STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1244-AOP-R9 AFIN: 43-00093

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Enable Mississippi River Transmission, LLC - Carlisle Compressor Station
2473 Hillman Road
Carlisle, Arkansas 72024

3. PERMIT WRITER:

Elliott Marshall

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
12/17/2020	Renewal/Modification	Update emission calculations for SN-01 through SN-08 and SN-10

6. REVIEWER'S NOTES:

This permitting action is necessary to renew the existing Title V permit. In addition, the following changes were made:

1. Correct the horsepower rating of compressor engines SN-05 and SN-06 from 1,000 hp to 1,100 hp.
2. Update the emergency generator engine (SN-10) emission factors for NOx, CO, and VOC to use manufacturer's data. Update HAP emission calculations using EPA AP-42 emission factors (SN-01 through SN-08 and SN-10).

3. Revise the fuel sulfur limit (Plantwide Condition #8) and SO_2 emission rates, at SN-01 through SN-08 and SN-10, to be commensurate with MRT's current Federal Energy Regulatory Commission (FERC) gas quality tariff.
4. Update emission calculations for all Insignificant Activities (IA) and add Truck Loading to A-13 IA list.

Permitted emission rates are increasing/decreasing by -0.8 tpy PM/PM_{10}, 4.0 tpy SO_2, -0.7 tpy VOC, -0.5 tpy CO, -2.2 tpy NO_x and 3.69 tpy Total HAPs.

7. COMPLIANCE STATUS:

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

There are no active or pending enforcement actions for this 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? N/A

b) Is the facility categorized as a major source for PSD? Y
- *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.

Emission increases are the result of updating emission factors not the result of construction, reconstruction, or modification of the sources.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-01 through SN-08, 10	HAPs	NESHAP 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? 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
Facility	40 CFR Part 63 Subpart HH - National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities	Compressors Exempt
Facility	40 CFR Part 63 Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities	A compressor station that transports natural gas prior to the point of custody transfer or to a natural gas processing plant (if present) is not considered a part of the natural gas transmission and storage source category.
SN-01 through 08 and SN-10	40 CFR Part 60 Subpart GG - Standards of Performance for Stationary Gas Turbines	No stationary gas turbines at the facility.
SN-01 through 08 and SN-10	40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	No compression ignition internal combustion engines.
SN-01 through 08 and SN-10	40 CFR Part 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	The latest installation/construction date is 1986. The engines have not been modified or reconstructed.
SN-01 through 08 and SN-10	40 CFR Part 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines	No stationary combustion turbines at the facility.
Facility	40 CFR Part 60 Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution	There has been no construction, modification, or reconstruction after August 23, 2011, and on or before September 18, 2015.
Facility	40 CFR Part 60 Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas	There has been no construction, modification, or

Source	Inapplicable Regulation	Reason
	Production, Transmission and Distribution	reconstruction after September 18, 2015.
SN-01 through 08, SN-10	40 CFR Part 64 – Compliance Assurance Monitoring	No emission controls at the facility.

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:

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?
Formaldehyde	1.5	0.165	2.148	N

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Methanol	262.1	28.83	0.321	Y
Acetaldehyde	45.1	4.95	0.292	Y
Benzene	1.6	0.18	0.166	Y
Toluene	75.36	8.29	0.059	Y
Acrolein	0.23	0.03	0.276	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 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?
Formaldehyde	15	7.83	Y
Acrolein	2.3	1.005	Y

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01 to 08	CO and NO_x: Stack Testing VOC, PM, PM_{10}, SO_2 and HAPs AP-42 Table 3.2-3	CO: 53.22 lb/hr NO_x: 40.62 lb/hr lb/MMBtu VOC: 0.0296 PM/PM_{10}: 0.0194 SO_2: 0.0147 Formaldehyde: 0.0205 Methanol: 0.00306 Acetaldehyde: 0.00279 Benzene: 0.00158 Toluene: 0.00056 Acrolein: 0.00263	None	N/A	SN-01 through SN-08 1,100 hp 13.1 MMBtu/hr 5500 hr/yr SO_2 emission factor

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
					adjusted for 5 gr/100scf
10	NO_x, CO and VOC Manufacturer EF PM, PM_{10}, SO_2 and HAPs AP-42 Table 3.2-3	g/hp-hr NO_x: 11.4 CO: 11.5 VOC: 0.8 lb/MMBtu PM/PM_{10}: 0.01941 SO_2: 0.0147 Formaldehyde: 0.0205 Methanol: 0.00306 Acetaldehyde: 0.00279 Benzene: 0.00158 Toluene: 0.00056 Acrolein: 0.00263	None	N/A	2.65 MMBtu/hr 500 hr/yr 300 hp SO_2 emission factor adjusted for 5 gr/100scf

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
SN-01through SN-08 Stack Testing	CO NO_x	Method 10 and 7E	One-half of eight compressor engines every 5 years	See Plantwide Condition #10 in permit.

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)
10	Hours of Operation	Non-resettable hour meter	When in operation	N
SN-01 through SN-08	Hours of Operation	Hour meter	Continuous as used	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)
01-08	Records required to maintain remote status	40 CFR §63.6675	Every 12 months	N
01-08, 10	Maintenance Conducted	-	See Plantwide Conditions	N
01-08	Hours of operation	5500 each engine	Monthly	N
10	Hours of operation	500 hours (emergency and non-emergency) per calendar year each. Emergency operation in excess of these hours may be allowable but shall be reported	Monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 through 08, 10	5%	Department Guidance	Natural Gas Fuel 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
Used Engine Oil Tank (2,960 gal)	A-3			0.15			<0.01	<0.01
Produced Water Storage Tank (8,820 gal)	A-3			1.92			<0.01	<0.01
Antifreeze Mix Tank (8,820 gal)	A-3			0.00005			<0.01	<0.01
Antifreeze Tank (4,200 gal)	A-3			0.00002			<0.01	<0.01
Produced Water Storage Tank (4,580 gal)	A-3			1.0			<0.01	<0.01
TOTAL A-3 Activities				3.07			<0.06	<0.06
Compressor and Facility Blowdowns	A-13			0.18				
Piping Component Fugitive Emissions	A-13			0.17				
Truck Loading	A-13			0.01				
Engine Oil Storage Tank (11,650 gal)	A-13			0.53				
TOTAL A-13 Activities				0.89				

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 #
1244-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 - Carlisle Compressor Station
Permit Number: 1244-AOP-R9
AFIN: 43-00093

$/ton factor	23.93	Annual Chargeable Emissions (tpy)	915.9
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	☐
If Hold Active Permit, Amt of Last Annual Air Permit Invoice $	0
Total Permit Fee Chargeable Emissions (tpy)	0.3
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		6.5	5.7	-0.8		
PM_{10}		6.5	5.7	-0.8	-0.8	5.7
$PM_{2.5}$		0	0	0		
SO_2		0.9	4.9	4	4	4.9
VOC		9.7	9	-0.7	-0.7	9
CO		1173.7	1173.2	-0.5		
NO_X		898.5	896.3	-2.2	-2.2	896.3
Total HAP	☐	5.41	9.1	3.69		