STATEMENT OF BASIS

For the issuance of Draft Air Permit # 0982-AOP-R11 AFIN: 14-00040

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

LB AmFuel, LLC
601 Firestone Drive
Magnolia, Arkansas 71753

3. PERMIT WRITER:

Elliott Marshall

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Rubber Product Manufacturing for Mechanical Use
NAICS Code: 326291

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
2/25/2022	Administrative Amendment	-

6. REVIEWER'S NOTES:

This permitting action is necessary to add a 0.4 MMBtu/hr natural gas boiler, for the Sizing Hot Room, as an A-1 Insignificant Activity. There are no changes to permitted emissions.

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 active or pending enforcement actions.

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/A

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)
15.3, 15.4	Record Keeping Only	NSPS 40 C.F.R. Part 60 Subpart Dc
15.3, 15.4	Work Practice Standards	NESHAP 40 C.F.R. Part 63 Subpart DDDDD
Fabrication Operations	VOC/HAP	NESHAP 40 C.F.R. Part 63 Subpart GG
23.1, 23.2, 23.3	HAP	NESHAP 40 C.F.R. Part 63 Subpart ZZZZ

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

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:

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).

No modeling was performed for this permit revision.

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
2,4-Toluene Diisocyanate	0.03561	0.00391	1.44E-03	Yes
Bis(2-Chloroethyl) Ether	0.004701	0.0005171	3.67E-03	No
Carbon Disulfide	3.11	0.3421	0.414	No

Pollutant	TLV (mg/m^3)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Formaldehyde	1.5	0.165	1.10E-02	Yes
Methanol	262.085	28.829	2.46	Yes
MIBK	81.93	9.0123	14.33	No
Styrene	85.20	9.37	15.06	No
Tetrachloroethylene	169.52	18.6472	20.13	No
Toluene	75.36	8.2896	49.372	No
Mercury	0.025	0.00275	1.11E-05	Yes
Manganese	0.02	0.0022	1.62E-05	Yes
Arsenic	0.01	0.0011	8.54E-06	Yes
Beryllium	0.00005	0.0000055	5.13E-07	Yes
Cadmium	0.002	0.00022	4.70E-05	Yes
Chromium	0.01	0.0011	5.99E-05	Yes
Cobalt	0.02	0.0022	0.003128	No
Lead	0.05	0.0055	2.14E-05	Yes
Selenium	0.2	0.022	1.03E-06	Yes

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?
Bis(2-Chloroethyl) Ether	0.04701	0.04675	Yes
Carbon Disulfide	31.14	13.57	Yes
Cobalt*	0.2	0.13	Yes
MIBK	819.3	284.23	Yes
Styrene	852.0	625.65	Yes
Tetrachloroethylene	1695.2	227.12	Yes
Toluene	753.6	709.20	Yes

*Organic cobalt compound emissions adjusted to elemental cobalt emissions (at SN-22) using molecular weight approach, see calculations section.

c) H_2S 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 H_2S Standards Y
If exempt, explain: No H_2S Emissions

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
02	Mass Balance MSDS		None	N/A	
05	Mass Balance MSDS		None	N/A	
08	Mass Balance MSDS		None	N/A	
09	Mass Balance MSDS		None	N/A	
10	Mass Balance MSDS		None	N/A	
16	Mass Balance MSDS	Emissions included in SN-19	None	N/A	
18	Mass Balance MSDS		None	N/A	
19	Mass Balance MSDS		None	N/A	
14.2, 14.3, 14.10	Tanks Program 4.0.9d(ASTs)	Tank 4.0.9b	None	N/A	• Tk#1 (10,000 Gal) (SN-14.1)(Out of Service) • Tk#2 (10,000 Gal) (SN-14.2)(Content =JP-8) • Tk#3 (12,000 Gal) (SN-14.2)(Content =JP-8) • Tk#4 (2,000 Gal) (SN-14.4)(Out of Service) • Tk#2 (5,000 Gal) (SN-14.10)(Content =TTS Type III)
15.3,	AP-42 1.4	PM_{10}=7.6 lb/MMScf	None	N/A	SN-15.3 (16.8

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
15.4		PM=7.6 lb/MMScf NO_X=100 lb/MMScf SO_2=0.6 lb/MMScf CO=84 lb/MMScf VOC=5.5 lb/MMScf			MMBtu/hr) SN-15.4 (26.78 MMBtu/hr)
21	Mass Balance MSDS		None	N/A	
22	Mass Balance MSDS	Cobalt Naphthenate Emission Rate: 0.02136 lb/hr MW Cobalt Napht.: 403.29 MW of Cobalt: 58.93 Elemental Cobalt Emissions = (58.93/403.29)*0.02136 = 0.00312 lb/hr Cobalt	None	N/A	Max spray gun capacity 2 gal/hr
23.1, 23.2, 23.3	AP-42 3.4 and Manufacturer Data	<u>lb/MMBtu</u> PM_{10}: 0.0573 SO_2: 0.002 HAP: 0.002 <u>g/kWh</u> PM: 0.018 TOC: 0.003 CO: 0.09 NO_x: 0.31			500 hr/yr, each 15 ppm sulfur fuel

16. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A				

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)
N/A				

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)
02, 05, 08, 09, 10, 16, 18, 19, 21, 22	VOC and HAP Emissions (MSDS's, concentration, wt%, gallons of material used)	223.0 tpy VOC 216.30 tpy Total HAPs	Monthly	Y
14.2, 14.3, 14.10	Fuel Receipt (Jet Fuel or lower Vapor Pressure)	5,000 gallons per year/tank	Monthly	N
15.3, 15.4	Natural Gas Usage	N/A	Monthly	N
22	Gallons Used	2,000 gallons	Monthly	N
	VOC wt%	7.53 lb/gal	Monthly	N
	HAP wt% Elemental Cobalt wt%	7.53 lb/gal 0.0015 lb/gal	Monthly	N
23.1, 23.2, 23.3	Fuel Sulfur Content	15 ppm	Annual	Y
02, 05, 08, 09, 10, 16, 18, 19, 21	Failure to meet applicable standard	N/A	As Applicable	N
21	Total organic HAP content, organic HAP weight fraction, water weight fraction, density, and mass of organic HAP.	8.6 lb/gallon HAP 8.6 lb/gal VOC	Annual	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
15.3, 15.4	5%	Reg.18.501	Natural Gas Usage
23.1, 23.2, 23.3	20%	Reg.18.501 & 40 CFR §63.6604(c)	Max 15 ppm sulfur diesel fuel

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	HAPs	
							Single	Total
Calendar Operations - Heat Sources	A-1	0.1	0.1	0.1	0.4	0.4		0.1
Natural Gas Heater for Sizing Hot Room	A-1	0.02	0.01	0.01	0.15	0.18		0.01
1,000 gal Diesel Tank	A-3			<0.1				
10,000 Gallon Jet Fuel tank	A-3			<0.1				
Jet fuel test fuel cells	A-3			<0.1				
2,000 Gallon Diesel Tank for SN-23.1 and 23.2	A-3			<0.1				
1,000 Gallon Diesel Tank for SN-23.3	A-3			<0.1				
Quality Control Lab	A-5							
Foam Operations	A-13	0.1						
Sand Blast Units	A-13	0.1						
Mill Cyclone	A-13	0.3						
Bossing Department (Sanding of Seam)	A-13	0.44						
Firing Range	A-13							

Source Name	Group A Category	Emissions (tpy)						
		PM/PM_{10}	SO_2	VOC	CO	NO_x	HAPs	
							Single	Total
Hot Room	A-13							
Fitting Oven	A-13							
Buffing Machine	A-13	0.1						
Leak Testing	A-13							
Exhaust from Paint Kitchen	A-13							
A-13 Total	A-13	1.04						

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 #
0982-AOP-R10

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: LB AmFuel, LLC
Permit Number: 0982-AOP-R11
AFIN: 14-00040

$/ton factor	25.13	Annual Chargeable Emissions (tpy)	427.75
Permit Type	AA	Permit Fee $	0

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		1.8	1.8	0		
PM_{10}		1.8	1.8	0	0	1.8
$PM_{2.5}$		0	0	0		
SO_2		0.5	0.5	0	0	0.5
VOC		224.6	224.6	0	0	224.6
CO		16.1	16.1	0		
NO_X		19.4	19.4	0	0	19.4
Methanol	☐	10.42	10.42	0		

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
MIBK	☐	36.28	36.28	0		
Toluene	☐	216.35	216.35	0		
Xylene	☐	42.65	42.65	0		
Tetrachloroethylene	☑	88.15	88.15	0	0	88.15
Total HAPs	☐	216.69	216.69	0		
Acetone	☑	93.3	93.3	0	0	93.3
Cobalt	☐	0.03	0.03	0		