

STATEMENT OF BASIS

For the issuance of Air Permit # 0277-AR-6 AFIN: 54-00009

1. PERMITTING AUTHORITY:

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

2. APPLICANT:

Helena Industries, LLC
101 MLK, Jr. Drive (Highway 49)
Helena-West Helena, Arkansas 72390

3. PERMIT WRITER:

Sarah Neoh

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Farm Supplies Merchant Wholesalers
NAICS Code: 424910

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
2/14/2022	Modification	- Increasing the max batch sizes of all the mix tank and pack tanks (total of 5 each) from 5,000-gallon to 5,700-gallon for the formulation of liquid products in the Liquid Area I Process Area. - Reflecting the separation, addition, and reorganization of equipment in the Liquid Area III Process Area. This equipment addition results in particulate matter (PM) emissions in a process area that does not include

		particulate emission limits in the Existing Permit. Similarly, HI desires to increase the permit throughput limit of VOC containing liquids to a total of 3,550,000 gallons/year. • Reflecting the use of Tank 15 (SN36) in Tank Farm #1. • Installing a 20,000-gallon storage tank; Tank 13 (SN34) in Tank Farm #2. • Installing a 1,000-gallon propane tank for on-site cylinder filling for use in forklifts. • Adding a new HAP category (Isophorene) for product 71. • Increasing the amount of supersack waste that is processed due to the addition of a new product profile in LAIII that includes the addition of dry material from supersacks. • Increasing the particulate emissions limit in the Waste Building as a result of supersack processing. • Removing Gasoline Storage Tank (SN-57) from the permit
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6. REVIEWER'S NOTES:

Helena Industries, Inc. (AFIN: 54-00009) is a toll manufacturing facility that formulates and packages agricultural chemicals. The facility is located at 101 MLK Jr. Drive (Hwy. 49), West Helena, Arkansas. This modification involves the following:

- Increasing the max batch sizes of all the mix tank and pack tanks (total of 5 each) from 5,000-gallon to 5,700-gallon for the formulation of liquid products in the Liquid Area I Process Area.
- Reflecting the separation, addition, and reorganization of equipment in the Liquid Area III Process Area. This equipment addition results in particulate matter (PM)

emissions in a process area that does not include particulate emission limits in the Existing Permit. Similarly, HI desires to increase the permit throughput limit of VOC containing liquids to a total of 3,550,000 gallons/year.

- Reflecting the use of Tank 15 (SN36) in Tank Farm #1.
- Installing a 20,000-gallon storage tank; Tank 13 (SN34) in Tank Farm #2.
- Installing a 1,000-gallon propane tank for on-site cylinder filling for use in forklifts.
- Adding a new HAP category (Isophorene) for product 71.
- Increasing the amount of supersack waste that is processed due to the addition of a new product profile in LAIII that includes the addition of dry material from supersacks.
- Increasing the particulate emissions limit in the Waste Building as a result of supersack processing.
- Removing Gasoline Storage Tank (SN-57) from the permit.

This modification results in increases in permitted emissions by 0.8 tpy PM, 0.2 tpy PM₁₀, 1.1 tpy VOC, and 2.25 tpy HAPs.

7. COMPLIANCE STATUS:

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

There are no active/pending enforcement actions for this facility.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? **N/A**
If yes, were GHG emission increases significant? **N/A**

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)
N/A		

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: N/A

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY: 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:

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.

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?
Manganese	0.1	0.011	0.0018	Yes

Pollutant	TLV (mg/m ³)	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Methylenediphenyl diisocyanate	0.051	0.00561	0.000258	Yes
Cobalt	0.1	0.011	0.003	Yes
Toluene diisocyanate	0.142	0.0156	0.00859	Yes
Formaldehyde	1.5	0.15	0.13	Yes
Xylene	434.199	47.7609	0.00024	Yes

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

N

If exempt, explain: This facility does not produce H₂S

15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equip.	Control Equip. Eff.	Comments
PM and PM10	PM10-1985 NAPAP Emissions Inventory: PM Removal Efficiencies	-	Filter; Dust Collector	99.9%	
VOC and HAP	AP-42, Section 5.2 AP-42, Chapter 7, Equation 1-	Varies			
Boiler	AP-42 Chapter 1.4-1 and 1.4-2	84 lb CO/106scf; 7.6 lb PM/PM10/106scf;			

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	Recorded Item	Permit Limit	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)
Liquid Area 3	VOC Containing Liquid (Gallons/Year)	3,550,000	Monthly	N
Liquid Area 1		9,330,000	Monthly	N
Liquid Area 5		1,718,496	Monthly	N
Liquid Area 1		9,330,000	Monthly	N
Tank Farm 2		11,950,000	Monthly	N
Tank Farm 1		11,000,000	Monthly	N
Mill 3	Dry Material (Tons/Year)	26,280	Monthly	N
Mill 5		10,000	Monthly	N
Liquid Area 1		4,794	Monthly	N
Dry Pack		5,000	Monthly	N
Facility	HAP Containing Liquid Ingredient Mixed and Loaded Out (Gallons/Year)	15,490,227	Monthly	N
Facility	HAP Containing Solid Ingredient Mixed and Loaded Out	4,794	Monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
Facility	10%	Reg.18.501 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311	Inspector Observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
N/A	

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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 ₁₀	SO ₂	VOC	CO	NO _x	HAPs	
							Single	Total
None.								

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 #
0277-AR-5

APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

Fee Calculation for Minor Source

Revised 03-11-16

Facility Name:
Permit Number:
AFIN:

			<table><tr><th>Old Permit</th><th>New Permit</th></tr><tr><td>6.5</td><td>8</td></tr></table>	Old Permit	New Permit	6.5	8
Old Permit	New Permit						
6.5	8						
\$/ton factor	25.13	Permit Predominant Air Contaminant	6.5				
Minimum Fee \$	400	Net Predominant Air Contaminant Increase	1.5				
Minimum Initial Fee \$	500						
		Permit Fee \$	400				
Check if Administrative Amendment	☐	Annual Chargeable Emissions (tpy)	8 No Annual Fee				

Pollutant (tpy)	Old Permit	New Permit	Change
PM	2.5	3.3	0.8
PM ₁₀	0.9	1.1	0.2
PM _{2.5}	0	0	0
SO ₂	0.1	0.1	0
VOC	6.5	7.5	1
CO	3.1	3.1	0
NO _x	1.2	1.2	0
Manganese	0.002893	1.80E-03	-0.001093
Methylenediphenyl diisocyanate	0.000258	0.000258	0
Cobalt	0.003	0.003	0
Toluene diisocyanate	0.00859	0.00859	0
Formaldehyde	0	0.13	0.13
Xylene	0	0.00024	0.00024
Total HAPs	5.75	8	2.25