

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P102959944

FACILITY: Haviland Products Company		SRN / ID: P1029
LOCATION: 2722 North Burdick Street, KALAMAZOO		DISTRICT: Kalamazoo
CITY: KALAMAZOO		COUNTY: KALAMAZOO
CONTACT: Brittany Albin , Environmental Engineer		ACTIVITY DATE: 08/18/2021
STAFF: Monica Brothers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, scheduled inspection		
RESOLVED COMPLAINTS:		

Staff, Monica Brothers, arrived on-site at about 1:00 pm and met with Brian Brannan, Kalamazoo Plant Manager. Upon arrival, no visible emissions or odors were observed coming from the facility. Brian and I briefly sat down in a conference room to discuss the inspection process and to go over what records I would like to see. Brian said that he was not the one who kept the records at the facility and that we should call Brittany Albin, the Environmental Engineer for the facility. We called Brittany, I let her know what records I needed to see, and she emailed them to me within a few days after the on-site inspection. Before conducting the walk-through portion of the inspection, I asked Brian a few questions about the facility. Brian said that there are only about eight employees who work at that location and that they only have one shift, 8:00 am to 5:00 pm, Monday through Friday. He said that this facility has been operating for over 60 years.

Haviland is a chemical packaging and blending facility. They are currently operating under PTI # 78-19A and are also subject to 40 CFR, Part 63, BBBB (National Emission Standards for Hazardous Air Pollutants for Area Sources: Chemical Preparations Industry) and VVVVV (National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources). The facility is currently submitting all required reports and inspection recordkeeping under these federal regulations. After our initial discussion, we took a walkthrough of the facility. During the tour I did not see any open containers that were not currently being used.

Exempt Equipment: The facility has three small boilers. They are considered exempt under Rule 282(2)(b). These boilers are used to heat the building and heat a couple of process tanks. The following table contains the information for each boiler:

Fuel Type	Manufacturer	Model	Serial Number	Location	Btu/hr	Installation and/or Manufacture Date
Natural Gas	Knight Boiler	KBN 150	A06H10008650	Kalamazoo	190,000	2005
Natural Gas	Knight Boiler	KBN 150	Not known	Kalamazoo	150,000	2005
	RayPak	H2 - 0824	1004308959	Kalamazoo	825,000	2011 or 2012

Natural Gas						
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There is also one electric oven that is used to heat up viscous products before they are used. There is an acid room with a scrubber that is currently operating under Rule 290. Brittany sent me the Rule 290 records for this process and the facility is under the required emission limits. They do not have any emergency generators or parts washers.

The following table shows each of the tanks at the facility, their capacities, and the exemptions they are operating under. The facility is keeping appropriate records and is under the required limits.

Tank ID	Equipment No.	Name	EXEMPTION	SIZE (gal)	STORAGE or BLENDING TANK	General Tank Contents
T-1	41116	Triethylamine Storage Tank	R 336.1284 (2)(i)	7,200	Storage	Triethylamine
T-2	41115	Acetone Storage Tank	R 336.1290 (2)(a)	7,200	Storage	Acetone
T-3	41117	Isopropyl Alcohol Storage Tank	R 336.1284 (2)(i)	7,200	Storage	2-propanol
T-4	41114	PMA Glycol Ether Storage Tank	R 336.1284 (2)(i)	7,200	Storage	Propylene Glycol Monomethyl Ether Acetate
T-5	41118	MEK Storage Tank	R 336.1291	7,200	Storage	2-butanone
T-6	41113	Hydrazine Holding Tank	PTI 78-19A	7,500	Storage (but can be used for blending)	Hydrazine

T-7	41119	Solvent General Storage Tank	R 336.1284 (2)(i)	7,200	Storage	Generally either toluene, xylol, or ethanol
T-8	41112	Hydrazine Mix Tank	PTI 78-19A	5,500	Blending (but can be used for storage)	Hydrazine
T-9	41111	WSCP Reactor	R 336.1291	1,500	Reactor	Pool chemical ingredient
T-9a	41122	1,500 Gallon Blend Tank 9A	R 336.1290 (2)(a)	1,500	Blending	Variety
T-9b	41120	1,500 Gallon Blend Tank 9B	R 336.1290 (2)(a)	1,500	Blending	Variety
T-10	41098	Pre Cat Mix Tank B	R 336.1291	1,500	Blending	Ethanamine, N,N-diethyl-,sulfate (2:1) final product
T-11	41097	Pre Cat Mix Tank A	R 336.1291	1,500	Blending	Ethanamine, N,N-diethyl-,sulfate (2:1) final product
T-12	41167	WSCP Storage Tank	R 336.1291	6,510	Storage	Typically empty but this is for WSCP
T-13	41105	Twin 12,000 Gallon Storage Tank 13	R 336.1284 (2)(i)	12,000	Storage	Pre Cat Storage
T-13a	41103	Twin 12,000 Gallon Storage Tank 13A	R 336.1284 (2)(i)	12,000	Storage	Pre Cat Storage

EUHYDRAZINESCRUB:

This emission unit is for hydrazine processing, which includes hydrazine holding tank T-6, hydrazine blend tank T-8, packaging hydrazine into totes, drums, or smaller containers in the solvent blending room, and hydrazine isotainer loading and off-loading. This process began operation in April 2021. There is a scrubber for pollution control. The scrubber and hydrazine process were not running during the inspection, so I could not take a pH or inlet pressure reading. However, their permit requires continuous monitoring and recordkeeping of pH and inlet pressure, and their Malfunction Abatement Plan (MAP) specifies a limit of -2.0 inches of water for inlet pressure and 3 for pH. If these limits are exceeded, they are required to follow their MAP to quickly fix the issue. They are keeping these records and are following their MAP procedures whenever there is a limit exceedance. Their permit also requires that they keep hourly hydrazine emission records. The emissions are limited to 0.00128 pph. They are keeping these records and are consistently under this limit. They are also limited to 1.77 lbs/year on a 12-month rolling basis. They are keeping these records and are under this limit.

EUSOLVENTPACK:

This emission unit is for the solvent packaging area, consisting of chemical repackaging and solvent blending and packaging into totes, drums, or other small containers. This is done in the same room as the hydrazine processes. The emissions from this process are uncontrolled. The facility is required to maintain a list of materials emitted from this emission unit that were determined to be exempt from the health-based screening level requirement of Rule 225 pursuant to Rule 226(a) for the PTI 78-19A application review. The list should include the emission rate of each material. The facility is maintaining this list and associated emission rates. The following table shows the emissions recordkeeping requirements for EUSOLVENTPACK and my observations.

Pollutant	Limit	Time Period / Operating Scenario	Observed During Inspection
1. Formaldehyde	2.8 x 10 ⁻² pph ¹	Hourly	Facility is keeping these records and is under this limit.
2. Formaldehyde	47.5 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.
3. Acetone	47.5 pph ¹	Hourly	Facility is keeping these records and is under this limit.
4. Acetone	167 lb/8-hour period ¹	8-hour time period	Facility is keeping these records and is under this limit.

Pollutant	Limit	Time Period / Operating Scenario	Observed During Inspection
5. Benzene	2.60×10^{-2} pph ¹	Hourly	Facility is keeping these records and is under this limit.
6. Benzene	59.3 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.
7. Ethylene oxide	2.96×10^{-6} pph ¹	Hourly	Facility is keeping these records and is under this limit.
8. Naphthalene	1.58×10^{-2} pph ¹	Hourly	Facility is keeping these records and is under this limit.
9. Naphthalene	47.4 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.
10. Cumene	4.46×10^{-2} pph ¹	Hourly	Facility is keeping these records and is under this limit.
11. Cumene	59.3 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.
12. Ethylbenzene	0.2015 pph ¹	Hourly	Facility is keeping these records and is under this limit.
13. Ethylbenzene	237 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.
14. 1,2-Dichloroethane	7.92×10^{-3} pph ¹	Hourly	Facility is keeping these records and is under this limit.
15. 1,2-Dichloroethane	23.7 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.

Pollutant	Limit	Time Period / Operating Scenario	Observed During Inspection
16. Methyl isobutyl ketone	6.7 pph ¹	Hourly	Facility is keeping these records and is under this limit.
17. Methyl isobutyl ketone	23.3 lb/8-hour period ¹	8-hour time period	Facility is keeping these records and is under this limit.
18. Isopropyl acetate	21.6 pph ¹	Hourly	Facility is keeping these records and is under this limit.
19. Isopropyl acetate	119 lb/8-hour period ¹	8-hour time period	Facility is keeping these records and is under this limit.
20. Isobutyl acetate	7.09 pph ¹	Hourly	Facility is keeping these records and is under this limit.
21. Isobutyl acetate	68.1 lb/8-hour period ¹	8-hour time period	Facility is keeping these records and is under this limit.
22. bis-2-chloroethylether	1.99 x 10 ⁻³ pph ¹	Hourly	Facility is keeping these records and is under this limit.
23. bis-2-chloroethylether	1.78 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.
24. Triethylamine	0.264 pph ¹	Hourly	Facility is keeping these records and is under this limit.
25. Triethylamine	0.596 lb/8-hour period ¹	8-hour time period	Facility is keeping these records and is under this limit.
26. Hydrotreated light distillate	4.54 pph ¹	Hourly	Facility is keeping these records and is under this limit.

Pollutant	Limit	Time Period / Operating Scenario	Observed During Inspection
(CAS 64742-47-8)			
27. Hydrotreated light distillate (CAS 64742-47-8)	14,238 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.
28. Hydrotreated light naphthenic distillate (CAS 64742-53-6)	1.31 pph ¹	Hourly	Facility is keeping these records and is under this limit.
29. Hydrotreated light naphthenic distillate (CAS 64742-53-6)	1.42 lb/8-hour period ¹	8-hour time period	Facility is keeping these records and is under this limit.
30. c11-c14 isoalcohols, c14 rich, ethoxylated alcohol (CAS 78330-21-9)	0.42 pph ¹	Hourly	Facility is keeping these records and is under this limit.
31. Formic acid	1.0 pph ¹	Hourly	Facility is keeping these records and is under this limit.
32. Formic acid	1,186 lb/year ¹	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.
33. Total butyl acetate isomers ^a	11.7 pph ¹	Hourly	Facility is keeping these records and is under this limit.
34. Total butyl acetate isomers ^a	68.2 lb/8-hour period ¹	8-hour time period	Facility is keeping these records and is under this limit.

Pollutant	Limit	Time Period / Operating Scenario	Observed During Inspection
35. Total petroleum hydrocarbon materials ^b	10.3 pph ¹	Hourly	Facility is keeping these records and is under this limit.
36. VOC	7.3 tpy	12-month rolling time period, as determined at the end of each calendar month	Facility is keeping these records and is under this limit.

The facility seemed to be in compliance at the time of inspection.

NAME Monia Baskin

DATE 9/24/21

SUPERVISOR RIL 9/28/21