

STATEMENT OF BASIS

For the issuance of Air Permit # 0407-AOP-R10 AFIN: 04-00100

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Glad Manufacturing Company
 1700 N. 13th Street
 Rogers, Arkansas 72756

3. PERMIT WRITER:

Alexander Sudibjo

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Unlaminated Plastics Film and Sheet (except Packaging)
 Manufacturing
 NAICS Code: 326113

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
2/6/2020	Renewal	Updated basis for emissions
2/6/2020	Minor Mod	

6. REVIEWER'S NOTES:

This is a Title V renewal for the air permit. In this renewal, the facility requested to make the following changes as minor modifications:

- Reduce the number of Rotary Bag Machines in SN-07 from seven to four.
- Combine emissions from SN-15 and SN-15A and update the basis of emissions to reflect the VOC and HAP contents of products currently used.

- Combine emissions from SN-19 and SN-26 and update the basis of emissions to reflect 2019 stack testing data.
- Revise emission calculations for SN-21 and add an annual fragrance throughput limit of 250 tons per year.
- Correct the applicability condition for the emergency engines (SN-22, SN-23, and SN-25).
- Add fragrance tanks as an A-2 insignificant activity.

The facility's permitted annual emissions are decreasing by 1.5 tpy PM/PM₁₀, 99.9 tpy VOC, and 2.64 tpy total HAPs.

7. COMPLIANCE STATUS:

As of February 6, 2020, there are no compliance issues with the facility.

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)
22	Criteria	NSPS JJJJ
22, 23, 25	HAPs	MACT ZZZZ

10. 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?

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		

11. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

12. 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:

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

c) H₂S Modeling:

The facility does not have any H₂S emissions.

13. 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, 16	Testing	PM/PM ₁₀ from railcar: 0.020 gr/scf	Filtair Fabric Filter	99% +	flowrate: 2,600 scfm per source
		PM/PM ₁₀ to silos: 0.030 gr/scf			flowrate: 2,600 scfm per source
04	Testing	PM/PM ₁₀ : 0.020 gr/scf	Fabric Filter	99% +	flowrate: 8,768 scfm
05	Testing	PM/PM ₁₀ : 0.020 gr/scf	Fabric Filter	99% +	Flowrate: 6,740 scfm
06	Testing	PM/PM ₁₀ per Exhaust: 0.048 lb/hr VOC per Exhaust:	-	-	20 exhausts

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		0.29 lb/hr HAP per Exhaust: 0.0023 lb/hr			
07	Testing	PM/PM ₁₀ : 0.065 lb/ton VOC: 0.095 lb/ton HAPs: 0.002 lb/ton	-	-	4 machines 1,300 lb/hr per machine
08	Testing	PM/PM ₁₀ : 0.813/ton VOC: 1.152 lb/ton HAPs: 0.004 lb/ton	-	-	11,388 tpy production
15	Mass Balance	<u>Suffocation Warnings</u> Ink VOC content: 4.6 lb/gal Makeup VOC content: 3.0 lb/gal No HAP content	-	-	100% evaporative loss
		<u>Case Coders</u> Ink VOC content: 0.13 lb/gal No HAP content	-	-	
18	Testing	PM/PM ₁₀ per Exhaust: 0.42 lb/hr VOC per Exhaust: 0.98 lb/hr HAP per Exhaust: 0.0039 lb/hr	-	-	10 exhausts
19	Testing	VOC: 0.6105 lb/hr per line VOC: 2.674 tpy per line	-	-	3 lines 114 lb/hr per line
20	AP-42, 13.4	PM/PM ₁₀ : 11,220 gal/min Drift Rate: 20% Total Dissolved Solids: 737ppm	-	-	-
21	Testing	<u>Fragrance Application</u> 1000 ft/min 490 bags/min 80 mg/bag 35 machines 0.4% fragrance evaporation rate	-	-	250 tons fragrance per year permit limit

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		<u>Scrap/Reclaim</u> 12% scrap/reclaim rate of finished product 100% evaporation rate	-	-	
22, 23, 25	AP-42	NO _x : 2.210 lb/MMBtu CO : 3.720 lb/MMBtu VOC : 0.030 lb/MMBtu SO ₂ : 0.000588 lb/MMBtu PM/PM ₁₀ : 0.0194 lb/MMBtu	-	-	-

14. TESTING REQUIREMENTS:

The permit requires testing of the following sources.

SN	Pollutants	Test Method	Test Interval	Justification
N/A				

15. 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				

16. 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)
15	Ink/Makeup VOC and HAP content	Ink VOC:4.6 lbs/gal Makeup VOC: 3.0 lbs/gal No HAP content	Monthly	Y
19	Adhesive Throughput	2,995,920 pounds per rolling 12 month period	Monthly	Y

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
21	Fragrance Throughput	250 tons per rolling 12 month period	Monthly	Y
22, 23, 25	Subpart ZZZZ	None	Monthly or per event	N
	Hours of Operation	350 hours per calendar year	Monthly	Y

17. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
01-03, 16	5%	Department Guidance	Weekly Readings
04-07, 18	5%	Department Guidance	§18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311
08	20%	Department Guidance	§19.503 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311
22, 23, 25	5%	Department Guidance	Natural Gas Combustion

18. DELETED CONDITIONS:

Former SC	Justification for removal
26, 27	SN-26 is combined with SN-19 so the recordkeeping condition for SN-26 is also combined with SC#24.

19. 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
Die Cleaning Ovens	A-1	0.49	0.001	0.01	0.16	0.19		0.01
Two (2) Diesel Fuel Storage Tanks, 250 gallons each	A-2			0.00042				0.00042
Fragrance Tanks, 65 gallons total	A-2			0.0013				

Source Name	Group A Category	Emissions (tpy)						
		PM/ PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
Resin Transfer Blowers	A-13	1.61						
Conversion Bag Machines	A-13	0.18						
Miscellaneous Adhesive Usage	A-13			0.20			0.2	0.2
Scrap Film Reclaim Operations	A-13	0.24						
Extrusion Dosing & Erema Reclaim Resin Transfer	A-13	1.48						
Equipment Cleaning Operation with IPA Wipes	A-13			4.46				
TOTAL A-13 EMISSIONS		3.52		4.66			0.20	0.20

20. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
0407-AOP-R9

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Glad Manufacturing Company
 Permit Number: 0407-AOP-R10
 AFIN: 04-00100

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	191.2
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)	-101.4
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		65.2	63.7	-1.5		
PM ₁₀		65.2	63.7	-1.5	-1.5	63.7
PM _{2.5}		0	0	0		
SO ₂		0.3	0.3	0	0	0.3
VOC		217.5	117.6	-99.9	-99.9	117.6
CO		20.9	20.9	0		
NO _x		9.6	9.6	0	0	9.6
Total HAPs	<input type="checkbox"/>	3.47	0.83	-2.64		