

STATEMENT OF BASIS

For the issuance of Air Permit # 1611-AOP-R9 AFIN: 70-00400

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Enterprise Refined Products Company LLC (El Dorado Terminal)
331 Old Calion Road
El Dorado, Arkansas 71730

3. PERMIT WRITER:

Kyle Crane

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Petroleum Bulk Stations and Terminals
NAICS Code: 424710

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
12/28/2021	Minor Modification	Flaring dry gas seals through SN- FLARE2

6. REVIEWER'S NOTES:

Enterprise Refined Products Company LLC (formerly TE Products Pipeline Company) operates a petroleum storage and transfer facility located at 331 Old Calion Road in El Dorado, Union County, Arkansas 71730. This minor modification adds the ability to comply with NESHAP Subpart WW as a way to satisfy the NSPS Subpart Kb and NESHAP Subpart BBBBBB requirements for gasoline storage tanks, includes the flaring of dry gas seals under SN-FLARE2, and includes pump seal vent emissions as an A-13 Insignificant Activity. Annual permitted emissions increase by 0.1 tons per year (tpy) of VOC, 0.5 tpy of CO, and 0.3 tpy of NO_x with this modification.

7. COMPLIANCE STATUS:

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

This facility was last inspected on June 21, 2019 and was found to be in compliance. EPA ECHO shows “No Violation Identified” for Clean Air Act compliance.

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

b) Is the facility categorized as a major source for PSD? N

- *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.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-1061, SN-1063 and SN-1064. All pre-existing tanks are not subject to Kb because they were constructed prior to July 23, 1984.	VOC	40 CFR Part 60, Subpart Kb
Facility		40 CFR Part 63, Subpart BBBBBB
Facility	VOC	PSD
GEN1	NO _x , CO, VOC	40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ
Gasoline Tanks	VOC	40 CFR Part 63, Subpart WW

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? N

(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? N
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
N/A		

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:

The facility has been reviewed under the NCAP strategy which includes any single NCAP HAP with emissions equal to or greater than 10 tpy or a TLV less than 1 mg/m³. Emergency generator emissions are included in the evaluation of the DeMinimis level HAPs but are not modeled per ADEQ guidance. Therefore, emissions of non-criteria pollutants are below thresholds of concern.

c) H₂S Modeling:

A.C.A. §8-3-103 requires hydrogen sulfide emissions to meet specific ambient standards. Many sources are exempt from this regulation, refer to the Arkansas Code for details.

Is the facility exempt from the H₂S Standards N

If exempt, explain: _____

This modeling was from the permit renewal 1611-AOP-R7. One flare was removed and therefore since the emissions would be reduced, the modeling would still pass.

Pollutant	Threshold value	Modeled Concentration ppm (ppb)	Pass?
H ₂ S	20 parts per million (5-minute average*)	0.131 (131)	P
	80 parts per billion (8-hour average) residential area	.077361 (77.361)	P
	100 parts per billion (8-hour average) nonresidential area	.077361 (77.361)	P

*To determine the 5-minute average use the following equation

$$C_p = C_m (t_m/t_p)^{0.2} \text{ where}$$

C_p = 5-minute average concentration

C_m = 1-hour average concentration

t_m = 60 minutes

t_p = 5 minutes

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)			Control Equipment	Control Equipment Efficiency	Comments
All Tanks	Emissions Master Tanks 8.4.2.19	Varied			Floating roofs or none, Domed for Tank #1031, 1023, 1024	N/A	TVP ≤ 11.1 psia Tank #1031 & #1032 RVP ≤ 14 psia Tanks 1001-1005 jet fuel or transmix
FUG1	EPA 453/R-95-017 (Nov, 1995) Oil and Gas Production Operations Average Emission Factors (lb/hr/Component) Table 2-3		Counts	EF	None	N/A	Uncontrolled Light Liquid Service
		Valve	995	9.48E-5			
		Pumps Seals	34	1.19E-3			
		Flanges	3190	1.7E-5			
		Connectors	11	1.7E-5			
		Process Drains/Other	15	2.87E-4			
Landing	API Tech Report 2567	Equation varied			None	N/A	Uncontrolled. This source accounts for emissions from floating roof tanks when the floating roof is not in contact with the surface of the liquid. Applicable for cleaning and maintenance operations. 76 landings per year lasting 24 hrs. Loss per landing = 3178 lbs
GEN1	AP-42 Table 3.2-3 4SRB Manufacturer Spec for g/hp-hr	<u>lb/MMBtu</u> PM/PM ₁₀ : 1.94E-2 SO ₂ : 5.88E-4 Acrolein: 2.63E-3 Benzene: 1.58E-3 Ethyl Benzene: 2.48E-5 PAH: 1.41E-4 Toluene: 5.58E-4			Catalyst	N/A	Model: Generac SG-150 2,061 scf/hr, 2.1 MMBtu/hr, 224 HP Natural Gas 500 hr/yr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		Xylene: 1.95E-4 g/hp-hr NO _x : 0.14 CO: 1.54 VOC: 0.18			
FLARE2	AP-42 Table 1.2, 1.3, 1.4, 13.5-1 and 13.5-2	7.6 lb/MMSCF PM/PM ₁₀ 1.888 lb/MMSCF HAPs 0.068 lb NO _x /MMBtu 0.31 lb CO/MMBtu 30ppmv H ₂ S		99% for ethane & methane 98% all other VOC 98% H ₂ S to SO ₂	Flare Flow rate = 62,500 scf/h FLARE2 (Ethane) – 100 hr/yr 6,250,000 scf/yr Pilot (propane) – 8760 hr/yr Flow rate=25 scf/h – 219,000 scf/yr Dry Gas Seal emissions included at 8760 hrs/yr

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
GEN1	NO _x , CO, VOC	See §60.4243	Only if purchase a non-certified engine, does not maintain properly, or conducts major repair/maintenance (See SC#57)	CFR Part 60, Subpart JJJ §60.4243(f)
GEN1	NO _x , CO, VOC	See §60.4243	Only if propane is used as fuel for	40 CFR Part 60, Subpart JJJ

SN	Pollutants	Test Method	Test Interval	Justification
			over 100 hrs	§60.4243(e)]

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)
None				

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)
All Tanks	Throughput limits	Varied	Monthly	Y
Landing	Emissions per tank per landing event	Calculate emissions. The 12-month rolling total is not to exceed 120.8 tpy VOC	Per event	Y
GEN1	Hours and classification of operation	500 hrs/yr	Monthly	N
GEN1	Hours and reason of non-emergency operation	non-emergency not maintenance/testing: 50 hrs/yr, Total: 100 hr/yr See SC#55	Monthly	N
GEN1	Hours and reason of operation using propane fuel	100 hr/yr without testing, emergency use only	Monthly	N
GEN1	Engine Certification	N/A	Continuous	N
GEN1	Manufacturer's Emission related instructions	N/A	Continuous	N
GEN1	Maintenance	Follow Manufacturer's Instructions	Monthly	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
GEN1	Any Performance Testing	2.0 g/HP-hr NO _x 4.0 g/HP-hr CO 1.0 g/HP-hr VOC Or 160 ppmvd@15%O ₂ NO _x 540 ppmvd@15%O ₂ CO 86 ppmvd@15%O ₂ VOC	If required by SC#56 and SC#57	Y
FLARE2	Flare usage	100 hrs/yr	Per event	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
GEN1	5%	§18.501	Natural Gas Fuel
FLARE2	5%	§18.501	Ethane

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
Pump Seal Vent Emissions	A-13	-	-	4.23	-	-	-	-

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 #
1611-AOP-R8

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Enterprise Refined Products Company
 LLC (El Dorado Terminal)
 Permit Number: 1611-AOP-R9
 AFIN: 70-00400

\$/ton factor	25.13	Annual Chargeable Emissions (tpy)	207.31
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 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)	0.4
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		0.2	0.2	0		
PM ₁₀		0.2	0.2	0	0	0.2
PM _{2.5}		0	0	0		
SO ₂		0.2	0.2	0	0	0.2
VOC		206	206.1	0.1	0.1	206.1
CO		1.9	2.4	0.5		
NO _x		0.5	0.8	0.3	0.3	0.8
Total HAPs	<input type="checkbox"/>	7.39	7.39	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
H2S	<input checked="" type="checkbox"/>	0.01	0.01	0	0	0.01