

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1513-AOP-R9 AFIN: 61-00076

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Enable Mississippi River Transmission, LLC (Biggers Compressor Station)
278 Gas Plant Road
Biggers, Arkansas 72413

3. PERMIT WRITER:

Kyle Crane

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
8/19/2020	Renewal	Recalculation of SN-13 emissions using AP-42 Section 7.1 methods

6. REVIEWER'S NOTES:

Enable Mississippi River Transmission, LLC (MRT) owns and operates the Biggers Natural Gas Compressor Station which is located in Biggers, Randolph County, Arkansas. This permit revision renews the facility's Title V operating permit and updates calculations for the Gasoline Storage Tank (SN-13) and for Insignificant Activity tanks using EPA's AP-42 Section 7.1 emission calculation methods. Annual permitted emissions decrease by 0.1 tons per year (tpy) of VOC with this renewal. Emissions were estimated using AP-42 emission factors and calculation methods, equipment manufacturer's data, and previous stack test data. HAP dispersion modeling

was performed with Lakes Environmental AERMOD View v9.7.0 using AERMOD v19191.

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 last inspected on January 15, 2020 and was found to be in compliance. EPA ECHO shows “No Violation Identified” for Clean Air Act compliance.

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? 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 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-11	SO ₂ and NO _x	40 C.F.R. Part 60 Subpart GG
SN-01, SN-02, SN-04 through SN-07, SN-09, and SN-12	Formaldehyde	40 C.F.R. Part 63 Subpart ZZZZ
SN-13	There are no specific emission limits or pollutants identified, but the rules generally regulate HAPs	40 C.F.R. Part 63 Subpart CCCCC

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
None				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

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

(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? N
If not, explain why.

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
N/A		

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/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?
Acetaldehyde	45	4.95	0.255	Yes
Acrolein	0.229	0.025	0.1925	No
Benzene	1.59	0.175	0.132	Yes
Formaldehyde	1.5 ^a	0.165	0.484	No
Methanol	262	28.8	0.252	Yes
Toluene	75	8.28	0.0724	Yes

a. Based on the ADEQ approved alternate PAIL

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	0.40991	Yes
Formaldehyde	15.0 ^a	0.82041	Yes

a. ADEQ approved alternate PAIL.

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 does not emit H₂S

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01, 02, 04, 05, 06, & 07	NO _x & CO per testing VOC, PM ₁₀ , SO ₂ , & HAP per AP-42 (7/00, 3.2-3)	Uncontrolled lb/hr: 44.90 CO 42.20 NO _x lb/MMBtu: 0.0296 VOC 0.01941 PM ₁₀ 0.0147 SO ₂ 0.01552 Total HAPs	NSCR	80% for NO _x & CO 76% for Formaldehyde	Controlled lb/hr: 8.98 CO 8.44 NO _x Based on 4000 hours of operation annually for each compressor engine
09	NO _x , CO, & VOC per Manufacturer's Data PM ₁₀ , SO ₂ , and HAPs per AP-42 (7/00, 3.2-3)	lb/hr: 11.4 NO _x 0.80 VOC 11.5 CO lb/MMBtu: 0.01941 PM ₁₀ 0.0147 SO ₂ 0.03112 Total HAPs	N/A	N/A	Tpy emissions are calculated based on 500 hours of operation annually
11	NO _x & CO per Manufacturer's Data VOC, PM ₁₀ , SO ₂ , and HAPs per AP-42 (7/00, 3.1-2a)	lb/hr: 32.50 NO _x 7.00 CO lb/MMBtu: 0.0021 VOC 0.0066 PM ₁₀ 0.00658 SO ₂ 0.0008984 Total HAPs	N/A	N/A	
12	NO _x , CO, VOC, PM ₁₀ , SO ₂ , & HAPs per AP-42 (7/00, 3.2-3)	lb/MMBtu: 2.27 NO _x 3.72 CO 0.0296 VOC 0.01941 PM ₁₀ 0.0147 SO ₂ 0.01552 Total	N/A	N/A	Tpy emissions are calculated based on 500 hours of operation annually.

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		HAPs			
13	AP-42 Section 7.1	Annual breathing losses: 97.02 lbs Annual working losses: 59.75 lbs	N/A	N/A	320 gallon capacity RVP-10

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

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	Every five years	Division Guidance
01, 02, 04, 05, 06, & 07	NO _x & CO	7E & 10	One half of every engine every 60 months	Division Guidance
11	NO _x & CO	7E/20 & 10	Every 60 months	Division 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)
11	Fuel sulfur content	As specified in NSPS Subpart GG	Continuously	N
	Fuel nitrogen content	As specified in NSPS Subpart GG	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, 02, and 04 through 07	Hours of operation	4,000 hours per rolling 12-month period (each)	Monthly	Y
	Records required by 63.6655	N/A	N/A	Y
	Maintenance Conducted	N/A	N/A	Y
09	Hours of Operation	500 hours per calendar year	Monthly	Y
11	NO _x emissions	230 ppm	Continuously	N
	Fuel sulfur content	0.8% by wt.	Continuously	N
12	Hours of operation	500 hour per calendar year	Monthly	Y
13	Gasoline throughput	6,576 gallons per rolling 12-month total	Monthly	Y

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
Plantwide except SN-13	5%	Division Guidance	Combustion of natural gas only

20. DELETED CONDITIONS:

Former SC	Justification for removal
	None

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
Boiler (0.1 MMBtu/hr)	A-1	0.003	0.0003	0.002	0.04	0.04	-	-
Methanol Tank (154 gal)	A-2	-	-	0.005	-	-	-	0.005
Kerosene Tank (154 gal)	A-2	-	-	0.0001	-	-	-	0.0001
A-2 Total		-	-	0.0051	-	-	-	0.0051
Produced Water Storage Tank (7,518 gal)	A-3	-	-	1.64	-	-	-	-
Wastewater Storage Tank (4,700 gal)	A-3	-	-	1.02	-	-	-	-
Antifreeze Storage Tank (4,200 gal)	A-3	-	-	<0.01	-	-	-	-
Antifreeze Blending Tank (8,820 gal)	A-3	-	-	<0.01	-	-	-	-
Diesel Storage Tank (564 gal)	A-3	-	-	0.06	-	-	-	-
Used Engine Oil Tank (1,176 gal)	A-3	-	-	<0.01	-	-	-	-
A-3 Total		-	-	2.75	-	-	-	-
Facility-wide Blowdowns	A-13	-	-	0.64	-	-	-	-
Compressor Blowdowns	A-13	-	-	0.34	-	-	-	-
Process Piping Fugitives	A-13	-	-	0.14	-	-	-	-
Truck Loading	A-13	-	-	0.004	-	-	-	-
Smart Ash Incinerator	A-13	0.07	-	0.002	0.10	-	-	-
Engine Oil Storage Tank (11,298 gal)	A-13	-	-	0.52	-	-	-	-
A-13 Total		0.07	-	1.65	0.10	-	-	-

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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 #
1513-AOP-R8

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Enable Mississippi River Transmission,
LLC (Biggers Compressor Station)
Permit Number: 1513-AOP-R9
AFIN: 61-00076

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	262.7
Permit Type	Renewal No Changes	Permit Fee \$	0

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)	-0.1
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		5.9	5.9	0		
PM ₁₀		5.9	5.9	0	0	5.9
PM _{2.5}		0	0	0		
SO ₂		4.7	4.7	0	0	4.7
VOC		6	5.9	-0.1	-0.1	5.9
CO		141.3	141.3	0		
NO _x		246.2	246.2	0	0	246.2
Total HAPs	<input type="checkbox"/>	2.88	2.88	0		