## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1244-AOP-R7 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:

Elliott Marshall

## 4. NAICS DESCRIPTION AND CODE:

NAICS Description:Pipeline Transportation of Natural GasNAICS Code:486210

#### 5. ALL 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
	Administrative Amendment)	
9/8/2016	Administrative Amendment	No new or modified emissions

## 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 issued as an administrative amendment. MRT requests the insignificant activities tank list be revised to show the replacement of the two (2) 4,200 gallons (gal) entrained liquids storage tanks with one (1) 8,820 gal produced water storage tank (TANK1).

## 7. COMPLIANCE STATUS:

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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

Y

- b) Is the facility categorized as a major source for PSD?
- Single pollutant  $\geq 100$  tpy and on the list of 28 or single pollutant  $\geq 250$  tpy and not on list

If yes, explain why this permit modification is not PSD.

This is an Administrative Amendment.

## 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.

1<sup>st</sup> 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<sup>3</sup>), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m <sup>3</sup> )	$PAER (lb/hr) = 0.11 \times TLV$	Proposed lb/hr	Pass?
Formaldehyde	1.5	0.165	1.2836	Ν
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	Ν

2<sup>nd</sup> 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	3.99	Y
Acrolein	2.3	0.682	Y

# 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 <sub>x</sub> : Stack Testing VOC, PM, PM <sub>10</sub> , SO <sub>2</sub> : AP-42 Table 3.2-3 HAPs: GRI- HAPCalc	$\begin{array}{c} \text{CO: } 3.8205 \text{ lb/MMbtu}\\ \text{NO}_{x}\text{: } 2.9158 \text{ lb/MMbtu}\\ \text{VOC: } 0.0296 \text{ lb/MMbtu}\\ \text{PM/PM}_{10}\text{: } 0.0194 \text{ lb/MMbtu}\\ \text{SO}_{2}\text{: } 0.000588 \text{ lb/MMbtu}\\ \text{Formaldehyde:} 0.0677 \text{gm/hp-hr}\\ \text{hr}\\ \text{Methanol: } 0.0101 \text{ gm/hp-hr}\\ \text{Acetaldehyde: } 0.0092 \text{ gm/hp-hr}\\ \text{hr}\\ \text{Benzene: } 0.0052 \text{ gm/hp-hr}\\ \text{Toluene: } 0.0018 \text{ gm/hp-hr}\\ \text{Acrolein: } 0.0087 \text{ gm/hp-hr}\\ \end{array}$	None	N/A	SN-01-04, SN-07,08 1100 hp SN-05,06 1000 hp 13.93 MMBtu/hr 5500 hr/yr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
10	NO <sub>x</sub> : AGA Emission Factors CO, VOC, PM, PM <sub>10</sub> SO <sub>2</sub> : 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:0.0677gm/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
SN-01through SN-08 Stack Testing	CO NO <sub>x</sub>	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	Pollutant(CEM, Pressure Gauge, etc.)		Report (Y/N)
10	Hours of	Non-resettable hour	When in	Ν
10	Operation	meter	operation	11
SN-01through	Hours of	Hour meter	Continuous as	N
SN-08	Operation	fiour meter	used	IN

# 15. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

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SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)	
01-08	Records required to maintain remote status	40 CFR §63.6675	Every 12 months	Ν	
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	Emissions (tpy)						
	Category	PM/P		VOC	<u> </u>	NO	HAPs	
		M <sub>10</sub>	$SO_2$	VOC	CO	NO <sub>x</sub>	Single	Total
Used Oil	A-3			0.01			< 0.01	< 0.01
Produced Water	A-3			1.92			< 0.01	< 0.01

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Source Name	Group A Category	Emissions (tpy)							
		PM/P M <sub>10</sub>	SO <sub>2</sub>	VOC	СО	NO <sub>x</sub>	HAPs		
							Single	Total	
Engine Oil	A-3			0.01			< 0.01	< 0.01	
Antifreeze	A-3			0.01			< 0.01	< 0.01	
Antifreeze	A-3			0.01			< 0.01	< 0.01	
Produced Water	A-3			0.01			< 0.01	< 0.01	
TOTAL A-3 Activities				1.97			0.06	0.06	
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-R6	

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

#### Fee Calculation for Major Source

Revised 03-11-16 Facility Name: Enable Mississippi River Transmission, LLC Permit Number: 1244-AOP-R6 AFIN: 43-00093 \$/ton factor Annual Chargeable Emissions (tpy) 23.93 915.6 Permit Type Permit Fee \$ 0 AA 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 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		Permit Fee Chargeable Emissions	Annual Chargeable Emissions
РМ		6.5	6.5	0		
PM <sub>10</sub>		6.5	6.5	0	0	6.5
PM <sub>2.5</sub>		0	0	0		
SO <sub>2</sub>		0.9	0.9	0	0	0.9
VOC		9.7	9.7	0	0	9.7
со		1173.7	1173.7	0		
NO <sub>X</sub>		898.5	898.5	0	0	898.5
Total HAP		5.41	5.41	0		