

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1725-AOP-R5 AFIN: 15-00068

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Enable Gas Transmission, LLC (Round Mountain Compressor Station)
13 Miles NE of the town of Morrilton
Morrilton, Arkansas 72110

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

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

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
8/20/2020	Renewal	Updated calculations for SN-01, SN-06, SN-07, and IAs

6. REVIEWER'S NOTES:

This is a Title V renewal for the facility. With this renewal, the facility is updating the basis for calculating emissions from all of its sources. The facility's permitted annual emissions are increasing by 0.2 tpy PM/PM₁₀, 14.5 tpy CO, 1.2 tpy NO_x, and 1.89 tpy total HAPs. The facility's permitted annual emissions are decreasing by 26.7 tpy SO₂ and 131.7 tpy NO_x.

7. COMPLIANCE STATUS:

As of August 20, 2020, there are no compliance issues with the facility.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N
If yes, were GHG emission increases significant?

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 for 8(b), explain why this permit modification is not PSD.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-01	NO _x & SO ₂	NSPS Subpart GG
SN-07	NO _x & SO ₂	NSPS Subpart KKKK
SN-06	-	NESHAP Subpart ZZZZ

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
N/A				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? Y

(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Regulation 18 requirement.)

If yes, are applicable requirements included and specifically identified in the permit?

If not, explain why. Y

For any requested inapplicable regulation in the permit shield, explain the reason why it is not applicable in the table below.

Source	Inapplicable Regulation	Reason
N/A		

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
No source uses a control device to achieve compliance with an emission limit or standard.		

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Division of Environmental Quality procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1st Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Division of Environmental Quality 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?
Acrolein	0.229	0.0252	1.013	N
Formaldehyde	0.368	0.0405	0.101	N

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 Division of Environmental Quality 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	0.004	Y
Formaldehyde	15	0.008	Y

* Emissions from SN-06 are not included in the model as it is an emergency generator

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards

Y

If exempt, explain: The facility has demonstrated that the H₂S in the natural gas does not exceed the four parts per million (4 ppm) for natural gas pipelines and related facilities that do not transmit gas as outlined in A.C.A. §8-3-103.

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	AP-42, 3.1	<u>lb/MMBtu:</u> PM/PM ₁₀ : 0.0066 SO ₂ : 0.085 0.007379	None	N/A	43.7 MMBtu/hr SO ₂ EF based on 5g/100 scf. HAPs EFs are determined by applying the AP-42 HAP/VOC ratio to the VOC EF.
	Manuf Data	<u>lb/MMBtu</u> VOC: 0.063 CO: 0.11 NO _x : 0.596			
	Calculated	<u>lb/MMBtu</u> Acetaldehyde: 0.00181 Acrolein: 0.00029 Benzene: 0.00054			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		Formaldehyde: 0.00071 Toluene: 0.00589			
06	AP-42, 3.2	<u>lb/MMBtu:</u> PM/PM ₁₀ : 0.01941 SO ₂ : 0.0147	None	N/A	237 Hp 1.90 MMBtu/hr 500 hours of operation per year SO ₂ EF based on 5g/100 scf. HAPs EFs are determined by applying the AP-42 HAP/VOC ratio to the VOC EF.
	Manuf Data	<u>g/Hp-hr</u> VOC: 1.8 CO: 60 NO _x : 6.2			
	Calculated	<u>Lb/MMBtu</u> Acetaldehyde: 0.552 Acrolein: 0.520 Benzene: 0.313 Formaldehyde: 0.0205 Methanol: 0.605 Toluene: 0.110			
07	AP-42, 3.1	<u>lb/MMBtu:</u> PM/PM ₁₀ : 0.0066 SO ₂ : 0.085 0.007379	None	N/A	43.7 MMBtu/hr SO ₂ EF based on 5g/100 scf. HAPs EFs are determined by applying the AP-42 HAP/VOC ratio to the VOC EF.
	Manuf Data	<u>lb/MMBtu</u> VOC: 0.063 CO: 0.11 NO _x : 0.596			
	Calculated	<u>lb/MMBtu</u> Acetaldehyde: 0.00181 Acrolein: 0.00029 Benzene: 0.00054 Formaldehyde: 0.00071 Toluene: 0.00589			

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
01 & 07	CO	10	60 months	Department Guidance
01	NO _x	20	60 months	Department Guidance NSPS Subpart GG
07	NO _x	20	Annually or 2-years	Department Guidance NSPS Subpart KKKK

SN	Pollutants	Test Method	Test Interval	Justification
Plantwide	Total Sulfur (SO ₂)	Methods outlined in section 2.3.5 or 2.3.3.1.2 of 40 CFR Part 75, Appendix D	5-year	Department Guidance

17. 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)
01	Fuel sulfur content	As specified in NSPS Subpart GG	Continuously	N
	Fuel nitrogen content	As specified in NSPS Subpart GG	Continuously	N
07	Fuel sulfur content	As specified in NSPS Subpart KKKK	Continuously	N
	Fuel nitrogen content	As specified in NSPS Subpart KKKK	Continuously	N
06	Hours of Operation	Non-resettable Hour Meter	Continuously	N

18. 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 sulfur content	0.8% by wt.	Continuously	N
06	Hours of operation	500 hours per calendar year	Monthly	N
	Maintenance Records	See Specific Condition #24	As necessary	N
07	Fuel sulfur content	20 grains per 100 scf	Continuously	N
Plantwide	Fuel sulfur content	5 grains per 100 scf	Continuously	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
SN-01, SN-06, and SN-07	5 %	Dept. Guidance	Combustion of natural gas only

20. DELETED CONDITIONS:

Former SC	Justification for removal
	N/A

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)						
		PM/ PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Produced Water Storage Tank (8820 gal)	A-3			2.54			< 0.1	< 0.1
Lube Oil Tank (500 gal)	A-3			0.03			< 0.1	< 0.1
A-3 TOTAL				2.57			< 0.2	< 0.2
Facility blowdown vents	A-13			0.26				
Turbine blowdown vents	A-13			0.38				
Plantwide fugitives	A-13			0.07			< 0.01	< 0.01
Truck loading	A-13			0.03			< 0.01	< 0.01
A-13 TOTAL				0.74			< 0.02	< 0.02

22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
1725-AOP-R4

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Enable Gas Transmission, LLC - Round
Mountain Compressor Station
Permit Number: 1725-AOP-R5
AFIN: 15-00068

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	259.4
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

☐

If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	-10.8
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		2.5	2.7	0.2		
PM ₁₀		2.5	2.7	0.2	0.2	2.7
PM _{2.5}		0	0	0		
SO ₂		29.8	3.1	-26.7	-26.7	3.1
VOC		10	24.5	14.5	14.5	24.5
CO		181.8	50.1	-131.7		
NO _x		227.9	229.1	1.2	1.2	229.1
Acetaldehyde	<input type="checkbox"/>	1.35	0	-1.35		

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