

STATEMENT OF BASIS

For the issuance of Air Permit # 0573-AOP-R26 AFIN: 70-00040

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

LSB Chemical L.L.C.
4500 North West Avenue
El Dorado, Arkansas 71730

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Nitrogenous Fertilizer Manufacturing
NAICS Code: 325311

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
12/8/2025	Minor Mod	N/A

6. REVIEWER'S NOTES:

With this minor modification, the facility is doing maintenance activities that are considered non-routine in order for the Ammonia Plant to reach design capacity. The purpose of these improvements is to provide ammonia via the pipeline. Equipment changes include replacement of the 103-J syngas compressor rotors, 104-C heat exchanger, and 103-C outlet channel. There is no increase in ammonia throughput. The facility's permitted annual emissions are decreasing by 0.3 tpy CO.

7. COMPLIANCE STATUS:

There was an issue with the facility's SSM plan and reporting. ECHO (<https://echo.epa.gov/detailed-facility-report?fid=110000746373>) shows no air violation identified as of August 9, 2023.

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?

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 for 8(b), explain why this permit modification is not PSD. The emission increases associated with the project are below the SER.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-41	PM ₁₀	PSD
SN-49, SN-53, SN-54, SN-56, SN-57, & SN-61	SO ₂ VOC CO NO _x GHG Opacity	PSD
SN-50	VOC CO GHG	PSD
SN-51	VOC CO GHG	PSD
SN-59	NO _x GHG Opacity	PSD
SN-61	NO _x	40 CFR Part 60, Subpart Db
SN-13	NO _x	40 CFR Part 60, Subpart G
SN-59	NO _x	40 CFR Part 60, Subpart Ga
SN-07	SO ₂ and sulfuric acid mist	40 CFR Part 60, Subpart H
SN-65, 66, 68, 69, 70, 71, 72	There are no specific emission limits or pollutants identified, but the rules generally regulate HAPs	40 CFR Part 63, Subpart ZZZZ

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-48, SN49, SN-54, & SN-61		40 CFR Part 63, Subpart DDDDD
SN-25		40 CFR Part 63, Subpart CCCCC
SN-65	CO, PM, NMHC + NO _x	40 CFR Part 60, Subpart IIII
SN-66, 68, 69, 70, 71, 72	CO, VOC, NO _x	40 CFR Part 60, Subpart JJJJ

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 8 CAR pt. 40 requirement.)

If yes, are applicable requirements included and specifically identified in the permit?
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
05A and B, 14, 18, 21, 41	PM ₁₀	Daily average of hourly scrubber parameter readings
49	NO _x	CEMs 30 day average

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
07	SO ₂	Continuous
10, 13	NO _x	Daily
51	VOC	Daily
56	CO	Daily
59	NO _x	Exempt - Post 1990 Emission Limitation

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:

There were no increases in non-criteria pollutant emissions. No evaluation was performed.

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

Y

If exempt, explain: the facility does not have H₂S emissions.

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
05A and B	Vendor Specification	PM ₁₀ – 0.085 mg/acf	Brinks Scrubber	-	-
	Engineering Estimate	0.8 lb/hr NH ₃	Brinks Scrubber	99.5%	-
07	NSPS limit	SO ₂ – 92.0 lb/hr	Brinks Mist Eliminator	-	Remain the previous permitted limit
	Testing	H ₂ SO ₄ – 0.123 lb/ton	Brinks Mist Eliminator	-	-
10	AP-42	NO _x - 10.0 lb/ton	best operation	-	-
	Highest lb/hr from Stack Test results of 2001-2004	HNO ₃ – 0.389 x 1.25 x 40/8.5 = 2.3 lb/hr + 1.1 lb/hr from car barn NO _x - 3.3 x 1.25 x 40/8.5 = 19.5 lb/hr	-	-	Maximum nitric acid production rate is 8.5 tons/hr, and maximum nitric acid blend production is 40 tons/hr. Stack test + 25% safety factor.
13	NSPS	3.0 lb/ton of acid	refrigerated absorption	-	-
18	Process Knowledge	PM ₁₀ – 0.033 lb/ton	Baghouse	-	-
19	PM – 50,556 scfm x 0.11677 lb/mmft ³ x 60 min/hr x 1.2 NH ₃ - 50,556 scfm x 25 ppm x 17.1 lb/lb-	-	-	-	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
	mol x lb-mol/385.2 ft ³ 60min/hr x 1.2				
25	TANKS 4.0.9	VOC	none	-	-
26	TANKS 4.0.9	NH ₃	none	-	-
27	Testing	PM 4.8E-7 lb/ton	none	-	-
28	Testing	PM 4.8E-7 lb/ton	none	-	-
30	AP-42 Section 5.2	H ₂ SO ₄ – 0.0034 lb/1000 gallons	none	-	-
31	SOCMI	NH ₃ – 0.5 lb/hr	none	-	-
32	SOCMI	NH ₃ – 1.6 lb/hr	none	-	-
33	Process Knowledge	NO _x – 0.1 lb/hr	none	-	-
	Process Knowledge	HNO ₃ – 0.1 lb/hr	none	-	-
34	Process Knowledge	PM ₁₀ – 0.7 lb/ton x 1.46 ton/hr	none	-	-
35A	Testing	PM ₁₀ – 0.1 lb/hr	baghouse	99%	-
35B	AP-42	PM 19.7 lb/hr	none		
38	EF _{PM} = Total liquid drift (lb/1000 gal) x TDS Fraction (ppm) = 0.0834 lb/1000 gal x 1,560 ppm PM ₁₀ = EF _{PM} x flowrate = 9,000 gpm x EF _{PM}			-	
40	TANKS 4.0.9d	NH ₃ : 0.12 lb/hr, 0.21 tpy	None	N/A	65 MMgal throughput 46,000 gal tank 9,000 gal truck/railcar

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
41	Stack testing	NH ₃ – 10.0 lb/hr PM/PM ₁₀ – 4 lb/hr	Chemical steam scrubber	-	24-hr BACT limit is 13.8 lb/hr 30-day rolling BACT limit is 3.4 lb/hr
44	Mass Balance for sulfur oxides and sulfuric acid. Stack test from similar plant plus a safety factor of 25%.	Scrubber	-	-	
46	Manuf. Spec	PM: 0.00013 lb/1000 gal PM ₁₀ : 70.5% PM 0.001% drift loss	None	N/A	3000 gpm Max TDS: 1560 ppm
49	BACT	<u>in lb/MMBtu</u> CO: 0.0194 NO _x : 0.0124 VOC: 0.0014 CO ₂ : 117	None	N/A	1,550 ton/day 824 MMBtu/hr 7,218,240 MMBtu/yr
	Stack Test	PM/PM ₁₀ /PM _{2.5} : 0.0042 lb/MMBtu	None	N/A	
	AP-42, 1.4	SO ₂ : 0.75 lb/MMscf	None	N/A	
50	BACT	CO: 0.003 lb/ton	None	N/A	1,550 ton/day 64.6 ton/hr 565,750 ton/yr
	Stack Test	<u>in lb/ton</u> VOC: 0.0389 CO ₂ : 13.2 CH ₄ : 0.0056 MeOH: 0.0607	None	N/A	
51	BACT	<u>in lb/ton</u> CO: 0.02 VOC: 0.101 CO ₂ : 2507.5	None	N/A	1,550 ton/day 64.6 ton/hr 565,750 ton/yr
53 56	AP-42, 1.4	<u>in lb/MMscf</u> PM/PM ₁₀ /PM _{2.5} : 7.6 VOC: 5.5	None	N/A	0.26 MMBtu/hr 1020 Btu/scf

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		SO ₂ : 0.75 CO: 84 NO _x : 100 Lead: 0.0005			
	40 C.F.R. § 98	<u>in kg/MMBtu</u> CO ₂ : 53.2 CH ₄ : 0.001 N ₂ O: 0.0001	None	N/A	
54	Manuf. Spec	<u>in lb/MMBtu</u> PM/PM ₁₀ /PM _{2.5} : 0.0075 VOC: 0.005 CO: 0.02 NO _x : 0.06	None	N/A	38 MMBtu/hr 1020 Btu/scf 500 hr/yr
	AP-42, 1.4	<u>in lb/MMscf</u> SO ₂ : 0.75 Lead: 0.0005	None	N/A	
	40 C.F.R. § 98	<u>in kg/MMBtu</u> CO ₂ : 53.2 CH ₄ : 0.001 N ₂ O: 0.0001	None	N/A	
57	AP-42, 1.4	<u>in lb/MMscf</u> PM/PM ₁₀ /PM _{2.5} : 7.6 VOC: 5.5 SO ₂ : 0.75 CO: 84 NO _x : 100	None	N/A	0.175 MMBtu/hr 1020 Btu/scf
	40 C.F.R. § 98	<u>in kg/MMBtu</u> CO ₂ : 53.2 CH ₄ : 0.001 N ₂ O: 0.0001	None	N/A	
	Ammonia throughput	2000 lb/hr	Flare	98%	
58	Engineering Estimate	NH ₃ : 2.3 lb/load	None	N/A	2 trucks/hr 2 railcar/hr 226,300 ton/yr loading rate
13	EPA/DOJ	NO ₂ (3-hr): 1.0 lb/ton (excluding SSM)	SCR	95%	400 ton/day 16.7 ton/hr 140,000 ton/yr

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		NO ₂ (rolling 365-days): 0.6 lb/ton			
	Vendor Info	NH ₃ : 20 ppm	None	N/A	
65	NSPS IIII	<u>in g/hp-hr</u> PM/PM ₁₀ : 0.15 CO: 2.6 NO _x +VOC: 3.0	None	N/A	315 hp 500 hr/yr 7000 Btu/hp-hr Diesel: 2.205 MMBtu/hr
	AP-42, 3.4	SO ₂ : 1.21E-05 lb/hp-hr			
66	Certified Engine	VOC: 1.3 g/kW-hr CO: 5.4 g/kW-hr NO _x : 2.7 g/kW-hr	None	N/A	477 hp 500 hr/yr 4621 scf/hr NG: 4.71 MMBtu/hr
	AP-42, 3.2	<u>in lb/MMBtu</u> PM/PM ₁₀ : 9.5E-03 SO ₂ : 7.35E-04			
68	Certified Engine	VOC: 1.0 g/hp-hr CO: 4.0 g/hp-hr NO _x : 2.0 g/hp-hr	None	N/A	155 hp 500 hr/yr Propane: 1.35 MMBtu/hr NG: 1.42 MMBtu/hr
	AP-42, 3.2	<u>in lb/MMBtu</u> PM/PM ₁₀ : 9.91E-03 SO ₂ : 7.35E-04			
69	Manuf. Spec	VOC: 0.10 g/hp-hr CO: 0.02 g/hp-hr NO _x : 0.03 g/hp-hr	None	N/A	230.3 hp 500 hr/yr Propane: 1.46 MMBtu/hr NG: 1.53 MMBtu/hr
	AP-42, 3.2	<u>in lb/MMBtu</u> PM/PM ₁₀ : 9.91E-03 SO ₂ : 7.35E-04			
70 71 72	Manuf. Spec	VOC: 0.75 g/hp-hr CO: 69.7 g/hp-hr NO _x : 3.51 g/hp-hr	None	N/A	51.07 hp 500 hr/yr Propane: 0.41 MMBtu/hr NG: 0.38 MMBtu/hr
	AP-42, 3.2	<u>in lb/MMBtu</u> PM/PM ₁₀ : 9.91E-03 SO ₂ : 7.35E-04			
67	AP-42	0.02 lb/ton	None		
14 21	Vendor Specification	0.085 mg/acf PM	Scrubber	99.5 for ammonia	
59	BACT limits Testing	Varied	SCR and Tertiary abator		

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
10	NO _x	7E	Every five years	Necessary for efficiency check on Venturi & Packed Tower Scrubber
10	HNO ₃	Approved method	Every five years	Necessary for efficiency check on Venturi & Packed Tower Scrubber
07	SO ₂	6C	Initial performance test	NSPS Requirement
05A and B	PM ₁₀	Approved method	Initial and alternating annually.	Necessary to prove that PSD has not been triggered.
14, & 21	PM, PM ₁₀ , PM _{2.5}	Method 5 or 201A, and 202	Annually until 2 consecutive passes, then once every 5 years	Necessary to prove that PSD has not been triggered.
21	NH ₃	Approved method	Annually until 3 consecutive passes, then once every 3 years	Necessary to prove adherence to the non-criteria pollutant strategy.
44	SO ₃ NO _x H ₂ SO ₄ HNO ₃	Approved method	Every five years	Necessary to prove adherence to the non-criteria pollutant strategy.
59	NH ₃	CTM-027 or equivalent	Annually until 2 consecutive passes, then once every 5 years	Necessary to prove adherence to the non-criteria pollutant strategy.
49	PM PM ₁₀ PM _{2.5}	Method 5 & 202 Method 201A & Method 202	Annually until 2 consecutive	Verify emissions

SN	Pollutants	Test Method	Test Interval	Justification
	SO ₂ VOC CH ₄ CO CO ₂ N ₂ O	Method 6C Method 25A Method 18 Method 10 Method 3A Method 320, ASTM D6348-03 or other approved method	passes, then once every 5 years	
50	VOC CO ₂	25A 3A	One Time Test	Verify emissions
50	Methanol	18 or 25A	Annually until 2 consecutive passes, then once every 5 years	Verify emissions
51	VOC Pre and Post Control CO NH ₃	25A 10 320	One Time Test	Verify emissions
51	Methanol CO ₂	18 or 25A 3A	Annually until 2 consecutive passes, then once every 5 years	Verify emissions
61	PM PM ₁₀ PM _{2.5} SO ₂ VOC CO NO _x	Method 5 & 202 Method 201A & Method 202 6C 25A 10 7E	Annually until 2 consecutive passes, then once every 5 years	Verify emissions
13	NH ₃	CTM-027 or equivalent	Annually until 2 consecutive passes, then once every 5 years	Necessary to prove adherence to the non-criteria pollutant strategy.

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)
13	NO _x	CEM	Continuously	Y
07	SO ₂ emission rate	CEM	Continuously	Y
41 and 63	Ammonia and particulate emission rates	Daily sampling consisting of two 12-hour composite sample	Continuously	Y
59	NO _x and N ₂ O	CEM	Continuously	Y
49	NO _x	CEM	Continuously	Y

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)
13	weak nitric acid production	140,000 tons/12 months	Monthly	Y
38, 46, 52, 60	Total Dissolve solid	1,560 ppm	Weekly	N
59	weak nitric acid production	461,725 tons/12 months	Monthly	Y
47	strong nitric acid production	5.2 tons per hour	Hourly	Y
47	strong nitric acid production	45,625 tons/12 months	Monthly	Y
10	Scrubber parameter	hydrogen peroxide concentration	Daily	N
07	Sulfuric acid production	200,750 ton/12 months	Monthly	Y
	Sulfuric acid production	550 tons of 100% sulfuric acid per day	Daily	Y
	Sulfuric acid emission limit	4.0 lb of SO ₂ per ton of acid production, expressed as 100% H ₂ SO ₄ , and based on a 3-hr average.	Continuously and averaged every 3-hours	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
	Annual SO ₂ emissions on a calendar basis	386.8 tpy	Annually	N
30	Sulfuric acid shipped	200,750 tons/12 months	Monthly	Y
All E2 Plant	Production	525,600 tons/12 months	Monthly	Y
05A and B	Scrubber liquid flow rate for each scrubber	225 gal/min (minimum)	Daily	N
	Gas pressure drop across unit	2.5 in. H ₂ O (minimum)	Daily	N
	Scrubber liquid pH	0.5 – 6.0	Daily	N
41	BACT Limit PM	24-hour Average 0.223 lb/ton	Daily	Y
		30-day Average 0.054 lb/ton	Monthly	Y
All KT plant	Production	394,200 tons/12 months	Monthly	Y
14	Scrubber liquid flow rate	225 gal/min (minimum)	Daily	N
	Gas Pressure Drop Across Unit	2.5 in H ₂ O (minimum)	Daily	N
	pH	0.5 – 6.0	Daily	N
	Exhaust Flow Rate	131,452 acfm (maximum)	Daily	N
18	Baghouse Pressure Drop	0.5 – 8.0 in H ₂ O	Daily	N
21	Scrubber liquid flow rate	225 gal/min (minimum)	Daily	N
	Gas Pressure Drop Across Unit	2.5 in H ₂ O (minimum)	Daily	N
	pH	0.5 – 6.0	Daily	N
	Exhaust Flow Rate	131,452 acfm (maximum)	Daily	N
67	Prills Unloaded	36,500 tons per 12 months	Monthly	Y
49	Natural gas usage	7,076.7 MMscf per 12 months	Monthly	Y
	NH ₃ production	565,750 tons/12 months	Monthly	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
51	Scrubber Liquid Flow Rate	26 gal/min (minimum)	Daily	N
	Gas Pressure Drop Across Unit	2 in H ₂ O (minimum)	Daily	N
53	Natural gas usage	9.0 MMscf per 12 months	Monthly	Y
56	Natural gas usage	8.2 MMscf per 12 months	Monthly	Y
57	Natural gas usage	1.5 MMscf per 12 months	Monthly	Y
53	Hours of operation	three (3) hours during any consecutive 24-hour period, in the event of an emergency venting scenario. During normal process gas flaring or unless operation is during a maintenance outage of the hydrogen recovery unit (HRU), in which case, the daily time restriction does not apply. In excess of 1,050 hours annually.	Daily	Y
53, 56, 57	Flare maintenance	No limit	As required	Y
54	Natural gas usage	18.63 MMscf per 12 months	Monthly	Y
44 Tanks	Amount of Oleum offload into the storage tank	394,000 tons	Monthly	N
	Percent strength of the Oleum	30%	Monthly	N
	Amount of mixed acid produced.	219,000 tons	Monthly	N
44 Scrubber	Scrubber liquid flow rate per scrubber	5.0 gal/min (minimum)	Daily	N
	Gas pressure drop across unit	10 – 35 in. H ₂ O	Daily	N
	Scrubber liquid pH	0.5 – 7.5	Daily	N
61	NSPS Db records	No specific limits	Monthly	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
25	usage of gasoline	40,000 gallons/12 months	Monthly	Y
29	Nitric Acid Shipped	250,000 tons/12 months	Monthly	Y
40	AN Loading tonnage	65,000,000 tons/12 months	Monthly	Y
58	Ammonia Loading	226,300 tons/12 months	Monthly	Y
65, 66	Hours of operation	100 hours per calendar year	Monthly	Y
68, 69, 70, 71, 72	Hours of operation	500 hours per calendar year	Monthly	Y
65 and 66	Engine maintenance	Change oil and filter every 500 hours of operation, or annually, whichever comes first; Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	As needed	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
07 & 13	10%	NSPS limit	Daily Observation
54, 61	0%	BACT limit	Natural Gas Combustion
49, 59	0%	BACT limit	Daily Observation
53, 56, 57	0%	BACT limit	Natural Gas Combustion
05A and B, 18, 35A, 41, 47, 63	5%	Department Guidance	Weekly Observation
52, 60	5%	Department Guidance	Weekly TDS
21, 27, 28	10%	Department Guidance	Daily Observation

SN	Opacity	Justification for limit	Compliance Mechanism
14, 19	15%	Department Guidance	Daily Observation
34, 44	20%	Previous permit	Daily Observation
10, 38, 46	20%	Department Guidance	Weekly TDS
35B & 67	20%	Department Guidance	-
65	20%	Department Guidance	Annual Observation
66	5%	Department Guidance	Annual Observation
68, 69, 70, 71, 72	5%	Department Guidance	Natural gas or propane combustion

20. DELETED CONDITIONS:

Former SC	Justification for removal
	N/A

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	H ₂ S	NH ₃	HAPs	
									Single	Total
Diesel Storage Tank (500 Gallon) (formerly SN-24)	A-3			0.001					0.002	0.002
Diesel Storage Tank (2,000 Gallon) (formerly SN-45)	A-3			0.002					0.003	0.003
Total	A-3			0.003					0.005	0.005
Partwashers (4)	A-13			2.11						
2 x Ammonia Flares	A-13	0.01	0.01	0.01	0.01	0.01		0.1	0.01	0.01
Sulfur Unloading/Storage	A-13						0.13			
Ammonia Offloading	A-13							0.44		
Tier 2 Warehouse	A-13	0.02								
Natural Gas Pipeline Knockout Pot	A-13			0.14						
Prill Cooling Tower	A-13	0.14								

Source Name	Group A Category	Emissions (tpy)								
		PM/ PM ₁₀	SO ₂	VOC	CO	NO _x	H ₂ S	NH ₃	HAPs	
									Single	Total
E2 Prill Warehouse	A-13	1.05								
Total	A-13	1.21	0.01	2.25	0.01	0.01	0.13	0.54	0.01	0.01

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 #
0573-AOP-R25

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: El Dorado Chemical Company
 Permit Number: 0573-AOP-R26
 AFIN: 70-00040

\$/ton factor	28.14	Annual Chargeable Emissions (tpy)	1526.57
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

☐

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	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM		107.8	107.8	0	0	107.8
PM ₁₀		86.1	86.1	0		
PM _{2.5}		76.7	76.7	0		
SO ₂		403.9	403.9	0	0	403.9
VOC		51.3	51.3	0	0	51.3
CO		163.8	163.5	-0.3		
NO _x		189.3	189.3	0	0	189.3
CO2e	☐	1297490	1297490	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Lead	☐	0.02	0.02	0		
Methanol	☐	45.45	45.45	0		
HAPs	☐	9.04	9.04	0		
NH ₃	☒	749.7	749.7	0	0	749.7
H ₂ SO ₄	☒	12.63	12.63	0	0	12.63
HNO ₃	☒	11.94	11.94	0	0	11.94
SO ₃	☐	0.18	0.18	0		