

STATEMENT OF BASIS

For the issuance of Air Permit # 2132-AOP-R6 AFIN: 22-00057

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Drew Foam Companies, Inc.  
1093 Highway 278 East  
Monticello, Arkansas 71655

3. PERMIT WRITER:

Kyle Crane

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
3/26/2021	Minor Modification	Installation of new Block Mold in SN-04

6. REVIEWER'S NOTES:

Drew Foam Companies, Inc. (Drew Foam) currently operates an expandable polystyrene manufacturing facility that is located at 1093 Highway 278 East in Monticello (Drew County), Arkansas. With this minor modification, the facility is installing a second block mold (Block Mold #2) to the facility's existing molding processes (SN-04), and reducing the facility's currently permitted plantwide limit for VOC from 280.0 tons per year (tpy) to 248.0 tpy due to existing limitations in plantwide supplied steam energy. Based on these limitations and historical annual VOC emission rates, the facility estimates it is not

capable of exceeding 248.0 tpy of VOC. Annual permitted emissions decrease by 32.0 tpy of VOC 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.

The facility was last inspected on January 9, 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-10	-	NSPS Subpart Dc
SN-15 and SN-16	-	NESHAP 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
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 ADEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Department procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

c) H<sub>2</sub>S 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<sub>2</sub>S Standards Y

If exempt, explain: The 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
01	Mass Balance 1999 BASF Bulletin "Environmental Pentane Emissions During Processing"	24% of pentane emitted	-	-	4,682 lb/hr beads 8% pentane by weight
02, 02A, 03		27% of pentane emitted	-	-	
04		12% of pentane emitted	-	-	
05, 06, 07, 14		33% of pentane emitted	-	-	
10	AP-42 1.4 - Natural Gas Combustion	<u>lb/MMscf</u> PM/PM <sub>10</sub> : 7.6 SO <sub>2</sub> : 0.6 VOC: 5.5 CO: 84 NO <sub>x</sub> : 100 Total HAP: 1.88	-	-	21.0 MMBtu/hr
15 and 16	AP-42 3.2 - Natural Gas-fired Reciprocating Engines	<u>lb/MMBtu</u> PM/PM <sub>10</sub> : 0.0195 SO <sub>2</sub> : 0.000588 VOC: 0.0296 CO: 3.72 NO <sub>x</sub> : 2.21 Total HAP: 0.137	-	-	4 stroke rich burn

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)
01, 02, 03, 04, 05, 06, 07, 13, and 14	VOC tpy	248.0	Monthly	Y
01, 02, 03, 04, 05, 06, 07, and 14,	VOC content	8 wt. %	Monthly	Y
10	Fuel Combusted	-	Monthly	Y
15 and 16	Operating hours	500 hours per calendar year each	Monthly	N
15 and 16	Maintenance plan	Specific Conditions #15 and #16	Annually	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
10	5%	Department Guidance	Inspector Observation
15 and 16	5%	Department Guidance	Inspector Observation

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
250-gallon used oil tank	A-2			9.0E-05				
Cooling	A-13	9.0E-05						

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
Tower								
Scrap Densifier	A-13	3.0E-07						

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 #
2132-AOP-R5

## APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

## Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Drew Foam Companies, Inc.  
 Permit Number: 2132-AOP-R6  
 AFIN: 22-00057

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	259.6
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)	-32
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		0.9	0.9	0		
PM <sub>10</sub>		0.9	0.9	0	0	0.9
PM <sub>2.5</sub>		0	0	0		
SO <sub>2</sub>		0.3	0.3	0	0	0.3
VOC		280.8	248.8	-32	-32	248.8
CO		8.3	8.3	0		
NO <sub>x</sub>		9.6	9.6	0	0	9.6
Total HAPs	<input type="checkbox"/>	0.2	0.2	0		