

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1362-AOP-R4 AFIN: 24-00092

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

SEECO, Inc. - Stockton Compressor Station
South of I-40, West of CR 64, North of Hwy 64
Ozark, Arkansas 72949

3. PERMIT WRITER:

Siew Low

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Support Activities for Oil and Gas Operations
NAICS Code: 213112

5. SUBMITTALS:

9/11/2008

6. REVIEWER'S NOTES:

SEECO, Inc. owns and operates a natural gas transmission pipeline compressor station near Ozark, Arkansas, known as the Stockton Compressor Station. There is no physical change in this a Title V renewal. Permitted emissions of formaldehyde are revised using most updated AP-42 emission factors. Permitted emission changes include increase of formaldehyde by 3.5 tpy; decreases of VOC, CO, NO_x, and acrolein by 1.7 tpy, 6.4 tpy, 0.4 tpy, and 0.02 respectively.

7. COMPLIANCE STATUS:

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

The facility was in compliance during the last inspection dated March 14, 2008.

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?

If yes, explain why this permit modification not PSD? N/A

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
01, 02, 03, 04	-	40 CFR Part 63 Subpart ZZZZ <i>- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.</i> However, the stationary RICEs (SN-01, SN-02, SN-03, and SN-04) at this facility do not have to meet the requirements of this subpart, and no initial notification is necessary pursuant to 40 CFR 63.6590(b)(3).

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

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

Pollutant	Emission Rate (lb/hr)	NAAQS Standard (µg/m ³)	Averaging Time	Highest Concentration (µg/m ³)	% of NAAQS
PM ₁₀	0.8	50	Annual	1.2	2%

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ($\mu\text{g}/\text{m}^3$)	Averaging Time	Highest Concentration ($\mu\text{g}/\text{m}^3$)	% of NAAQS
VOC	*	0.12	1-Hour (ppm)	na	na
CO	77.0	10,000	8-Hour	1773	18
		40,000	1-Hour	2357	6
NO _x	*	100	Annual	na	Na

* Per ADEQ's Screening Modeling Protocol dated October 8, 2008, modelings for these pollutants are not required because it is less than 100 tpy.

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/m^3), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = $0.11 \times \text{TLV}$	Proposed lb/hr	Pass?
Acrolein	0.23	0.0253	0.1284	No
Formaldehyde	0.37	0.0407	1.27	No
n-Hexane	176	19.38	0.04	Yes

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	2.3	1.5	Yes
Formaldehyde	15	14.92	Yes

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01 and 02	Manufacturer's data VOC CO NO _x	For SN-01 2 g/hp-hr 28 g/hp-hr 7 g/hp-hr			
	Manufacturer's data VOC CO NO _x HAPs – AP-42, Table 3.2-2 and 3.2-3	For SN-02 2.3 g/hp-hr 32 g/hp-hr 8.5 g/hp-hr			
03 and 04	Manufacturer's data VOC CO NO _x HAPs – AP-42, Table 3.2-2 and 3.2-3	1 g/hp-hr 2.65 g/hp-hr 1.5 g/hp-hr			

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
01, 02, 03, 04	CO	10	One-half of each engine type every five years.	Standard for compressor stations. See Plantwide Condition #8 for details.
	NO _x	7E		

14. 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				

15. 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, 02	hours of operation - total both units	8760 hours per 12 consecutive months	update daily	Yes

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01, 02, 03, 04	5%	natural gas fired	use of natural gas

17. DELETED CONDITIONS:

Former SC	Justification for removal
	N/A

18. GROUP A INSIGNIFICANT ACTIVITIES

Source Name	Group A Category	Emissions (tpy)							
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs		
							Single	Total	
Blowdown and fugitive	A-13			0.3					

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19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1362-AOP-R3

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.



Karen Cerney, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

