# ADEQ OPERATING AIR PERMIT

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

Permit #: 1842-AOP-R2

IS ISSUED TO:

Wrightsville Power Facility
AR State Highway 365
Wrightsville, AR 72183
Pulaski County
AFIN: 60-01380

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:

	2/28/00	and	2/27/05
AND IS S	UBJECT TO ALL LIMI	ITS AND CONDITIONS CO	ONTAINED HEREIN.
Signed:			
Anthony (			Date Modified
Interim Cl	hief. Air Division		

**SECTION I: FACILITY INFORMATION** 

PERMITTEE: Wrightsville Power Facility

AFIN: 60-01380 PERMIT NUMBER: 1842-AOP-R2

FACILITY ADDRESS: AR State Highway 365

Wrightsville, AR 72183

COUNTY: Pulaski

CONTACT POSITION: Paul R. Steinway TELEPHONE NUMBER: (303) 914-7501

REVIEWING ENGINEER: Bryan Leamons

UTM North-South (X): 3827.8

UTM East-West (Y): 571.8

Zone: 15

AFIN #: 60-01380

#### **SECTION II: INTRODUCTION**

#### **Summary and Process Description**

The KN Power Company ("KN Power") operates a 510 megawatt (MW) combined-cycle natural gas combustion turbine plant located in Pulaski County, 0.5 miles south of Wrightsville, Arkansas. The plant will consist of six (6) General Electric LM6000 aeroderivative turbines, one (1) General Electric Frame 7EA turbine, seven duct burners, steam turbines, an emergency diesel generator, and a cooling tower.

The plant is designed to supply approximately 450 to 510 MW of power during high electrical demand hours of each day (usually between the hours of 7:00 a.m. and 11:00 p.m.) and ramp down to approximately 75 MW during off-peak hours. This daily load cycling results in reduced power production each day during hours when there is no demand for the power.

This modification incorporates changes to include additional permit language to clearly define startup and shutdown periods at the facility. Excess emission reports are not required during these periods. Other required reporting is unchanged, including reporting deviations as required in semi-annual reports. Also included in this permit are references to and requirements of ADEQ's *Continuous Emissions Monitoring Conditions* (CEMS Conditions).

#### Regulations

The facility is subject to regulation under the *Arkansas Air Pollution Control Code* (Air Code), the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (SIP), and the *Regulations of the Arkansas Operating Air Permit Program* (Title V), because it emits over 100 tons per year of a criteria pollutant. The facility is one of the 28 named *Prevention of Significant Deterioration* (PSD) source categories and is subject to regulation under 40 CFR 52.21 (PSD). KN Power is also subject to NSPS Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*; Subpart GG - *Standards of Performance for Stationary Combustion Turbines*; and 40 CFR Part 75 - *Continuous Emission Monitoring*.

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# **Emission Summary**

The following table is a summary of emissions from the facility. Specific conditions and emissions for each source can be found starting on the page cross referenced in the table.

	EMI	ISSION SUMMAF	RY		
Source	Description	Pollutant	Emissic	n Rates	Cross
No.			lb/hr	tpy*	Reference Page
Total 2	Allowable Emissions	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \\ acrolein \\ formaldehyde \\ PAH \end{array}$	43.2 42.0 3.8 17.6 612.9 418.1 0.04 2.24 0.01	185.3 180.2 13.2 74.0 818.6 619.0 0.14 9.79 0.05	NA
01	LM6000 Combustion Turbine with Duct Burner	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \\ acrolein \\ formaldehyde \\ PAH \end{array}$	5.2 5.2 0.4 2.1 79.0 56.0 0.01 0.28 0.01	177.0 177.0 13.0 73.6 815.8 607.0 0.14 9.79 0.05	9
02	LM6000 Combustion Turbine with Duct Burner	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \\ acrolein \\ formaldehyde \\ PAH \end{array}$	5.2 5.2 0.4 2.1 79.0 56.0 0.01 0.28 0.01		9
03	LM6000 Combustion Turbine with Duct Burner	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \end{array}$	5.2 5.2 0.4 2.1 79.0 56.0		9

	EMI	ISSION SUMMAF	RY		
Source	Description	Pollutant	Emissio	n Rates	Cross
No.			lb/hr	tpy*	Reference Page
		acrolein formaldehyde PAH	0.01 0.28 0.01		
04	LM6000 Combustion Turbine with Duct Burner	PM PM <sub>10</sub> SO <sub>2</sub> VOC CO NO <sub>x</sub> acrolein formaldehyde PAH	5.2 5.2 0.4 2.1 79.0 56.0 0.01 0.28 0.01		9
05	LM6000 Combustion Turbine with Duct Burner	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \\ acrolein \\ formaldehyde \\ PAH \end{array}$	5.2 5.2 0.4 2.1 79.0 56.0 0.01 0.28 0.01		9
06	LM6000 Combustion Turbine with Duct Burner	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \\ acrolein \\ formaldehyde \\ PAH \end{array}$	5.2 5.2 0.4 2.1 79.0 56.0 0.01 0.28 0.01		9
07	7EA Frame Combustion Turbine with Duct Burner	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \\ acrolein \\ formaldehyde \\ PAH \end{array}$	9.2 9.2 0.8 4.2 132 52.0 0.01 0.56 0.01		9

	EM	ISSION SUMMAI	RY		
Source	Description	Pollutant	Emissic	n Rates	Cross
No.			lb/hr	tpy*	Reference Page
08	Emergency Diesel Generator	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \end{array}$	0.9 0.9 0.6 0.8 6.9 30.1	0.4 0.4 0.2 0.4 2.8 12.0	26
09	Cooling Towers	PM PM <sub>10</sub>	1.9 0.7	7.9 2.8	28

<sup>\*</sup>tpy emissions for SN-01 thru SN-07 are based on a worst case scenario so that the facility may operate any combination of turbines at any time within the tpy restriction.

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# **SECTION III: PERMIT HISTORY**

1842-AOP-R0, issued February 28, 2000, was the initial operating permit for this facility. This permit went through PSD review including BACT analysis and ambient air impact analysis. A summary of the BACT determinations is located in Section IV of this permit.

1842-AOP-R1, issued March 28, 2002, included provisions for the emission of Hazardous Air Pollutants (HAPs), which were inadvertently left out of the original permit. Each HAP is a subset of the VOC emissions; therefore, the emission change was zero. Emissions were quantified and evaluated according to Department's *Non-Criteria Pollutant Control Strategy*. This modification also included slight changes in impact modeling results due to altered plant layout at the facility. The changes did not trigger any modeling significance levels.

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SECTION IV: EMISSION UNIT INFORMATION

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### SN-01 through SN-07 Combustion Turbines with Duct Burners

# **Source Description**

SN-01 through SN-07 each represent a combined cycle combustion turbine with a duct burner.

**Combustion Turbines**: Six of the seven combustion turbines (SN-01 through SN-06) will be General Electric LM6000's and fired solely on pipeline natural gas. Each LM6000 combustion turbine has a nominal electric production rating of 46 MW. One of the seven combustion turbines (SN-07) will be a General Electric Frame 7EA. All turbines will be fired solely on pipeline natural gas. The 7EA has a nominal electric production rating of 80 MW.

<u>Combustion Turbine Operating Scenarios</u>: The typical operating scenario for each LM 6000 combustion turbine system will be for the combustion turbine to operate near or at 100% of the design capacity. The typical operating scenario for the 7EA combustion turbine system will be for the combustion turbine to operate between 60% to 100% of the design capacity.

#### Comparison of BACT and NSPS Subpart GG Limits for the Combustion Turbines:

The combustion turbines will be subject to NSPS Subpart GG. Control technologies in the BACT analysis must meet applicable NSPS requirements to be considered viable. The BACT emission limits for each combustion turbine are more stringent than or equal to applicable NSPS requirements.

Emissions Unit	Pollutant	BACT*	NSPS
Each LM6000 (SN-01 - SN-06)	0.0	27/1	
Frame 7EA (SN-07)	$SO_2$	D <sub>2</sub> N/A	0.8% sulfur by weight
Each LM6000 (SN-01 - SN-06)	110	22 ppmvd @ 15% O <sub>2</sub>	113.8 ppmvd @15% O <sub>2</sub>
Frame 7EA (SN-07)	$NO_x$	9 ppmvd @ 15% O <sub>2</sub>	96.6 ppmvd @15% O <sub>2</sub>

<sup>\*</sup>the BACT emission factors include emissions from the combustion turbine only.

**Duct Burners**: Each duct burner will be fired solely on pipeline natural gas and will add supplemental heat to the heat recovery steam generator.

<u>Duct Burner Operating Scenario</u>: The duct burner will use combustion turbine exhaust as the combustion air supply. Consequently, the duct burner cannot operate if the combustion turbine is not operating.

N/A - SO<sub>2</sub> did not go through BACT review and therefore is not subject to BACT limits.

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<u>Comparison of BACT and NSPS Subpart Db limits for the Duct Burner</u>: The duct burner will be subject to NSPS Subpart Db. Control technologies in the BACT analysis must meet applicable NSPS requirements to be considered viable. The BACT emission limits for each duct burner are more stringent than or equal to applicable NSPS requirements.

Pollutant	BACT-(Duct Burner Only)	NSPS - (Duct Burner only)
$NO_x$	0.09lb/MMBtu	0.20 lb/MMBtu

**Emission Limits**: Each combustion turbine/duct burner set will be exhausted through a single stack, for a total of seven stacks.

#### **BACT Summary for the Combustion Turbine with Duct Burner**

Emission Unit	Pollutant	BACT Determina	ntion
	$PM_{10}$	combustion of pipeline natural gas	0.011 lb/MMBtu
Each LM6000 Combustion	VOC	good combustion practices	0.005 lb/MMBtu
Turbine with Duct Burner (SN-01 - SN-06)	СО	good combustion practices	66 ppmvd @ 15% O <sub>2</sub>
(314-01 - 314-00)	$NO_x$	steam injection into the turbine combustion process	22 ppmvd @ 15% O <sub>2</sub> * 0.09 lb/MMBtu**
	$PM_{10}$	combustion of pipeline natural gas	0.010 lb/MMBtu
	VOC	good combustion practices	0.005 lb/MMBtu
7EA Combustion Turbine	СО	good combustion practices	50 ppmvd @ 15% O <sub>2</sub>
with Duct Burner (SN-07)	$NO_x$	dry-low NO <sub>x</sub> turbine combustor	9 ppmvd @ 15% O <sub>2</sub> * 0.09 lb/MMBtu**
All Seven Combustion	СО	good combustion	815.8 tpy
Turbines with Duct Burners (SN-01 - SN-07)	$NO_x$	low NO <sub>x</sub>	607.0 tpy

<sup>\*</sup>the BACT emission factor includes emissions from the combustion turbine only.

### **Specific Conditions**

#### **Particulate Matter and Opacity**

<sup>\*\*</sup> the BACT emission factor includes emissions from the duct burner only.

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1. Pursuant to §19.501 et seq. and §19.901 et seq. of the *Regulations of the Arkansas Plan of Implementation for Air Pollution Control*, effective February 15, 1999 (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 the hourly emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine/ Duct Burner stack for PM/PM<sub>10</sub>. The hourly emission rates set forth in the following table are based on a worst-case scenario.

Sources	Pollutant	lb/hr
Each LM6000 Combustion Turbine with Duct Burner (SN-01 through SN-06)	$PM_{10}$	5.2
7EA Combustion Turbine with Duct Burner (SN-07)	$PM_{10}$	9.2

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 the hourly emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine/ Duct Burner stack for PM/PM<sub>10</sub>. The hourly emission rates set forth in the following table are based on a worst-case scenario.

Sources	Pollutant	lb/hr
Each LM6000 Combustion Turbine with Duct Burner (SN-01 through SN-06)	PM	5.2
7EA Combustion Turbine with Duct Burner (SN-07)	PM	9.2

3. Pursuant to §19.501 et seq. and §19.901 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 the annual emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine/ Duct Burner

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stack for PM/PM<sub>10</sub>. The annual emission rates set forth in the following table are based on a maximum lb/hr times 8760 hr/yr.

Sources	Pollutant	Tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	PM <sub>10</sub>	177

4. 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 the annual emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine/ Duct Burner stack for PM/PM<sub>10</sub>. The annual emission rates set forth in the following table are based on a maximum lb/hr times 8760 hr/yr.

Sources	Pollutant	Tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	PM	177

5. Pursuant to §19.901 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall comply with the following BACT determinations for the Combustion Turbine and Duct Burner. Compliance with the emission factors set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine/ Duct Burner stack for PM<sub>10</sub>.

Each LM6000		
Combustion Turbine with Duct Burner (SN-01 thru SN-06) PM <sub>10</sub> combustion of clean	fuels	0.011 lb/MMBtu

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Sources	Pollutant	BACT Determina	ition
7EA Combustion Turbine with Duct Burner (SN-07)	$PM_{10}$	combustion of clean fuels	0.010 lb/MMBtu

- 6. Pursuant to §18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from the Combustion Turbine / Duct Burner stack gases which exhibit an opacity greater than 5%. Compliance with this opacity limit shall be demonstrated by the use of natural gas.
- 7. Pursuant to §19.702 and §19.901 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall perform a stack test on one-half of each type of Combustion Turbine / Duct Burner stack (SN-01 thru SN-07) for PM/PM<sub>10</sub> to demonstrate compliance with the limits specified in Specific Conditions 1 through 5. Testing shall be performed every five years in accordance with Plantwide Condition 3 and EPA Reference Method 5 as found in 40 CFR Part 60 Appendix A (or alternative methods as pre-approved by the Director). Testing shall be performed at or near the maximum operating load. The Department reserves the right to select the turbine/duct burner to be tested. The testing shall be rotated so that all turbines/duct burner stacks are tested by the end of the first 5-year test cycle.

#### **Sulfur Dioxide**

8. 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 the use of natural gas and Specific Condition 9.

Sources	Pollutant	lb/hr	tpy
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)		0.4*	
7EA Combustion Turbine with Duct Burner (SN-07)	$\mathrm{SO}_2$	0.8*	13

<sup>\*</sup>This mass emissions rate is derived from the emission factor provided in 40 CFR Part 75, Appendix D (i.e., 0.0006 lb SO<sub>2</sub>/MMBtu).

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- 9. Pursuant to §19.703 of Regulation #19, 40 CFR Part 52 Subpart E, NSPS Subpart GG, 40 CFR Part 75 Subpart B, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, monitoring requirements relative to SO<sub>2</sub> emissions from the Combustion Turbine and Duct Burner shall be as follows:
  - A. The permittee shall conduct SO<sub>2</sub> emissions monitoring procedures in accordance with Specific Condition 31(C).
  - B. The permittee shall maintain records which demonstrate compliance with the above condition.

#### **Volatile Organic Compounds**

10. Pursuant to §19.501 et seq. and §19.901 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 the hourly emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for VOC. The hourly emission rates set forth in the following table are based on a worst-case scenario.

Sources	Pollutant	lb/hr
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	VOC (as C3)	2.1
7EA Combustion Turbine with Duct Burner (SN-07)	VOC (as C3)	4.2

11. Pursuant to §19.501 et seq. and §19.901 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 the annual emission rates set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for VOC. The annual emission rates set forth in the following table are based on a maximum lb/hr times 8760 hr/yr.

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Sources	Pollutant	tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	VOC (as C3)	73.6

12. Pursuant to §19.901 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall comply with the following BACT determinations for the Combustion Turbine and Duct Burner. Compliance with the emission factors set forth in the following table shall be demonstrated by the initial performance test of the Combustion Turbine / Duct Burner stack for VOC.

Sources	Pollutant	BACT Dete	ermination
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	VOC (as C3)	Good combustion practices	0.005 lb/MMBtu
7EA Combustion Turbine with Duct Burner (SN-07)	VOC (as C3)	Good combustion practices	0.005 lb/MMBtu

13. Pursuant to §19.702 and §19.901 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall perform a stack test on one-half of each type of Combustion Turbine / Duct Burner stack (SN-01 thru SN-07) for VOC to demonstrate compliance with the limits specified in Specific Conditions 10, 11, and 12. Testing shall be performed every five years in accordance with Plantwide Condition 3 and EPA Reference Method 25A as found in 40 CFR Part 60 Appendix A (or alternative methods as pre-approved by the Director). Testing shall be performed at or near the maximum operating load. The Department reserves the right to select the turbine/duct burner to be tested. The testing shall be rotated so that all turbines/duct burner stacks are tested by the end of the first 5-year test cycle.

#### **Carbon Monoxide**

14. Pursuant to §19.501 et seq. and §19.901 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. Each Combustion Turbine/Duct Burner stack (SN-01 thru SN-07) will be

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monitored by CO CEMS. The CEMS data shall be used to demonstrate compliance with the hourly emission rates set forth in the following table.

Sources	Pollutant	lb/hr, using a 3-hr average
Each LM6000 Combustion Turbine with Duct Burner (SN-01 thru SN-06)	СО	79.0
7EA Combustion Turbine with Duct Burner (SN-07)	СО	132.0

15. Pursuant to §19.501 et seq. and §19.901 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. Each Combustion Turbine/Duct Burner stack will be monitored by CO CEMS. The CEMS data shall be used to demonstrate compliance with the annual emission rate set forth in the following table.

Source	Pollutant	tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	СО	815.8

16. Pursuant to §19.901 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall comply with the following BACT determinations for the Combustion Turbine and Duct Burner. Compliance with the emission factors set forth in the following table shall be demonstrated by the initial performance testing of the Combustion Turbine and Duct Burner for CO and CEMS requirements.

Sources	Pollutant	BACT Determination
	СО	66 ppmvd @ 15% O <sub>2</sub> , 3-hr average

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Sources	Pollutant	BACT Determination
(SN-01 thru SN-06)		
7EA Combustion Turbine with Duct Burner		50 ppmvd @ 15% O <sub>2</sub> , 3-hr average

- 17. Pursuant to §19.702 and §19.901 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall perform an initial stack testing of the Combustion Turbine and Duct Burner for CO to demonstrate compliance with all limits specified in Specific Conditions 14 and 16. Testing shall be performed in accordance with Plantwide Condition 3 and EPA Reference Method 10 as found in 40 CFR Part 60 Appendix A (or alternative methods as pre-approved by the Director). Testing shall be performed at or near the maximum operating load.
- 18. Pursuant to §19.703 and §19.901 et seq. 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 install, calibrate, maintain, and operate CO CEMS to monitor emissions from each Combustion Turbine/Duct Burner stack. The CEMS shall comply with the Air Divisions "Continuous Emissions Monitoring Systems Conditions." A copy is provided in Appendix D. The measured concentrations of CO and O<sub>2</sub> in the flue gas along with the measured fuel flow shall be used to calculate CO mass emissions. The CEMS data may be used by the Department for enforcement purposes. The CEMS shall be used to demonstrate compliance with the CO mass emission limits and emission factors specified in Specific Conditions 14, 15, and 16.

#### **Nitrogen Oxides**

19. Pursuant to §19.501 et seq. and §19.901 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. Each Combustion Turbine/Duct Burner stack (SN-01 thru SN-07) will be monitored by NO<sub>x</sub> CEMS. The CEMS data shall be used to demonstrate compliance with the hourly emission rates set forth in the following table.

Sources	Pollutant	lb/hr, using a 24- hr average
Each LM6000 Combustion Turbine with Duct Burner	$NO_x$	56.0

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Sources	Pollutant	lb/hr, using a 24- hr average
(SN-01 thru SN-06)		
7EA Combustion Turbine with Duct Burner (SN-07)	NO <sub>x</sub>	52.0

20. Pursuant to §19.501 et seq. and §19.901 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. Each Combustion Turbine/Duct Burner stack will be monitored by NO<sub>x</sub> CEMS. The CEMS data shall be used to demonstrate compliance with the annual emission rate set forth in the following table.

Sources	Pollutant	tons per twelve consecutive months
Combustion Turbines with Duct Burners (SN-01 thru SN-07)	$NO_x$	607.0

21. Pursuant to §19.901 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall comply with the following BACT determinations for the Combustion Turbine and Duct Burner. Compliance with the 3-hr average emission factors set forth in the following table shall be demonstrated by the initial performance testing of the Combustion Turbine and Duct Burner for NO<sub>x</sub> and CEMS requirements.

Sources	Pollutant	BACT Determination
Each LM6000 Combustion Turbine* (SN-01 thru SN-06)		22 ppmvd @ 15% O <sub>2</sub> using a rolling 12 month avg. 25 ppmvd @ 15% O <sub>2</sub> using a 3 hr avg.
7EA Combustion Turbine (SN-07)*	$NO_x$	9 ppmvd @ 15% O <sub>2</sub> using a 3 hr average
Each Duct Burner (SN-01 thru	$NO_x$	0.09 lb/MMBtu using a 3 hr average**

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Sources	Pollutant	BACT Determination
SN-07)		

<sup>\*</sup> the BACT emission factors include emissions from the combustion turbine only.

- 22. Pursuant to §19.702 and §19.901 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E, the permittee shall perform an initial stack test on all Combustion Turbines and Duct Burners for NO<sub>x</sub> to demonstrate compliance with the limits specified in Specific Conditions 19 and 21 (except for the LM6000 22ppm long term average). Testing shall be performed in accordance with Plantwide Condition #3 and EPA Reference Method 7E or 20 as found in 40 CFR Part 60 Appendix A. Testing shall be performed at or near the maximum operating load.
- Pursuant to §19.703 and §19.901 et seq. of Regulation #19, 40 CFR Part 52 Subpart E, NSPS Subpart GG, 40 CFR Part 75 Subpart B, and A.C.A. §8-4-203 as referenced by §8-3-304 and §8-4-311, monitoring requirements relative to NO<sub>x</sub> emissions from the Combustion Turbine and Duct Burner shall be as follows:
  - A. The permittee shall install, calibrate, maintain, and operate NO<sub>x</sub> CEMS to monitor emissions from each Combustion Turbine/Duct Burner stack in accordance with Specific Condition 31(D). The CEMS shall comply with the Air Divisions "Continuous Emissions Monitoring Systems Conditions." The CEMS data may be used by the Department for enforcement purposes. The CEMS shall be used to demonstrate compliance with the NO<sub>x</sub> mass emission limits specified in Specific Conditions 19 and 20.
  - B. The permittee shall maintain records which demonstrate compliance with the above condition.
- 24. Pursuant to §19.901 of Regulation 19 et seq., and 40 CFR Part 52, Subpart E, CEMS shall be used to demonstrate compliance with the ppm limits/ emission limits listed in Specific Conditions 19, 20, and 21, except during periods of duct firing. The CEMS shall comply with the Air Divisions "Continuous Emissions Monitoring Systems Conditions." During those periods of turbine/duct firing, compliance with emission factors set forth in Specific Condition 21 shall be demonstrated by complying with the CEMS verification of Specific Condition 19 only.

**HAPs** 

<sup>\*\*</sup> the BACT emission factors include emissions from the duct burner only.

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25. Pursuant to §18.801 of Regulation 18 and A.C.A., the permittee shall not exceed lb/hr emission rates listed in the following table at SN-01 through SN-07. Initial compliance shall be determined by testing requirements of Specific Condition 27. Ongoing compliance with emission rates shall be demonstrated by the exclusive use of pipeline quality natural gas.

Source Number	Pollutant	pound per hour	averaging period
01 through 06 (separately)	formaldhyde acrolein PAH	0.28 0.01 0.01	per method 18
07	formaldhyde acrolein PAH	0.56 0.01 0.01	per method 18

26. Pursuant to §18.801 of Regulation 18 and A.C.A., the permittee shall not exceed ton per year emission rates listed in the following table SN-01 through SN-07 combined. Initial compliance shall be demonstrated by Specific Condition 27. Ongoing compliance shall be determined by compliance with and the exclusive use of pipeline quality natural gas.

Pollutant	ton per 12 consecutive months	
formaldhyde	9.79	
acrolein	0.14	
PAH	0.05	

27. Pursuant to §18.1002 and A.C.A., the permittee shall conduct an initial performance test on any one of SN-01 through SN-06 and SN-07 using Method 18 (or alternative methods as pre-approved by the Director) for all detectable HAPs concentrations. The test shall be performed while operating at greater than 90% of capacity. At this time the permittee shall also demonstrate that the facility is not a major source for HAPs (i.e. 10 tpy single HAP or 25 tpy total HAPs facility wide) and is therefore not subject to requirements of the Clean Air Act §112(g). Testing shall be performed in accordance with Plantwide Condition 3.

# **Throughput Limitations**

28. Pursuant to §18.1004 of Regulation #18, §19.705 and §19.901 et seq. 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, 40

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CFR §70.6, and 40 CFR Part 75, each combustion turbine and each duct burner may only fire pipeline natural gas.

29. Pursuant to §18.1004 of Regulation #18, §19.705 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, and 40 CFR Part 75, the permittee shall maintain records to demonstrate compliance with Specific Condition 28. These records shall be a copy of the page or pages that contain the gas quality characteristics specified in either a purchase contract or pipeline transportation contract. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes.

# **Hourly Emissions**

- 30. Pursuant to §19.601 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, for the purposes of this permit, "upset condition" reports as required by §19.601 of Regulation 19 shall not be required for periods of startup or shutdown of SN-01 through SN-07. This shall only apply for emissions which directly result from the start-up and/or shut down of one or more of the combustion turbine units (SN-01 through SN-07). All other "upset conditions" must be reported as required by Regulation 19. The following conditions must be met during startup and shutdown periods.
  - A. All CEM systems required for SN-01 through SN-07 must be operating during start up and shut down. The emissions recorded during these periods shall count toward the annual ton per year emission limits.
  - B. The permittee shall maintain a log or equivalent electronic data storage which shall indicate the date, start time, and duration of each start up and shut down procedure. "Startup" shall be defined as the period of time beginning with the first fire within the combustion turbine firing chamber until the unit(s) initially reach 29.9 MW for the LM6000's and 52 MW for the 7EA or a maximum of three hours (whichever comes first). "Shutdown" shall be defined as the period of time up to one hour beginning with the initiation of the shut down procedure and ending when emissions are no longer detected from the source. This log or equivalent electronic data storage shall be made available to Department personnel upon request.
  - C. Opacity is not included. If any occurrences should ever occur, "upset condition" reporting is required.

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- D. Operating mode, specifically, the current load in megawatts, shall be able to be identified at any time from the control area for that unit and shall be available for inspection by ADEQ representatives at any time.
- E. The facility shall comply with 40 CFR 60.7 reporting and recordkeeping requirements as applicable to NSPS limits and applicable parts of the ADEQ CEMS Conditions. CEMS Condition II(F) is not applicable to SN-01 through SN-07.

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

- 31. Each combustion turbine is subject to and shall comply with applicable provisions of 40 CFR Part 60 Subpart A General Provisions and 40 CFR Part 60 Subpart GG Standards of Performance for Stationary Gas Turbines. Applicable provisions of Subpart GG include, but are not limited to, the following:
  - A. Pursuant to 40 CFR §60.332(a)(1), NO<sub>x</sub> emissions from each LM6000 shall not exceed 113.8 ppmvd at 15% O<sub>2</sub>. Pursuant to 40 CFR §60.332(a)(1), NO<sub>x</sub> emissions from the 7EA shall not exceed 96.6 ppmvd at 15% O<sub>2</sub>. Initial compliance with this condition shall be demonstrated by complying with Specific Condition 21.
  - B. Pursuant to 40 CFR §60.333(b), the permittee shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight. Compliance with this condition shall be demonstrated by Specific Condition 31(C).
  - C. The permittee shall conduct the following fuel monitoring as an alternative to 40 CFR 60.334(b) and 40 CFR 60.335(a) and (d);
    - i. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
    - ii. The documentation requirements for natural gas in §2.3.1.4 and the

proced ures for sulfur content determ

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ination in §2.3.3. 1 of Appen dix D to 40 **CFR** Part 75 shall be used to monito r the fuel sulfur content . The docum entatio n require ments include the records describ ed in Specifi c Condit ion 29. The proced ures for sulfur content determ ination

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measur ing pipelin natural gas fuel flow rate using an inline fuel flow meter, determ ining the gross calorifi c value of the pipelin natural gas at least once per month, and using the default emissi on rate of 0.0006

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pounds of SO<sub>2</sub> per million Btu of heat input.

- iii. The permittee shall notify the Department if the sulfur fuel monitoring conducted per Specific Condition 31(C)(ii), indicates noncompliance with Specific Condition 31(B).
- D. The permittee shall conduct the following  $NO_x$  monitoring and testing as an alternative to 40 CFR 60.334(a) and 40 CFR 60.335(c)(2) and (c)(3):
  - i. The permittee shall install, calibrate, maintain, and operate  $NO_x$  CEMS to monitor emissions from each Combustion Turbine/Duct Burner stack. The CEMS shall comply with 40 CFR Part 75. The permittee shall use the measured concentrations of  $NO_x$  and  $O_2$  in the flue gas along with the measured fuel flow (or another 40 CFR Part 75 procedure) to calculate  $NO_x$  mass emissions.
  - ii. The  $NO_x$  CEMS must be capable of calculating 1-hour and 3-hour average  $NO_x$  emissions concentrations corrected to 15%  $O_2$ .
  - iii. The permittee shall submit reports of excess emissions as required in 40 CFR 60.7(c) and summary reports as required in 40 CFR 60.7(d). Excess emissions are defined as all periods when the consecutive 3-hour average concentration is greater than the limit in Specific Condition 31(A). Each report shall be submitted on ADEQ Quarterly Excess Emission Report Forms which may be obtained from the Air Division of the Little Rock Office of ADEQ. Alternate forms may be used with prior written approval from the Department.
  - iv. The permittee shall conduct initial performance tests in accordance with Specific Condition 22.
- 32. The duct burners are subject to and shall comply with applicable provisions of 40 CFR Part 60 Subpart A General Provisions and 40 CFR Part 60 Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. A copy of

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Subpart Db is provided in Appendix C. Applicable provisions of Subpart Db include, but are not limited to, the following:

- A. Pursuant to 40 CFR §60.44b(a)(4)(i), NO<sub>x</sub> emissions shall not exceed 0.2 lb/MMBtu heat input. Initial compliance with this condition shall be demonstrated by complying with Specific Condition 21.
- B. Pursuant to 40 CFR §60.46b(a), the nitrogen oxides emission standards under **§60.44b** apply at all times, this includes periods of startup, shutdown, and malfunction.
- C. Pursuant to 40 CFR §60.46b(f), to determine compliance with the emission limit for nitrogen oxides required by 40 CFR §60.44b(a)(4) for duct burners, the owner or operator of the facility shall conduct a performance test required under 40 CFR §60.8 using the nitrogen oxides and oxygen measurement procedures in 40 CFR part 60 appendix A, Method 20. During the performance test, one sampling site shall be located as close as practicable to the exhaust of the turbine; as provided by 6.1.1 of Method 20. A second sampling site shall be located at the outlet to the steam generating unit. Measurements of nitrogen oxides and oxygen shall be taken at both sampling sites during the performance test. The nitrogen oxides emission rate from the combined cycle system shall be calculated by subtracting the nitrogen oxides emission rate measured at the sampling site and at the outlet from the turbine from the nitrogen oxides emission rate measured at the sampling site at the outlet from the steam generating unit.
- D. Pursuant to 40 CFR §60.49b(d), the owner shall record and maintain records of the amounts of fuel combusted during each day and calculate the annual capacity factor individually for each calender quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calender month.
- E. Pursuant to 40 CFR §60.49b(o), all records required under the section shall be maintained by the owner or operator of the facility for a period of 2 years following the date of such record.
- 33. Pursuant to 40 CFR §60.7(a), the following notifications to the Department are required for the combustion turbines and the duct burners: (a) date of construction commenced postmarked no later than 30 days after such date, (b) anticipated date of initial start-up between 30-60 days prior to such date, (c) actual date of initial start-up postmarked

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within 15 days after such date, and (d) CEMS, opacity, and emissions performance testing postmarked not less than 30 days prior to testing.

#### **Acid Rain Program**

- 34. The affected units (SN-01 thru SN-07) are subject to and shall comply with applicable provisions of the Acid Rain Program (40 CFR Parts 72, 73, and 75).
- 35. Pursuant to 40 CFR Part 75 Continuous Emission Monitoring Subpart G, the submission of the NO<sub>x</sub>, SO<sub>2</sub>, and O<sub>2</sub> or CO<sub>2</sub> monitoring plans and notice of CEMS initial certification testing are required at least 45 days prior to the CEMS initial certification testing.
- 36. Pursuant to 40 CFR Part 75 Continuous Emission Monitoring Subpart G, a monitoring plan is required to be submitted for NO<sub>x</sub>, SO<sub>2</sub>, and O<sub>2</sub> or CO<sub>2</sub> monitoring. The plan will be pending approval by the EPA for all pollutants.
- 37. Pursuant to 40 CFR Part 75(b)(2) Subpart A, the initial NO<sub>x</sub>, SO<sub>2</sub>, and O<sub>2</sub> or CO<sub>2</sub> CEMS certification testing is to occur no later than 90 days after the date the unit commences commercial operation.
- 38. Pursuant to 40 CFR §75.10, the permittee shall ensure that the continuous emissions monitoring systems are in operation and monitoring all unit emissions at all times, except during periods of calibration, quality assurance, preventative maintenance or repair, periods of backups of data from the data acquisition and handling system, or recertification.

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# SN-08 Emergency Diesel Generator

#### **Source Description**

The emergency diesel generator will consist of a diesel fueled internal combustion engine and an electrical generator. The generator will have a nominal rating of 850 kW and will be permitted to operate 800 hours per year.

#### **Specific Conditions**

39. Pursuant to §19.501 et seq. and §19.901 et seq. of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control, effective February 15, 1999 (Regulation #19), and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rate set forth in the following table. The hourly emission rate set forth in the following table is based on maximum capacity. Compliance with the tpy emission rate set forth in the following table shall be demonstrated by Specific Conditions 42 and 43.

Emission Unit	Pollutant	lb/hr	tpy
Emergency Diesel Generator	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \end{array}$	0.9 0.9 0.6 0.8 6.9 30.1	0.4 0.4 0.2 0.4 2.8 12.0

- 40. Pursuant to §19.503 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall not cause to be discharged to the atmosphere from the emergency diesel generator stack gases which exhibit an opacity greater than 20%.
- 41. Pursuant to §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E, an inital observation of the opacity from source SN-08 shall be conducted by a person trained in EPA Reference Method 9 and repeated every 5 years. If visible emissions appear to be in excess of 20%, the permittee shall immediately take action to identify the cause of the excess visible emissions, implement corrective action, and document that visible emissions do not appear to be in excess of the permitted opacity following the corrective action. The permittee shall maintain records of any visible emissions which appeared to be in excess of the permitted opacity, the corrective action taken, and if visible emissions

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were present following the corrective action. These records shall be kept on site and made available to Department personnel upon request.

- 42. Pursuant to §18.1004 of Regulation #18, §19.705 and §19.901 et seq. 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, and 40 CFR §70.6, the emergency diesel generator may only fire low sulfur diesel fuel.
- 43. Pursuant to §18.1004 of Regulation #18, §19.705 and §19.901 et seq. 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, and 40 CFR §70.6, operation of the emergency diesel generator shall be limited to 800 hours per twelve consecutive months. Compliance shall be based on a monthly calculation of the 12-month rolling total operating hours.
- 44. Pursuant to §18.1004 of Regulation #18, §19.705 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 maintain records to demonstrate compliance with Specific Conditions 42 and 43. These records shall be updated on a monthly basis. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes.

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# SN-09 Cooling Tower

#### **Source Description**

The cooling towers will consist of mechanical draft vents with drift eliminators.

#### **Specific Conditions**

45. Pursuant to §19.501 et seq. and §19.901 et seq. of the Regulations of the Arkansas State Implementation Plan for Air Pollution Control, effective February 15, 1999 (Regulation #19), and 40 CFR Part 52 Subpart E, the permittee shall not exceed the emission rate set forth in the following table. The emission rates set forth in the following table are based on maximum capacity.

Emission Unit	Pollutant	lb/hr (24-hr average)	tpy
Cooling Tower	PM	1.9	7.9
	PM <sub>10</sub>	0.7	2.8

- 46. Pursuant to §18.501 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, the permittee shall not cause to be discharged to the atmosphere from the cooling tower stack gases which exhibit an opacity greater than 20%. Compliance with this opacity limit shall be demonstrated by Specific Condition 47.
- 47. Pursuant to §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6, the total dissolved solids content shall not exceed 4000 parts per million.
- 48. Pursuant to §19.705 of Regulation 19, and 40 CFR Part 52, Subpart E, the permittee shall monitor weekly the total dissolved solids to demonstrate compliance with Specific Condition 47. These records shall be updated on a monthly basis. During any week when the cooling towers do not operate the TDS testing shall not be required. Records shall be maintained to verify operations. These records shall be kept on site, provided to Department personnel upon request, and may be used by the Department for enforcement purposes.

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#### SECTION V: COMPLIANCE PLAN AND SCHEDULE

KN Power Company - Wrightsville Power Facility is in compliance with the applicable regulations cited in the permit application. KN Power Company - Wrightsville Power Facility 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.

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#### **SECTION VI: PLANTWIDE CONDITIONS**

- 1. Pursuant to §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 §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 §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, any equipment that is to be tested, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, shall be tested with the following time frames: (1) Equipment to be constructed or modified shall be tested 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 or (2) equipment already operating shall be tested according to the time frames set forth by the Department. The permittee shall notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. Compliance test results shall be submitted to the Department within thirty (30) days after the completed testing.
- 4. Pursuant to §19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, the permittee shall provide:
  - A. Sampling ports adequate for applicable test methods
  - B. Safe sampling platforms
  - C. Safe access to sampling platforms
  - D. Utilities for sampling and testing equipment
- 5. 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 submit, for the Department's approval, a CEMS protocol at least 60 days in advance of the installation of any CEMS.
- 6. Pursuant to \$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

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equipment shall be operated within their design limitations and maintained in good condition at all times.

- 7. Pursuant to §18.801 of Regulation #18, the permittee shall not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303.
- 8. Pursuant to §18.901(A) of Regulation #18, the permittee shall not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne

#### Acid Rain (Title IV)

9. 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.

#### **Title VI Provisions**

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

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

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promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

#### **Permit Shield**

- 15. 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 item A of this condition.
  - A. The following have been specifically identified as applicable requirements based upon information submitted by the permittee in an application dated April 29, 1999 and subsequent correspondence.

Source	Regulation	Description	
Facility	Arkansas Regulation #19	Regulations of the Arkansas State Implementation Plan for Air Pollution Control	
Facility	Arkansas Regulation #26	Regulations of the Arkansas Operating Permit Program	
Facility	40 CFR §52.21	Prevention of Significant Deterioration	
SN-01 - SN-07	40 CFR Parts 72, 73, and 75	The Acid Rain Program	
SN-01 - SN-07	40 CFR Part 60 Subpart A	General Provisions	
SN-01 - SN-07	40 CFR Part 60 Subpart GG	Standards of Performance for Stationary Gas Turbines	
SN-01 - SN-07	40 CFR Part 60 Subpart Db	New Source Performance Standard for Industrial- Commercial-Institutional Steam Generating Units	

B. The following requirements have been specifically identified as not applicable, based upon information submitted by the permittee in an application dated April 29, 1999 and subsequent correspondence.

Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
Compliance Assurance Monitoring	40 CFR Part 64	SN-01 - SN-07	Because none of the emission units use a control device as defined under Part 64.

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Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
Compliance Assurance Monitoring	40 CFR Part 64	SN-08 - SN-09	Because none of the emission units have a potential pre-control device emissions in the amounts of tons per year required to classify the unit as a major source under Part 70.
National Emissions Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	40 CFR Part 63 Subpart Q	Cooling Tower (SN-09)	The facility will not be a major source of HAPs. The facility will not operate the cooling tower with chromium based water treatment chemicals.
Portion of the Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units.	40 CFR 60.49b(g) and (b)	Duct Burners (SN-01 - SN-07)	Pursuant to 40 CFR 60.48b(h) a continuous monitoring system for NOx is not required for the duct burners.  Therefore these two paragraphs do not apply because the provisions are applicable to affected facilities required to install a continuous monitoring system.

# C. Nothing in this permit shall alter or affect the following:

Provisions of Section 303 of the Clean Air Act;

The liability of an owner or operator 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 Section 408(a) of the Clean Air Act; or

The ability of the EPA to obtain information under Section 114 of the Clean Air Act.

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#### SECTION VII: INSIGNIFICANT ACTIVITIES

Pursuant to §26.304 of Regulation 26, the following sources are insignificant activities. Any activity for which a state or federal applicable requirement applies is not insignificant even if this activity meets the criteria of §304 of Regulation 26 or is listed below. Insignificant activity determinations rely upon the information submitted by the permittee in a letter dated February 20, 2002.

Description	Category
Natural Gas Fired Fuel Heater (9.9 MM Btu/hr)	A-1

Pursuant to §26.304 of Regulation 26, the emission units, operations, or activities contained in Regulation 19, Appendix A, Group B, 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.

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#### **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;

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- 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 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 Environmental Quality Air Division ATTN: Compliance Inspector Supervisor 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 §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 by the next business day after 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,

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- 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.

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 full report in writing (by facsimile, overnight courier, or other means) by the next business day after 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.
- 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 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.







