

## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1433-AOP-R4 AFIN: 02-00065

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

CenterPoint Energy - Mississippi River Trans. Corp. - Fountain Hill Compressor Station  
409 Ashley 8 Road  
Hamburg, Arkansas 71646

3. PERMIT WRITER:

Michael Lynch

4. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Pipeline Transportation of Natural Gas  
NAICS Code: 48621

5. SUBMITTALS:

4/28/2009

6. REVIEWER'S NOTES:

CenterPoint Energy - Mississippi River Transmission Corporation (MRT) owns and operates the Fountain Hill Natural Gas Compressor Station which is located in Hamburg, Ashley County, Arkansas.

This permit is being issued as a permit minor modification and the Title V permit renewal. A minor modification was approved to allow MRT to apply NSCR controls to SN-06 thereby reducing the sources NO<sub>x</sub> emissions by 95% and CO emissions by 90%. NO<sub>x</sub> emissions for the facility will be reduced by 128.4 tpy and the CO emissions will be reduced by 142.5 tpy. Since the facility is not a natural gas production facility, it is not subject to NESHAP HH and since it is not a major source of HAP is not subject to NESHAP HHH. The facility is not subject to NSPS JJJJ since all engines were last installed or modified prior to July 1, 2007.

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 known active/pending enforcement activities regarding this facility. The Fountain Hill Compressor Station plans to comply with all future regulatory requirements.

8. PSD APPLICABILITY:

- a. Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? Y/N
- b. Is the facility categorized as a major source for PSD? Y/N  
*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 not PSD? This is not a major modification. No process or emissions changes have been requested or anticipated.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
NONE		

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ( $\mu\text{g}/\text{m}^3$ )	Averaging Time	Highest Concentration ( $\mu\text{g}/\text{m}^3$ )	% of NAAQS
PM <sub>10</sub>	1.0	50	Annual	*20.2	40.4
		150	24-Hour	*28.1	18.7
SO <sub>2</sub>	< 100 tpy	80	Annual	N/A	N/A
		1300	3-Hour	N/A	N/A
		365	24-Hour	N/A	N/A
VOC	N/A	0.12	1-Hour (ppm)	N/A	N/A

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CO	306.8	10,000	8-Hour	1436.5	14.4
		40,000	1-Hour	2814.2	7.0
NO <sub>x</sub>	257.7	100	Annual	64.17	64.2
Pb	N/A	0.15	Rolling 3-month Period over 3 years (not to be exceeded in any 3 month period)	N/A	N/A

Non-Criteria Pollutants:

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 ( $\text{mg}/\text{m}^3$ ), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV ( $\text{mg}/\text{m}^3$ )	PAER (lb/hr) = $0.11 \times \text{TLV}$	Proposed lb/hr	Pass?
Formaldehyde	1.5	0.170	1.12	N
Methanol	262	28.82	0.18	Y
Acetaldehyde	45	4.95	0.18	Y
Benzene	1.6	0.18	0.1	Y
Toluene	188.4	20.72	0.08	Y
Acrolein	0.23	0.03	0.18	N

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 ( $\mu\text{g}/\text{m}^3$ ) = 1/100 of Threshold Limit Value	Modeled Concentration ( $\mu\text{g}/\text{m}^3$ )	Pass?
Formaldehyde	15	2.35	Y
Acrolein	2.3	0.41	Y

Other Modeling: NONE

Odor: N/A

H<sub>2</sub>S Modeling: N/A

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equip.	Control Equipment Efficiency	Comments
01 to 05 and 07 to 08	NO <sub>x</sub> & CO: Stack test data. VOC, PM <sub>10</sub> , SO <sub>2</sub> (AP-42, 7/00, table 3.2-3)	<u>g/hp-hr</u> NO <sub>x</sub> -15.9 CO -18.64 <u>lb/MMBtu</u> PM/PM <sub>10</sub> - 9.5E-3 SO <sub>2</sub> - 2.96E-2 VOC - 2.96E-2	None	These sources shall be tested for CO & NO <sub>x</sub> emissions. Uncontrolled	
06	NO <sub>x</sub> & CO: Stack test data. VOC, PM <sub>10</sub> , SO <sub>2</sub> (AP-42, 7/00, table 3.2-3)	<u>g/hp-hr</u> NO <sub>x</sub> -1.795 CO -1.864 <u>lb/MMBtu</u> PM/PM <sub>10</sub> - 9.5E-3 SO <sub>2</sub> - 2.96E-2 VOC - 2.96E-2	NSCR/ AFRC	95% - NO <sub>x</sub> 90% - CO	
01 to 08	HAPs: GRI-HAPCalc 3.01	<u>g/hp-hr</u> Form. - 6.77E-2 Acet. - 9.2E-3 Acarol. - 8.7E-3 Benzene - 1.01E-2 Methanol - 5.2E-3 Toluene - 1.8E-3	None	Uncontrolled	
09 & 10	NO <sub>x</sub> , CO, VOC, PM <sub>10</sub> & SO <sub>2</sub> : (AP-42, 7/00, table 3.2-3)	<u>lb/MMBtu</u> PM/PM <sub>10</sub> - 9.5E-3 NO <sub>x</sub> - 2.27 CO - 3.72 SO <sub>2</sub> - 2.96E-2 VOC - 2.96E-2	None	Test SN-09 one time to determine compliance for CO & NO <sub>x</sub> .	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equip.	Control Equipment Efficiency	Comments
09 & 10	HAPs: GRI-HAPCalc 3.01	g/hp-hr Form. - 6.77E-2 Acet. - 9.2E-3 Acarol. - 8.7E-3 Benzene - 1.01E-2 Methanol - 5.2E-3 Toluene - 1.8E-3	None	Uncontrolled	

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
01 to 08	NOX and CO	7E and 10	Upon permit issuance and Title V renewal	Compressor stations are required to test one half of each type of engine every five years.
Plantwide	Total Sulfur (SO <sub>2</sub> )	Methods outlined in section 2.3.5 or 2.3.3.1.2 of 40 CFR Part 75, Appendix D	Within 180 days of permit issuance and every five years	Department Guidance

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)
NONE				



Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
Antifreeze Mix Tank (8820 gal)	3	----	----	----	----	----	----	----
Wastewater Tank (8820 gal)	3	----	----	0.18	----	----	----	----
Wastewater Tank (8820 gal)	3	----	----	0.18	----	----	----	----
Slop Tank (10038 gal)	13	----	----	0.23	----	----	----	----
Lube Oil Tank (11298 gal)	13	----	----	0.01	----	----	----	----
Smart Ash Incinerator	13	----	----	----	----	----	----	----
Piping Component Fugitive Emissions	13	----	----	1.8	----	----	0.05	0.09
Condensate Truck Loading	13	----	----	----	----	----	----	----

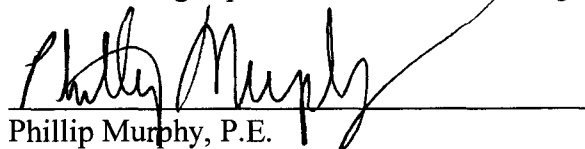
19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

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

Permit #
1433-AOP-R3

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

  
 Phillip Murphy, P.E.

**APPENDIX A – EMISSION CHANGES AND FEE CALCULATION**



