

STATEMENT OF BASIS

For the issuance of Air Permit # 2132-AOP-R8 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:

Alexander Sudibjo

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 |
|---------------------|---|---|
| 9/13/2022 | Minor Mod | Increased hourly EPS throughput |

6. REVIEWER'S NOTES:

With this minor modification, the facility is increasing the hourly EPS throughput to 5,619 lb of polystyrene beads per hour. There are no changes to the facility's permitted annual emission limits.

7. COMPLIANCE STATUS:

As of September 13, 2022, there are no compliance issues with the facility. ECHO (<https://echo.epa.gov/detailed-facility-report?fid=110001149221>) shows no air violations identified as of April 12, 2021.

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? 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 Rule 18 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 |
|--------|----------------------|---|
| 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 of Environmental Quality procedures for review of non-criteria pollutants, 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 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 |
|-------------|--|---------------------------------------|-------------------|------------------------------|---|
| 01 | Mass Balance | 24% of pentane emitted | - | - | 5,619 lb/hr beads 8% pentane by weight |
| 02, 02A, 03 | 1999 BASF Bulletin "Environmental Pentane Emissions During | 27% of pentane emitted | - | - | |

| SN | Emission Factor Source (AP-42, testing, etc.) | Emission Factor (lb/ton, lb/hr, etc.) | Control Equipment | Control Equipment Efficiency | Comments |
|----------------|--|--|-------------------|------------------------------|--------------------|
| 04 | Processing" | 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 ₁₀ : 7.6 SO ₂ : 0.6 VOC: 5.5 CO: 84 NO _x : 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 ₁₀ : 0.0195 SO ₂ : 0.000588 VOC: 0.0296 CO: 3.72 NO _x : 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 | Y |
| 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 |
|-----------|---------------------------|
| | 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) | | | | | | HAPs | |
|--------------------------|------------------|---------------------|-----------------|---------|----|-----------------|--------|-------|--|
| | | PM/PM ₁₀ | SO ₂ | VOC | CO | NO _x | Single | Total | |
| | | | | | | | | | |
| 250-gallon used oil tank | A-2 | | | 1.0E-04 | | | | | |
| Cooling Tower | A-13 | 9.0E-05 | | | | | | | |
| Scrap Densifier | A-13 | 3.0E-07 | | | | | | | |

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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-R7 |

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-R8
 AFIN: 22-00057

| | | | |
|---------------|-----------|-----------------------------------|-------|
| \$/ton factor | 25.13 | 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) | 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 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 ₁₀ | | 0.9 | 0.9 | 0 | 0 | 0.9 |
| PM _{2.5} | | 0 | 0 | 0 | | |
| SO ₂ | | 0.3 | 0.3 | 0 | 0 | 0.3 |
| VOC | | 248.8 | 248.8 | 0 | 0 | 248.8 |
| CO | | 8.3 | 8.3 | 0 | | |
| NO _x | | 9.6 | 9.6 | 0 | 0 | 9.6 |
| Total HAPs | <input type="checkbox"/> | 0.2 | 0.2 | 0 | | |