

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1244-AOP-R6 AFIN: 43-00093

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Enable Mississippi River Transmission, LLC (Carlisle Compressor Station)
Hillman Road, Route 1
Carlisle, Arkansas 72024

3. PERMIT WRITER:

Paula Parker

4. NAICS DESCRIPTION AND CODE:

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

5. SUBMITTALS:

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
1/16/2014	Renewal	None

6. REVIEWER'S NOTES:

Enable Mississippi River Transmission, LLC (Carlisle Compressor Station) is a natural gas compressor station located about 10 miles south of Carlisle on Hillman Road, Route 1, in Lonoke County, Arkansas. The permit is being renewed. The requirements for 40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* are being added to the permit for all engines. There are no physical changes taking place at the facility. Particulate emissions increased by 3.2 tpy. The increase of particulate is due to the addition of the condensable portion. Total HAPs decreased by 0.26 tpy.

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 currently no enforcement actions for this facility.

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? **Y**

- *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 is not PSD.

This is a renewal with no modifications.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-01 through SN-08, 10	HAPs	NESHAP ZZZZ

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. AMBIENT AIR EVALUATIONS:

a) Reserved.

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?
Formaldehyde	1.5	0.165	1.2836	N
Methanol	262.1	28.83	0.1915	Y
Acetaldehyde	45.1	4.95	0.1744	Y
Benzene	1.6	0.18	0.09859	Y
Toluene	75.36	8.29	0.03413	Y
Acrolein	0.23	0.03	0.1649	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 (µg/m ³) = 1/100 of Threshold Limit Value	Modeled Concentration (µg/m ³)	Pass?
Formaldehyde	15	3.99	Y
Acrolein	2.3	0.682	Y

c) H₂S Modeling: N/A

12. 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 : AP-42 Table 3.2-3 HAPs: GRI-	CO: 3.8205 lb/MMbtu NO _x : 2.9158 lb/MMbtu VOC: 0.0296 lb/MMbtu PM/PM ₁₀ : 0.0194 lb/MMbtu SO ₂ : 0.000588 lb/MMbtu Formaldehyde: 0.0677 gm/hp-hr Methanol: 0.0101 gm/hp-hr Acetaldehyde: 0.0092 gm/hp-hr Benzene: 0.0052 gm/hp-hr	None	N/A	SN-01-04, SN-07,08 1100 hp SN-05,06 1000 hp 13.93 MMBtu/hr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	HAPCalc	Toluene: 0.0018 gm/hp-hr Acrolein: 0.0087 gm/hp-hr			5500 hr/yr
10	NO _x : AGA Emission Factors CO, VOC, PM, PM ₁₀ SO ₂ : AP-42 Table 3.2-3 HAPs: GRI-HAPCalc	NO _x : 7.2715 lb/MMbtu CO: 3.72 lb/MMbtu VOC: 0.0296 lb/MMbtu PM/PM ₁₀ : 0.0194 lb/MMbtu SO ₂ : 0.000588 lb/MMbtu Formaldehyde: 0.0677 gm/hp-hr Methanol: 0.0101 gm/hp-hr Acetaldehyde: 0.0092 gm/hp-hr Benzene: 0.0052 gm/hp-hr Toluene: 0.0018 gm/hp-hr Acrolein: 0.0087 gm/hp-hr	None	N/A	2.65 MMBtu/hr 500 hr/yr 300 hp

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
SN01-SN08 Stack Testing	CO NO _x	Method 10 and 7E	One-half of eight compressor engines every 5 years	See Plantwide Condition # 10 in permit.

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)
10	Hours of operation	non-resettable hour meter	When in operation	N
SN-01-SN08	Hours of operation	Hour meter	Continuous as used	N

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)
01-08	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

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 thru 08, 10	5%	Department Guidance	Natural Gas Fuel Only

17. DELETED CONDITIONS:

Former SC	Justification for removal
	None

18. GROUP A INSIGNIFICANT ACTIVITIES:

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Antifreeze	A-3	-	-	0.01			<0.01	<0.01
Antifreeze	A-3	-	-	0.01			<0.01	<0.01

Source Name	Group A Category	Emissions (tpy)						
		PM/ PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Entrained Liquids	A-3	-	-	0.03			<0.01	<0.01
Entrained Liquids	A-3	-	-	0.03			<0.01	<0.01
Lube Oil	A-3	-	-	0.01			<0.01	<0.01
Used Oil	A-3	-	-	0.01			<0.01	<0.01
Wastewater	A-3	-	-	0.01			<0.01	<0.01
TOTAL A-3 Activities				0.11			0.07	0.07
Blowdown Vent	A-13	-	-	0.10				
Piping Component Fugitive Emissions	A-13	-	-	0.32			0.01	0.01
TOTAL A-13 Activities				0.42			0.01	0.01

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1244-AOP-R5

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

CenterPoint Energy Mississippi River Transmission, LLC
 (Carlisle Compressor Station)
 1244-AOP-R6
 43-00093

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	915.6
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	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	3.2
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 condensable 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		3.3	6.5	3.2		
PM ₁₀		3.3	6.5	3.2	3.2	6.5
PM _{2.5}		0	0	0		
SO ₂		0.9	0.9	0	0	0.9
VOC		9.7	9.7	0	0	9.7
CO		1173.7	1173.7	0		
NO _x		898.5	898.5	0	0	898.5

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Total HAP	<input type="checkbox"/>	5.67	5.41	-0.26		