

STATEMENT OF BASIS

For the issuance of Air Permit # 1450-AOP-R4 AFIN: 24-00104

1. PERMITTING AUTHORITY:

Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

SourceGas Arkansas Inc. (Lone Elm Compressor Station)
4511 Dogwood Lane
Ozark, Arkansas 72949

3. PERMIT WRITER:

Joseph Hurt

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Pipeline Transportation of Natural Gas
NAICS Code: 486210

5. SUBMITTALS:

12/12/2012

6. REVIEWER'S NOTES:

Arkansas Western Gas Company (AWG) owns and operates the Lone Elm natural gas compressor station (AFIN: 24-00104) located at 4511 Dogwood Lane, Ozark, Arkansas 72949. With this Title V Renewal, the facility has added the applicable requirements of 40 CFR Part 63, Subpart ZZZZ. There were no permitted emission changes with this modification.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

No compliance issues were noted during the last inspection, dated July 10, 2012.

8. PSD APPLICABILITY:

a. Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

b. Is the facility categorized as a major source for PSD? N

- Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list, or
- CO_2e potential to emit $\geq 100,000$ tpy and ≥ 100 tpy/ ≥ 250 tpy of combined GHGs?

If yes, explain why this permit modification is not PSD.

9. GHG MAJOR SOURCE (TITLE V):

Indicate one:

- Facility is classified as a major source for GHG and the permit includes this designation
- Facility does not have the physical potential to be a major GHG source
- Facility has restrictions on GHG or throughput rates that limit facility to a minor GHG source. Describe these restrictions: _____

10. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

| Source | Pollutant | Regulation (NSPS, NESHAP or PSD) |
|--------|---|----------------------------------|
| SN-01 | There are no specific emission limits or pollutants identified, but the rules generally regulate HAPs. At the time of issuance of Permit 1450-AOP-R4, SN-01 was classified as a remote engine according to 40 CFR Part 63, Subpart ZZZZ. The facility is required to annually verify that the engine is still classified as a remote engine, see Specific Condition 10. | 40 CFR Part 63, Subpart ZZZZ |

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. NAAQS EVALUATIONS AND NON-CRITERIA POLLUTANTS:

a) NAAQS

- (i) List the reason for a NAAQS evaluation (i.e. what changes are being permitted that would require the evaluation) and pollutants affected. If a NAAQS evaluation is not required, indicate why not.

This is a Title V Renewal with no changes. Therefore, no further action is required at this time.

- (ii) If modeling was proposed and agreed to, list the results below:

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

b) 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 Department has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

| Pollutant | TLV (mg/m ³) | PAER (lb/hr) = 0.11 × TLV | Proposed lb/hr | Pass? |
|---------------|--------------------------|------------------------------|----------------|-------|
| 1,3-Butadiene | 4.4 | 0.48 | 0.01 | Yes |
| Acrolein | 0.229 ^a | 0.025 | 0.04 | No |
| Formaldehyde | 0.368 ^a | 0.04 | 0.10 | No |

a. STEL value

2nd Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

| Pollutant | PAIL ($\mu\text{g}/\text{m}^3$) = 1/100 of Threshold Limit Value | Modeled Concentration ($\mu\text{g}/\text{m}^3$) | Pass? |
|--------------|--|--|-------|
| Acrolein | 2.29 | 0.83362 | Yes |
| Formaldehyde | 15 ^a | 2.08404 | Yes |

a. Alternate PAIL, see Permit Guidance Manual.

13. CALCULATIONS:

| SN | Emission Factor Source (AP-42, testing, etc.) | Emission Factor (lb/ton, lb/hr, etc.) | Control Equipment | Control Equipment Efficiency | Comments |
|----|---|---|-------------------|------------------------------|--------------|
| 01 | Mfg Spec. for NO _x , CO, and VOC | g/hp-hr: 22 NO _x 1.5 CO 0.25 VOC | None | | Uncontrolled |
| | AP-42 for PM, PM ₁₀ , SO ₂ , and HAPs | lb/MMBtu 0.0095 PM ₁₀ 0.000588 SO ₂ | | | |

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

| SN | Pollutants | Test Method | Test Interval | Justification |
|-----------|-----------------------|---|--|-------------------------------|
| 01 | NO _x CO | 7E 10 | No later than August 2, 2016, and once every 60 months thereafter. | Necessary to verify emissions |
| Plantwide | Total Sulfur | 40 CFR Part 75, Appendix D section 2.3.5 or 2.3.3.1.2 | Once every 5 years (Initial testing completed on 12/29/08) | Department Guidance |

15. MONITORING OR CEMS

The permittee must monitor the following parameters with CEMS or other monitoring equipment (temperature, pressure differential, etc.)

| SN | Parameter or Pollutant to be Monitored | Method (CEM, Pressure Gauge, etc.) | Frequency | Report (Y/N) |
|-----|--|------------------------------------|-----------|--------------|
| N/A | | | | |

16. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

| SN | Recorded Item | Permit Limit | Frequency | Report (Y/N) |
|----|--------------------|---|--------------|--------------|
| 01 | Fuel used | Natural gas only | Continuously | N |
| 01 | Engine maintenance | Change oil and filter every 2,160 hours of operation, or annually, whichever comes first; Inspect air cleaner every 2,160 hours of operation or annually, whichever comes first; and Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary. | As needed | N |

17. OPACITY:

| SN | Opacity | Justification for limit | Compliance Mechanism |
|----|---------|-------------------------|----------------------|
| 01 | 5 % | Natural Gas Combustion | At inspection |

18. DELETED CONDITIONS:

| Former SC | Justification for removal |
|-----------|---------------------------|
| N/A | |

19. GROUP A INSIGNIFICANT ACTIVITIES

| Source Name | Group A Category | Emissions (tpy) | | | | | | |
|---|------------------|---------------------|-----------------|------|----|-----------------|--------|-------|
| | | PM/PM ₁₀ | SO ₂ | VOC | CO | NO _x | HAPs | |
| | | | | | | | Single | Total |
| 550 gallon Lube Oil Storage Tank | A-3 | | | 0.03 | | | | |
| 6,300 gallon Production Fluid Collection Tank | A-3 | | | 0.01 | | | | |
| Blowdowns | A-13 | | | 0.01 | | | | |
| Fugitive Emissions | A-13 | | | 0.6 | | | 0.02 | 0.02 |

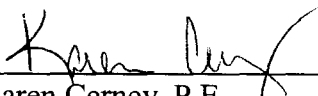
20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

| |
|-------------|
| Permit # |
| 1450-AOP-R3 |

21. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.



 Karen Cerney, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 08-20-12

Facility Name: SourceGas Arkansas Inc. (Lone Elm
Compressor Station)
Permit Number: 1450-AOP-R4
AFIN: 24-00104

| | | | |
|---------------|--------------|-----------------------------------|-------|
| \$/ton factor | 22.97 | Annual Chargeable Emissions (tpy) | 193.9 |
| Permit Type | Modification | Permit Fee \$ | 1000 |

| | |
|---|--------------------------|
| Minor Modification Fee \$ | 500 |
| Minimum Modification Fee \$ | 1000 |
| Renewal with Minor Modification \$ | 500 |
| Check if Facility Holds an Active Minor Source or Minor Source General Permit | <input type="checkbox"/> |
| If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$ | 0 |
| Total Permit Fee Chargeable Emissions (tpy) | 0 |
| Initial Title V Permit Fee Chargeable Emissions (tpy) | |

HAPs not included in VOC or PM:

Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride

Air Contaminants:

All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensible PM, H2S in TRS, etc.)

| Pollutant (tpy) | Check if Chargeable Emission | Old Permit | New Permit | Change in Emissions | Permit Fee Chargeable Emissions | Annual Chargeable Emissions |
|------------------|-------------------------------------|------------|------------|---------------------|---------------------------------|-----------------------------|
| PM | <input checked="" type="checkbox"/> | 1.2 | 1.2 | 0 | 0 | 1.2 |
| PM ₁₀ | <input type="checkbox"/> | 0.6 | 0.6 | 0 | | |
| SO ₂ | <input checked="" type="checkbox"/> | 0.1 | 0.1 | 0 | 0 | 0.1 |
| VOC | <input checked="" type="checkbox"/> | 2.2 | 2.2 | 0 | 0 | 2.2 |
| CO | <input type="checkbox"/> | 13 | 13 | 0 | | |
| NO _x | <input checked="" type="checkbox"/> | 190.4 | 190.4 | 0 | 0 | 190.4 |
| 1,3-Butadiene | <input type="checkbox"/> | 0.05 | 0.05 | 0 | | |
| Acrolein | <input type="checkbox"/> | 0.16 | 0.16 | 0 | | |
| Formaldehyde | <input type="checkbox"/> | 0.44 | 0.44 | 0 | | |