

STATEMENT OF BASIS

For the issuance of Draft Air Permit # 2132-AOP-R2 AFIN: 22-00057

1. PERMITTING AUTHORITY:

Arkansas Department 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. PROCESS DESCRIPTION AND NAICS CODE:

NAICS Description: Polystyrene Foam Product Manufacturing
NAICS Code: 326140

5. SUBMITTALS:

12/2/2011

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. This is a Title V renewal for the facility. The polystyrene beads used by the facility will change from 6.8% maximum pentane content to 8%. The facility's permitted hourly VOC emission rate is increasing by 43.7 lb/hr.

7. COMPLIANCE STATUS:

As of December 2, 2011, there are currently no compliance issues with the facility.

8. PSD 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 ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list?

If yes, 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

10. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

11. MODELING:

Criteria Pollutants

Examination of the source type, location, plot plan, land use, emission parameters, and other available information indicate that modeling is not warranted at this time.

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/m³), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Acetone	1187	130.5	0.18	Y
Dimethyl Ether	19000	2090	1.80	Y
Hexane	176.2	19.3	1.69	Y

12. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01, 02, 03, 04, 05, 06, 07, 14	Mass Balance	-	-	-	-
13	Mass Balance	-	-	-	-
10	AP-42	1.4 - Natural Gas Combustion	-	-	-
15 and 16	AP-42	3.2 - Natural Gas-fired Reciprocating Engines	-	-	4 stroke rich burn

13. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
None				

14. 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)
None				

15. 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

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
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 each	monthly	N
13	VOC Acetone Hexane Dimethyl Ether	82 wt.% 5 wt.% 46 wt.% 50 wt.%	monthly	N

16. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
10	5%	Department Guidance	Natural Gas As Fuel
15 and 16	5%	Department Guidance	Natural Gas As Fuel

17. DELETED CONDITIONS:

Former SC	Justification for removal
	None

18. GROUP A INSIGNIFICANT ACTIVITIES

Source Name	Group A Category	Emissions (tpy)						
		PM/PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
250-gallon used oil tank	A-2							
Dust Collection Cyclone and cyclone dust bagging system	A-13	1.6						

19. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

List all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
2132-AOP-R1

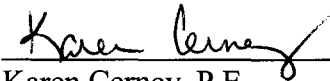
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20. CONCURRENCE BY:

The following supervisor concurs with the permitting decision.



Karen Cerney, P.E.

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 08-30-11

Facility Name: Drew Foam Companies, Inc.
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\$/ton factor	22.65	Annual Chargeable Emissions (tpy)	254.4
Permit Type	Renewal No Changes	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	<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	<input checked="" type="checkbox"/>	0.6	0.6	0	0	0.6
PM ₁₀	<input type="checkbox"/>	0.6	0.6	0		
SO ₂	<input checked="" type="checkbox"/>	0.3	0.3	0	0	0.3
VOC	<input checked="" type="checkbox"/>	248.5	248.5	0	0	248.5
CO	<input type="checkbox"/>	4.4	4.4	0		
NO _x	<input checked="" type="checkbox"/>	5	5	0	0	5
Acetone	<input type="checkbox"/>	0.8	0.8	0		
Hexane	<input type="checkbox"/>	7.4	7.4	0		
Dimethyl Ether	<input type="checkbox"/>	0	7.9	7.9		