STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1433-AOP-R5 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:

   3/30/2010

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 to allow MRT to apply NSCR controls to SN-06 thereby reducing the sources NO_X and CO emissions by 90%. NO_X emissions for the facility will be reduced by 134.6 tpy and the CO emissions will be reduced by 121.6 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 ($\mu g/m^3$)	Averaging Time	Highest Concentration ($\mu g/m^3$)	% of NAAQS
PM_{10}	1.0	50	Annual	*20.2	40.4
		150	24-Hour	*28.1	18.7
SO_2	< 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

Pollutant	Emission Rate (lb/hr)	NAAQS Standard ($\mu g/m^3$)	Averaging Time	Highest Concentration ($\mu g/m^3$)	% of NAAQS
CO	306.8	10,000	8-Hour	1436.5	14.4
		40,000	1-Hour	2814.2	7.0
NO_x	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:

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	0.170	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

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	2.35	Y
Acrolein	2.3	0.41	Y

Other Modeling: NONE

Odor: N/A

H_2S 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 08	NOx & CO: Stack test data. VOC, PM10, SO2 (AP-42, 7/00, table 3.2-3)	g/hp-hr NO_X -15.9 CO -18.64 lb/MMBtu PM/PM_{10} – 9.5E-3 SO_2 – 2.96E-2 VOC – 2.96E-2	None	These sources shall be tested for CO & NOx emissions. Uncontrolled	
06 and 07	NOx & CO: Stack test data. VOC, PM10, SO2 (AP-42, 7/00, table 3.2-3)	g/hp-hr NO_X -0.795 (SN-07) NO_X -1.59 (SN-06) CO -1.864 lb/MMBtu PM/PM_{10} – 9.5E-3 SO_2 – 2.96E-2 VOC – 2.96E-2	NSCR/ AFRC	95% - NO_X (SN-07) 90% - NO_X(SN-06) 90% - CO	
01 to 08	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	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equip.	Control Equipment Efficiency	Comments
09 & 10	NOx, CO, VOC, PM10 & SO2: (AP-42, 7/00, table 3.2-3)	lb/MMBtu PM/PM_{10} - 9.5E-3 NO_X – 2.27 CO – 3.72 SO_2 - 2.96E-2 VOC – 2.96E-2	None	Test SN-09 one time to determine compliance for CO & NOx.	
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_2)	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				

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)
09	Operating Hours	2160 hours (SC #7)	Consecutive 12 month	N
10	Operating Hours	876 hours (SC # 12)	Consecutive 12 months	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01 to 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
Slop Tank (2 @ 4200 gal)	3	----	----	0.18	----	----	----	----
Slop Tank (8820 gal)	3	----	----	0.18	----	----	----	----
Used Oil Tank (1008 gal)	3	----	----	----	----	----	----	----
Used Solvent Tank (1008 gal)	3	----	----	0.02	----	----	----	----
Diesel Tank (105 gal)	3	----	----	----	----	----	----	----
Gasoline Tank (105 gal)	3	----	----	0.1	----	----	----	----
Kerosene Tank (105 gal)	3	----	----	----	----	----	----	----
Glycol Tank (4200 gal)	3	----	----	----	----	----	----	----

Source Name	Group A Category	Emissions (tpy)						
		PM/PM_{10}	SO_2	VOC	CO	NO_x	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-R4

20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.

Phillip Murphy, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 07-27-09

Facility Name: CenterPoint Energy - Mississippi River
ans. Corp. - Fountain Hill Compressor Station
Permit Number: 1433-AOP-R5
AFIN: 02-00065

$/ton factor	22.07	Annual Chargeable Emissions (tpy)	851.2
Permit Type	Minor Mod	Permit Fee $	500

Minor Modification Fee $	500
Minimum Modification Fee $	1000
Renewal with Minor Modification $	500
Check if Facility Holds an Active Minor Source Permit	☐
If Hold Active Permit, Amt of Last Annual Air Permit Invoice $	0
Total Permit Fee Chargeable Emissions (tpy)	-121.6
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	☑	2.6	2.6	0	0	2.6
PM_{10}	☐	2.6	2.6	0		
SO_2	☑	1	1	0	0	1
VOC	☑	8.2	8.2	0	0	8.2
CO	☐	1129.7	995.1	-134.6		
NO_X	☑	961	839.4	-121.6	-121.6	839.4
*Formaldehyde	☐	4.63	4.63	0		
*Methanol	☐	0.74	0.74	0		
*Acetaldehyde	☐	0.74	0.74	0		
*Benzene	☐	0.34	0.34	0		
*Toluene	☐	0.16	0.16	0		
*Acrolein	☐	0.58	0.58	0		
	☐	0	0	0		
*HAPs included in VOC	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		
	☐	0	0	0		