

## STATEMENT OF BASIS

### *for the issuance of Draft Air Permit # 1450-AOP-R1*

**1. PERMITTING AUTHORITY:**

Arkansas Department of Environmental Quality  
8001 National Drive  
Post Office Box 8913  
Little Rock, Arkansas 72219-8913

**2. APPLICANT:**

Arkansas Western Gas Company – Lone Elm Compressor Station  
County Road 302  
Ozark, Arkansas 72949

**3. PERMIT WRITER:**

James G. Siganos, P. E.

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

NAICS Description: Pipeline Transportation of Natural Gas-Compressor Station  
NAICS Code: 486210

**5. SUBMITTALS:** April 29, 2003

**6. REVIEWER'S NOTES:**

Permit No. 1450-AOP-R1 is being issued to Arkansas Western Gas Company (AWG) Lone Elm compressor station as a renewal. The reciprocating Combustion Engine (RICE) MACT (40CFR §63, Subpart ZZZZ) will probably become effective during the permit term. The final decision is scheduled to be promulgated on February 28, 2004.

**7. COMPLIANCE STATUS:** The following summarizes the current compliance status of the facility including active/pending enforcement actions and recent compliance activities and issues.

There are no known active/pending enforcement activities regarding this facility. AWG plans to meet all future regulatory requirements on a timely basis.

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**AFin #: 24-00071**

**8. APPLICABLE REGULATIONS:**

A. Applicability

Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, et cetera) (Y/N)   N  

Has this facility underwent PSD review in the past (Y/N)   N   Permit # \_\_\_\_\_

Is this facility categorized as a major source for PSD? (Y/N)   Y  

\$ 100 tpy and on the list of 28 (100 tpy)? (Y/N) \_\_\_\_\_

\$ 250 tpy all other (Y/N)   Y  

B. PSD Netting

Was netting performed to avoid PSD review in this permit? (Y/N)   N  

C. Source and Pollutant Specific Regulatory Applicability **N/A**

<b>Source</b>	<b>Pollutant</b>	<b>Regulation [NSPS, NESHAP (Part 61 &amp; Part 63), or PSD <u>only</u>]</b>
None		

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**9. EMISSION CHANGES:**

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

<b>Plantwide Permitted Emissions (ton/yr)</b>			
<b>Pollutant</b>	<b>Air Permit 1450-AOP-R0</b>	<b>Air Permit 1185-AOP-R2</b>	<b>Change</b>
PM/PM10	0.2	0	-0.2
VOC	19.4	19.4	+0.3
CO	193.7	193.2	-0.5
NO <sub>x</sub>	173.9	173.9	0.0
formaldehyde	2.2	0.66	-1.34
Acrolein	0.22	0	-0.22

**10. MODELING:**

**A. Criteria Pollutants**

<b>Pollutant</b>	<b>Emission Rate (lb/hr)</b>	<b>NAAQS Standard (µg/m<sup>3</sup>)</b>	<b>Averaging Time</b>	<b>Highest Concentration (µg/m<sup>3</sup>)</b>	<b>% of NAAQS</b>
NO <sub>x</sub>	41.1	100	Annual	41.99	42
CO	44.3	10,000	8-hour	316.3	3.2%
		40,000	1-hour	452.6	1.1%

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**11. NON-CRITERIA POLLUTANTS**

**1st Tier Screening (PAER)**

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The PAER was deemed by the Department to be the product, in lb/hr, of 0.11 and the Threshold Limit Value ( $\text{mg}/\text{m}^3$ ), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV ( $\text{mg}/\text{m}^3$ )	PAER (lb/hr) = 0.11*TLV	Proposed lb/hr	Pass?
Formaldehyde	1.5	0.165	0.15	Y

**12. CALCULATIONS:**

SN	Emission Factor Source (AP-42, Testing, etc)	Emission Factor and units (lbs/ton, lbs/hr, etc)	Control Equipment Type (if any)	Control Equipment Efficiency	Comments (Emission factor controlled/uncontrolled, etc)
01,	Equipment Manufacturer + stack testing for $\text{NO}_x$ and CO	g/bhp-hr	None	NA	emission factors are uncontrolled
01,	Formaldehyde calculations were derived using GRI factors converted from AP-42 factor units.	g/bhp-hr	None	NA	emission factors are uncontrolled

**13. TESTING REQUIREMENTS:**

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This permit requires stack testing of the following sources.

<b>SN(s)</b>	<b>Pollutant</b>	<b>Test Method</b>	<b>Test Interval</b>	<b>Justification For Test Requirement</b>
SN-01	NO <sub>x</sub> CO	7E 10	Upon Title V renewal	Compressor engine will be tested every 5 years as confirmation of the permit limits

#### **14. MONITORING OR CEMS**

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

<b>SN</b>	<b>Parameter or Pollutant to be Monitored</b>	<b>Method of Monitoring (CEM, Pressure Gauge, etc)</b>	<b>Frequency*</b>	<b>Report (Y/N)**</b>
No monitoring or CEMS				

\* Indicate frequency of recording required for the parameter (Continuously, hourly, daily, etc.)

\*\* Indicates whether the parameter needs to be included in reports.

#### **15. RECORD KEEPING REQUIREMENTS**

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

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**16. OPACITY**

SN	Opacity %	Justification (NSPS limit, Dept. Guidance, etc)	Compliance Mechanism (daily observation, weekly, control equipment operation, etc)
01,	5%	Department Guidance	Natural Gas Fuel Only

**17. DELETED CONDITIONS:**

The following Specific Conditions were included in the previous permit, but deleted for the current permitting action.

Former SC	Justification for removal
No deleted conditions	

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

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

Permit #
1450-AOP-R0

**19. CONCURRENCE BY:**

The following supervisor concurs with the permitting decision:

\_\_\_\_\_  
*Thomas Rheume, P.E.*