903.2
02 (C3)	Unit 3	PM	38.1	461.7
		PM_{10}	29.0	343.4
		SO_2	4.4	5230.2
		VOC	28.0	34.6
		CO	422.0	166.4
		NO_X	2764.0	1568.0
03 (C4)	Unit 4	PM	197.1	2376.2
		PM_{10}	146.0	1763.0
		SO_2	15.4	26818.7
		VOC	141.0	177.8
		CO	615.0	854.1
		NO_X	14861.0	5466.2

APPENDIX B

Arkansas Department of Environmental Quality

CONTINUOUS EMISSION MONITORING SYSTEMS CONDITIONS

Revised August 2004

PREAMBLE

These conditions are intended to outline the requirements for facilities required to operate Continuous Emission Monitoring Systems/Continuous Opacity Monitoring Systems (CEMS/COMS). Generally there are three types of sources required to operate CEMS/COMS:

1. CEMS/COMS required by 40 CFR Part 60 or 63,
2. CEMS required by 40 CFR Part 75,
3. CEMS/COMS required by ADEQ permit for reasons other that Part 60, 63 or 75.

These CEMS/COMS conditions are not intended to supercede Part 60, 63 or 75 requirements.

- Only CEMS/COMS in the third category (those required by ADEQ permit for reasons other than Part 60, 63, or 75) shall comply with SECTION II, MONITORING REQUIREMENTS and SECTION IV, QUALITY ASSURANCE/QUALITY CONTROL.

- All CEMS/COMS shall comply with Section III, NOTIFICATION AND RECORDKEEPING.

SECTION I

DEFINITIONS

Continuous Emission Monitoring System (CEMS) - The total equipment required for the determination of a gas concentration and/or emission rate so as to include sampling, analysis and recording of emission data.

Continuous Opacity Monitoring System (COMS) - The total equipment required for the determination of opacity as to include sampling, analysis and recording of emission data.

Calibration Drift (CD) - The difference in the CEMS output reading from the established reference value after a stated period of operation during which no unscheduled maintenance, repair, or adjustments took place.

Back-up CEMS (Secondary CEMS) - A CEMS with the ability to sample, analyze and record stack pollutant to determine gas concentration and/or emission rate. This CEMS is to serve as a back-up to the primary CEMS to minimize monitor downtime.

Excess Emissions - Any period in which the emissions exceed the permit limits.

Monitor Downtime - Any period during which the CEMS/COMS is unable to sample, analyze and record a minimum of four evenly spaced data points over an hour, except during one daily zero-span check during which two data points per hour are sufficient.

ut-of-Control Period - Begins with the time corresponding to the completion of the fifth, consecutive, daily CD check with a CD in excess of two times the allowable limit, or the time corresponding to the completion of the daily CD check preceding the daily CD check that results in a CD in excess of four times the allowable limit and the time corresponding to the completion of the sampling for the RATA, RAA, or CGA which exceeds the limits outlined in Section IV. Out-of-Control Period ends with the time corresponding to the completion of the CD check following corrective action with the results being within the allowable CD limit or the completion of the sampling of the subsequent successful RATA, RAA, or CGA.

Primary CEMS - The main reporting CEMS with the ability to sample, analyze, and record stack pollutant to determine gas concentration and/or emission rate.

Relative Accuracy (RA) - The absolute mean difference between the gas concentration or emission rate determined by the CEMS and the value determined by the reference method plus the 2.5 percent error confidence coefficient of a series of tests divided by the mean of the reference method tests of the applicable emission limit.

Span Value – The upper limit of a gas concentration measurement range.

SECTION II

MONITORING REQUIREMENTS

A. For new sources, the installation date for the CEMS/COMS shall be no later than thirty (30) days from the date of start-up of the source.

B. For existing sources, the installation date for the CEMS/COMS shall be no later than sixty (60) days from the issuance of the permit unless the permit requires a specific date.

C. Within sixty (60) days of installation of a CEMS/COMS, a performance specification test (PST) must be completed. PST's are defined in 40 CFR, Part 60, Appendix B, PS 1-9. The Department may accept alternate PST's for pollutants not covered by Appendix B on a case-by-case basis. Alternate PST's shall be approved, in writing, by the ADEQ CEM Coordinator prior to testing.

D. Each CEMS/COMS shall have, as a minimum, a daily zero-span check. The zero-span shall be adjusted whenever the 24-hour zero or 24-hour span drift exceeds two times the limits in the applicable performance specification in 40 CFR, Part 60, Appendix B. Before any adjustments are made to either the zero or span drifts measured at the 24-hour interval the excess zero and span drifts measured must be quantified and recorded.

E. All CEMS/COMS shall be in continuous operation and shall meet minimum frequency of operation requirements of 95% up-time for each quarter for each pollutant measured. Percent of monitor down-time is calculated by dividing the total minutes the monitor is not in operation by the total time in the calenda quarter and multiplying by one hundred. Failure to maintain operation time shall constitute a violation of the CEMS conditions.

F. Percent of excess emissions are calculated by dividing the total minutes of excess emissions by the total time the source operated and multiplying by one hundred. Failure to maintain compliance may constitute a violation of the CEMS conditions.

G. All CEMS measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive fifteen minute period unless more cycles are required by the permit. For each CEMS, one-hour averages shall be computed from four or more data points equally spaced over each one hour period unless more data points are required by the permit.

H. All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

I. When the pollutant from a single affected facility is released through more than one point, a CEMS/COMS shall be installed on each point unless installation of fewer systems is approved, in writing, by the ADEQ CEM Coordinator. When more than one CEM/COM is used to monitor emissions from one affected facility the owner or operator shall report the results as required from each CEMS/COMS.

SECTION III

NOTIFICATION AND RECORD KEEPING

A. When requested to do so by an owner or operator, the ADEQ CEM Coordinator will review plans for installation or modification for the purpose of providing technical advice to the owner or operator.

B. Each facility which operates a CEMS/COMS shall notify the ADEQ CEM Coordinator of the date for which the demonstration of the CEMS/COMS performance will commence (i.e. PST, RATA, RAA, CGA). Notification shall be received in writing no less than 15 days prior to testing. Performance test results shall be submitted to the Department within thirty days after completion of testing.

C. Each facility which operates a CEMS/COMS shall maintain records of the occurrence and duration of start up/shut down, cleaning/soot blowing, process problems, fuel problems, or other malfunction in the operation of the affected facility which causes excess emissions. This includes any malfunction of the air pollution control equipment or any period during which a continuous monitoring device/system is inoperative.

D. Except for Part 75 CEMs, each facility required to install a CEMS/COMS shall submit an excess emission and monitoring system performance report to the Department (Attention: Air Division, CEM Coordinator) at least quarterly, unless more frequent submittals are warranted to assess the compliance status of the facility. Quarterly reports shall be postmarked no later than the 30th day of the month following the end of each calendar quarter. Part 75 CEMs shall submit this information semi-annually and as part of Title V six (6) month reporting requirement if the facility is a Title V facility.

E. All excess emissions shall be reported in terms of the applicable standard. Each report shall be submitted on ADEQ Quarterly Excess Emission Report Forms. Alternate forms may be used with prior written approval from the Department.

F. Each facility which operates a CEMS/COMS must maintain on site a file of CEMS/COMS data including all raw data, corrected and adjusted, repair logs, calibration checks, adjustments, and test audits. This file must be retained for a period of at least five years, and is required to be maintained in such a condition that it can easily be audited by an inspector.

G. Except for Part 75 CEMs, quarterly reports shall be used by the Department to determine compliance with the permit. For Part 75 CEMs, the semi-annual report shall be used.

SECTION IV

QUALITY ASSURANCE/QUALITY CONTROL

A. For each CEMS/COMS a Quality Assurance/Quality Control (QA/QC) plan shall be submitted to the Department (Attn.: Air Division, CEM Coordinator). CEMS quality assurance procedures are defined in 40 CFR, Part 60, Appendix F. This plan shall be submitted within 180 days of the CEMS/COMS installation. A QA/QC plan shall consist of procedure and practices which assures acceptable level of monitor data accuracy, precision, representativeness, and availability.

B. The submitted QA/QC plan for each CEMS/COMS shall not be considered as accepted until the facility receives a written notification of acceptance from the Department.

C. Facilities responsible for one, or more, CEMS/COMS used for compliance monitoring shall meet these minimum requirements and are encouraged to develop and implement a more extensive QA/QC program, or to continue such programs where they already exist. Each QA/QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

1. Calibration of CEMS/COMS
   a. Daily calibrations (including the approximate time(s) that the daily zero and span drifts will be checked and the time required to perform these checks and return to stable operation)
2. Calibration drift determination and adjustment of CEMS/COMS
   a. Out-of-control period determination
   b. Steps of corrective action
3. Preventive maintenance of CEMS/COMS
   a. CEMS/COMS information
      1) Manufacture
      2) Model number
      3) Serial number
   b. Scheduled activities (check list)
   c. Spare part inventory
4. Data recording, calculations, and reporting
5. Accuracy audit procedures including sampling and analysis methods
6. Program of corrective action for malfunctioning CEMS/COMS

D. A Relative Accuracy Test Audit (RATA), shall be conducted at least once every four calendar quarters. A Relative Accuracy Audit (RAA), or a Cylinder Gas Audit (CGA), may be conducted in the other three quarters but in no more than three quarters in succession. The RATA should be conducted in accordance with the applicable test procedure in 40 CFR Part 60 Appendix A and calculated in accordance with the applicable performance specification in 40 CFR Part 60 Appendix B. CGA's and RAA's should be conducted and the data calculated in accordance with the procedures outlined on 40 CFR Part 60 Appendix F.

If alternative testing procedures or methods of calculation are to be used in the RATA, RAA or CGA audits prior authorization must be obtained from the ADEQ CEM Coordinator.

E. Criteria for excessive audit inaccuracy.

RATA

All Pollutants except Carbon Monoxide	> 20% Relative Accuracy
Carbon Monoxide	> 10% Relative Accuracy
All Pollutants except Carbon Monoxide	> 10% of the Applicable Standard
Carbon Monoxide	> 5% of the Applicable Standard
Diluent (O_2 & CO_2)	> 1.0 % O2 or CO2
Flow	> 20% Relative Accuracy

CGA

Pollutant	> 15% of average audit value or 5 ppm difference
Diluent (O_2 & CO_2)	> 15% of average audit value or 5 ppm difference

RAA

Pollutant	> 15% of the three run average or > 7.5 % of the applicable standard
Diluent (O_2 & CO_2)	> 15% of the three run average or > 7.5 % of the applicable standard

F. If either the zero or span drift results exceed two times the applicable drift specification in 40 CFR, Part 60, Appendix B for five consecutive, daily periods, the CEMS is out-of-control. If either the zero or span drift results exceed four times the applicable drift specification in Appendix B during a calibration drift check, the CEMS is out-of-control. If the CEMS exceeds the audit inaccuracies listed above, the CEMS is out-of-control. If a CEMS is out-of-control, the data from that out-of-control period is not counted towards meeting the minimum data availability as required and described in the applicable subpart. The end of the out-of-control period is the time corresponding to the completion of the successful daily zero or span drift or completion of the successful CGA, RAA or RATA.

G. A back-up monitor may be placed on an emission source to minimize monitor downtime. This back-up CEMS is subject to the same QA/QC procedure and practices as the primary CEMS. The back-up CEMS shall be certified by a PST. Daily zero-span checks must be performed and recorded in accordance with standard practices. When the primary CEMS goes down, the back-up CEMS may then be engaged to sample, analyze and record the emission source pollutant until repairs are made and the primary unit is placed back in service. Records must be maintained on site when the back-up CEMS is placed in service, these records shall include at a minimum the reason the primary CEMS is out of service, the date and time the primary CEMS was out of service and the date and time the primary CEMS was placed back in service.

APPENDIX C
Acid Rain Program – Acid Rain Permit Application

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 206-0258

Acid Rain Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is: ☐ **New** **X Revised**

Step 1

Identify the source by plant name, State and Oris code.

Plant Name	State	ORIS Code
Lake Catherine	AR	170

Step 2

Enter the unit ID# For every affected Unit at the affected Source in column "a." For new units, enter the requested information in columns "c" and "d."

a	b	c	d
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
1	Yes		
2	Yes		
3	Yes		
4	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

Plant Name (from Step 1)
Lake Catherine

Permit Requirements

Step 3 Read the standard requirements

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance sub account (after deductions under 40 CFR 73.34(c)), or in the compliance sub account of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

i) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Plant Name (from Step 1)
Lake Catherine

Step 3, Cont'd.

Nitrogen Oxides Requirements The owners and operators of the source and each attached unit at the source shall comply with the appalicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained onsite at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for record keeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

Plant Name (from Step 1)
Lake Catherine

Liability, Cont'd.

Step 3, Cont'd.

(5) Any provision of Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

((2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

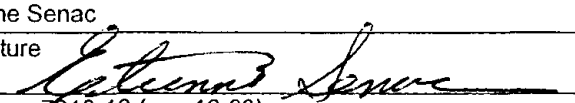
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

Step 4

Read the Certification statement, sign, and date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Etienne Senac	
Signature 	Date 6-15-04