STATEMENT OF BASIS

For the issuance of Air Permit # 1513-AOP-R7 AFIN: 61-00076

1. PERMITTING AUTHORITY:

Arkansas Department 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
7/24/2018	Modification	Remove CAM, Update Emission Factors and Calculations, Update Sulfur Content Limit

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 modification is necessary to:

1. Remove Compliance Assurance Monitoring (CAM) requirements due to the compressor engines (SN-01, SN-02, and SN-04 through SN-07) having federally

enforceable limits on hours of operation that reduce pre-control emissions below the major source threshold, making CAM no longer applicable;
2. Update emission factors and calculations for all sources using AP-42 and manufacturer's emission factors;
3. Correct typographical errors regarding the horsepower rating of compressor engines SN-05, 06, and 07 and the capacity of the gasoline storage tank SN-13;
4. Update the natural gas sulfur content limit and associated calculations to be consistent with the current FERC gas quality tariff; and
5. Update the Insignificant Activities list and associated calculations.

The permit's general provisions have also been updated. Annual permitted emissions increase by 2.8 tons per year (tpy) of SO_2 and 0.1 tpy of VOC. Annual permitted emissions decrease by 2.3 tpy of CO, 0.7 tpy of NO_X, and 0.66 tpy of Total HAPs. Emissions were calculated using AP-42 and manufacturer supplied emission factors. Dispersion modeling was performed with AERMOD v18081 using Lakes Environmental AERMOD View 9.5.0.

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 9, 2018 and was found to be in compliance. This permit revision does not address any enforcement issues. ECHO displays "Not Available" for air history.

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 NOx	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 CCCCCC

10. 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? Y
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		

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. 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 ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Department 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 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 × 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 Department to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL ($\mu g/m^3$) = 1/100 of Threshold Limit Value	Modeled Concentration ($\mu g/m^3$)	Pass?
Acrolein	2.29	0.40991	Yes
Formaldehyde	15.0[a.]	0.82041	Yes

a. ADEQ approved alternate PAIL.

c) H_2S 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 H_2S Standards Y
If exempt, explain: The facility does not emit H_2S

13. 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, PM10, SO2, & 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 HAPs	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
13	EPA Tanks software	Varies	N/A	N/A	320 gallon capacity RVP-10

14. 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	Department Guidance
01, 02, 04, 05, 06, & 07	NO_x & CO	7E & 10	One half of every engine every 60 months	Department Guidance
11	NO_x & CO	7E/20 & 10	Every 60 months	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)
11	Fuel sulfur content	As specified in NSPS Subpart GG	Continuously	N
	Fuel nitrogen content	As specified in NSPS Subpart GG	Continuously	N

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, 02, and 04 through 07	Hours of operation	4,000 hours per rolling 12-month period (each)	Monthly	Y
	Records required	N/A	N/A	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	by 63.6655			
	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

17. OPACITY:

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

18. DELETED CONDITIONS:

Former SC	Justification for removal
#7-11	CAM for SN-01, 02, and 04 – Due to hours of operation limits, pre-control emissions are under 100 tpy so these sources are no longer subject to CAM
#12-17	SN-05, SN-06, and SN-07 conditions have been combined with SN-01, SN-02, and SN-04 conditions (#1-6)
#18-22	CAM for SN-05, 06, and 07 – Due to hours of operation limits, pre-control emissions are under 100 tpy so these sources are no longer subject to CAM
#51	Permit Shield – no longer included and not requested

19. 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	A-2	-	-	0.01	-	-	-	0.01

Source Name	Group A Category	Emissions (tpy)						
		PM/PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
(154 gal)								
Kerosene Tank (154 gal)	A-2	-	-	0.0001	-	-	-	0.0001
A-2 Total		-	-	0.0101	-	-	-	0.0101
Produced Water Storage Tank (7,518 gal)	A-3	-	-	1.64	-	-	-	-
Wastewater Storage Tank (4,700 gal)	A-3	-	-	1.03	-	-	-	-
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	-	-	<0.01	-	-	-	-
Used Engine Oil Tank (1,176 gal)	A-3	-	-	<0.01	-	-	-	-
A-3 Total		-	-	2.67	-	-	-	-
Facility-wide Blowdowns	A-13	-	-	1.55	-	-	-	-
Compressor Blowdowns	A-13	-	-	0.83	-	-	-	-
Process Piping Fugitives	A-13	-	-	0.34	-	-	-	-
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	-	-	0.007	-	-	-	-
A-13 Total		0.07	-	2.73	0.10	-	-	-

20. 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-R6

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-R7
AFIN: 61-00076

$/ton factor	23.93	Annual Chargeable Emissions (tpy)	262.8
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)	2.2
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		1.9	4.7	2.8	2.8	4.7
VOC		5.9	6	0.1	0.1	6
CO		143.6	141.3	-2.3		
NO_X		246.9	246.2	-0.7	-0.7	246.2
Total HAPs	☐	3.54	2.88	-0.66		