

## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 2448-AOP-R1 AFIN: 60-06113

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Creative Foam Products, LLC.  
1301 E. Eighth Street  
North Little Rock, Arkansas 72114

3. PERMIT WRITER:

Skylar Redman

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Polystyrene Foam Product Manufacturing  
NAICS Code: 326140

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
4/13/2025	Minor Mod	None

6. REVIEWER'S NOTES:

Creative Foam Products, LLC operates an expanded polystyrene (EPS) block molding facility at 1308 West 8<sup>th</sup> Street in North Little Rock, AR. The facility submitted a minor mod application to install a new block mold former under SN-01 and to call out the (4) individual stacks associated with Foam Production (SN-01 A/B/C/D). There are no changes to the permitted emissions to SN-01/A/B/C/D (formerly SN-01) with this permitting action.

## 7. COMPLIANCE STATUS:

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

The facility was last inspected on January 10<sup>th</sup>, 2024 with no violations identified.

<https://echo.epa.gov/detailed-facility-report?fid=110071232069>

## 8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? N

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

- *Single pollutant  $\geq 100$  tpy and on the list of 28 or single pollutant  $\geq 250$  tpy and not on list*

## 9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
02A, 02B	-	NSPS Dc

## 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 Rule 18 requirement.)

## 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:

Based on Division on Environmental Quality procedures for review of non-criteria pollutants, emissions of non-criteria pollutants are below thresholds of concern.

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 (mg/m<sup>3</sup>), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m <sup>3</sup> )	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Benzene	1.597	0.17567	0.0000431	Y
Dichlorobenzene	0.2	0.022	0.0000246	Y
Formaldehyde	1.5	0.165	0.00154	Y
Hexane	176.327	19.39	0.0369	Y
Toluene	75.37	8.29	0.0000697	Y
Arsenic	0.01	0.0011	0.0000041	Y
Beryllium	0.002	0.00022	0.000000246	N
Cadmium	0.01	0.0011	0.0000226	Y
Cobalt	0.02	0.0022	0.00000172	Y
Lead	0.05	0.0055	0.0000103	Y

Pollutant	TLV (mg/m <sup>3</sup> )	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Manganese	0.02	0.0022	0.00000779	Y
Mercury	0.01	0.0011	0.00000533	Y
Nickel	0.2	0.022	0.0000431	Y
Selenium	0.2	0.022	0.000000429	Y
POM	0.2	0.022	0.000062605	Y

\*Permitted emissions did not change with this permitting action so no modelling was performed

## 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 (µg/m <sup>3</sup> ) = 1/100 of Threshold Limit Value	Modeled Concentration (µg/m <sup>3</sup> )*	Pass?
N/A			

c) H<sub>2</sub>S Modeling: N/A, this facility does not emit H<sub>2</sub>S.

## 15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01A/B/C/D	Mass Balance 1999 BASF Bulletin “Environmental Pentane Emissions During Processing”	Pre- expansion: 13% of pentane emitted	-	-	4,000 lb/hr beads 8% pentane by weight
		Pre-puff aging: 27% of pentane emitted	-	-	
		Block Molding:	-	-	

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		16% of pentane emitted			
		Block Storage: 9.7% of pentane emitted	-	-	
		Remelt: VOC: 8% by weight pentane 100% of pentane emitted  PM: 882.75 dscfm 0.01 gr/dscf 7000 gr/lb	Dust Collector	99%	800 lb/hr throughput  60 min/hr 8760 hr/yr
02A & 02B	AP-42 Table 1.4-1 & 2 Table 1.4-3 & 4	<u>lb/MMscf</u> PM/PM <sub>10</sub> : 7.6 SO <sub>2</sub> : 0.6 VOC: 5.5 CO: 84.0 NO <sub>x</sub> : 100.0	-	-	10.461 MMBtu/hr  10,255.90 scf/hr  8,760 hr/yr

## 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)
01A/B/C/D	VOC tpy	240.0	Monthly	N
01 A/B/C/D	VOC content	8 wt. %	Monthly	N
02A, 02B	Fuel Combusted	-	Monthly	N

## 19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01D	5%	Department Guidance	Weekly Observations
02A, 02B	5%	Department Guidance	Use of Natural Gas

## 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 <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
Cooling Tower	A-13	0.86						
Crusher	A-13	0.017						
Dust Distributor (Block)	A-13	0.05						

Permit #: 2448-AOP-R1

AFIN: 60-06113

Page 7 of 7

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
Fabrication Process)								

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 #
2448-AOP-R0





## APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

## Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Creative Foam Products, LLC  
 Permit Number: 2448-AOP-R1  
 AFIN: 60-06113

\$/ton factor	28.14	Annual Chargeable Emissions (tpy)	251
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) 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		0.4	1.2	0.8		
PM <sub>10</sub>		0.4	1.2	0.8	0.8	1.2
PM <sub>2.5</sub>		0	0	0		
SO <sub>2</sub>		0.1	0.2	0.1	0.1	0.2
VOC		240	240.6	0.6	0.6	240.6
CO		3.8	7.6	3.8		
NO <sub>x</sub>		4.5	9	4.5	4.5	9
Total HAPs	<input type="checkbox"/>	0.18	0.18	0		