

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection**

N087835896

FACILITY: HAVILAND PRODUCTS CO		SRN / ID: N0878
LOCATION: 421 ANN ST NW, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Josh Mueller , Environmental, Health, and Safety Manager		ACTIVITY DATE: 08/04/2016
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: This was a self-initiated inspection to correspond with EPA's Multi-Media Inspection going on at the same time.		
RESOLVED COMPLAINTS:		

On Thursday August 4, 2016 AQD Staff Kaitlyn DeVries (KD) conducted an announced, unscheduled inspection of Haviland Enterprises located at 421 Ann Street (East Building), 521 Ann Street (West Building) and 2168 Avastar Parkway (North Building), in Grand Rapids and Walker, MI. The purpose of this inspection was to determine compliance with all applicable air quality rules and regulations. This inspection was announced, due to The United States Environmental Protection Agency (EPA) conducting an announced, scheduled, multi-media inspection of the facilities that week.

KD arrived on site at approximately 8:15 am and surveyed the area for odors and opacity. None were noted prior to entering the building. KD was accompanied for the opening meeting by Ms. Cher Benisek, Mr. Jonathan Moody, Ms. Sue Brauer, Ms. Claudia Niess, and Ms. Abigail Wesley, all from EPA. Mr. Josh Mueller was KD's primary contact from the facility for the duration of the day. KD presented Mr. Mueller with the Environmental Rights and Responsibilities pamphlet, which was briefly discussed. Mr. Jonathan Moody (EPA) also accompanied KD and Mr. Mueller on the tour of the facility.

Facility Description

Haviland Enterprises (Haviland) receives, repackages, blends, and dilutes various products including caustics, phosphates, acids, bleaches, and algaecides. The main facility is comprised of an east campus, a west building, and a north building. The east campus has several building located on the vicinity including the corner building, Swagelok building, west building (of east campus) and several rooms within the main building.

Regulatory analysis

Currently Haviland does not have any permits through AQD, nor are they subject to any federal regulations. Haviland has previously relied on Rule 201 permitting exemptions for much of the facility; more specifically Rule 290 for a majority of the processes.

Compliance Evaluation

The compliance evaluation portion of this report is evaluated based on the building or room it is located in.

East Campus

The east campus is the largest production site of the three. It is located at 421 Ann Street and contains several different areas which will be described below.

The first building toured contains primary storage and packaging areas. Per Mr. Mueller, there is some mixing of the product into the containers done here, but there are no emission points.

There are several other areas in the east building such as the acid room, the chrome-treat area, upper and lower manufacturing areas, bleach fill area, and an east and a north tank farm. The east tank farm is adjacent to the bleach filling area. Several of the areas share a common scrubber, which will be detailed below.

1. Acid Room – This area is controlled by a wet scrubber located on the roof. There are six (6) exhaust points that are all controlled by the common acid room scrubber. The products made, diluted, mixed, and filled in this area include nitric acid, sulfuric acid, hydrochloric acid, phosphoric acid, sodium bisulfite, magnesium bisulfite, and various caustics. Rule 290 records are used for all of these processes; records are attached. The records indicate less than 2 pounds per month are emitted for each of the chemicals.

2. Chrome-Treat Area – The chrome-treat area has its own dedicated wet scrubber that is located on the roof of the building. The area had a distinct acidic odor and there was obvious corrosion around the tanks. At the time of the inspection, the pH of the scrubber was 5.85. This area has two tanks that blend and mix the ingredients to make several different chromium containing products. KD requested the SDS's for all of the chromium containing raw materials and final products. Upon review, it was discovered that this emission unit uses, and subsequently emits, chromium trioxide (CAS# 1133-82-0). KD spoke with AQD's Toxics unit's Doreen Lehner, who stated that chromium trioxide is also known as chromium (VI) oxide, is a carcinogen with an IRSL of 0.000083 $\mu\text{g}/\text{m}^3$ and is below the IRSLA allowance of Rule 290, thus Haviland cannot use Rule 290 for any emission unit processing chromium trioxide or any Chromium (VI) compound (see attached documentation). A Violation Notice will be sent for failure to obtain a permit to install.

3. Upper and Lower Manufacturing Areas – these areas are primarily used for packaging, but upper manufacturing does have a separate, semi-self-contained room that does resin blending. This is controlled by a dust collection system. At the time of the inspection, the pressure drop was 2.6 inches water column. KD also noted that there was some duct-tape used to seal some of the ductwork around the capture hood. The duct-tape appeared to be containing any possible leak, but KD suggested that this be properly fixed. The packaging portions hoods that vent to the common scrubber. Rule 290 records are being kept for these processes and emission below the allowed 10 pounds per month (see attached).

4. Bleach Fill area and East Tank Farm – the bleach fill area is uncontrolled. At the time of the inspection, the doors located in that area were open to the ambient environment. Rule 290 is also utilized in this area, and emissions are below 10 pounds per month (see attached). KD noted corrosion in the area round the East tank farm, which is directly next door to the bleach fill area. These tanks are exempt from Rule 201 permitting under Rule 284(h).

5. North Tank Farm – this tank farm is located on the north end of the facility and feeds the contents of the tanks back to the acid room, which is subsequently controlled by the acid room scrubber. The seven (7) tanks contain various acids, such as sulfuric acid and nitric acid, and are either filled via truck or rail. These tanks are exempt from Rule 201 permitting under Rule 284(h).

There is also one (1) 500,000 BTU/Hr natural gas boiler in this building as well. This is exempt from Rule 201 permitting under Rule 282(b)(i). One (1) 20 kw (68,242 BTU/Hr) natural gas emergency generator housed here as well. This is exempt from Rule 201 under Rule 285(g).

The corner building is used for processing and packaging products such as bromine tablets, and powder chlorine and lithium products. The bromine tablet packaging area is controlled by an internally vented dust collection system. The lithium process is also exhausted to a dust collection system. The chlorine process is exhausted to a wet scrubber. Per Mr. Mueller, this scrubber was installed in 2016 and at the time of the inspection was operating at a pH of 8.2. KD noted that the control screen had several other performance indicators including pressure drop, but the gauge did not have a reading. KD mentioned to Mr. Mueller that since this scrubber was new in 2016 all of the gauges should be hooked up and have available readings in order to indicate proper operation. Since the control panel was not properly installed, maintained, and operated in a satisfactory manner, this is a Violation of Rule 910; this will be included in the Violation Notice. In addition, there were no available emission records for this process. This will also be included in the Violation Notice.

West Building

The west building is located at 521 Ann Street, Grand Rapids Michigan. This building is directly to the west of the main East campus. A majority of the building houses a large liquid processing and packaging area, the large tanks are exhausted through one (1) of two (2) scrubbers. Tank #11 has its own scrubber. Tank #11 was empty at the time of the inspection. The scrubbers have low pH alarms set at pH of 5.5, and were running around a pH of 6 at the time of the inspection. Per Mr. Mueller, Haviland checks the scrubber pH a couple of times per week, and changes out the liquid in the scrubber weekly. The flow rate through the scrubbers was 81.6 gallons per minute (gpm). The west building also relies on Rule 290, for which records are attached to this report. Rule 290 limits the emissions to 500 lbs/month. There is also one small dust collector in the packaging area, which is exhausted to the in-plant environment. This is exempt under Rule 284(k). There is also a small electric oven in this area, which is exempt under Rule 282(a).

Also located in this building is the White Bright Room. This contains a self-contained powder mixing and packaging area with an externally vented baghouse used to control particulate. KD viewed the exit point on the side of the building and it appeared to have good capture; there was no particulate outside of the collection

barrel. This utilizes Rule 290 (a)(iii), records are attached.

There is also one (1) additional 500,000 BTU/Hr natural gas boiler in this building, which is exempt under Rule 282(b)(i). One (1) natural gas emergency generator is also located outside of this building. It is a 60 kW (204,728 BTU/Hr). This is exempt from Rule 201 permitting under Rule 285(g).

This building used to house the product D45, which was noted as the factor that was involved in the prior releases. This product is no longer being manufactured.

North Building

The north building is located at 2168 Avastar Parkway, Walker Michigan. This building is located to the north and west of the main campus (Map attached). The north facility houses several different processes. Located in the main area of the building there is a silk screening process the exhausts externally through two (2) vents. The silk screening process is exempt from Rule 201 permitting under Rule 287(e). Also in the main area is a powder coating line with an associated pulse-jet baghouse that is internally exhausted. This process is also exempt from Rule 201 permitting under Rule 287(d). Also located in the main area of the north building are six (6) large mixing, blending, and storage tanks. At the time of the inspection only a few of them were labeled with what they were holding. All six (6) tanks are vented through a common duct which is externally exhausted without any controls. KD requested to follow this vent out to the roof. Upon examination of the rooftop, it was noted that there was some discoloration by the vent to the roof. KD asked Mr. Mueller if Haviland has been tracking what was kept in these tanks and any emission calculations. He stated that they have not been doing so. KD explained that this would be a Rule 201 violation for not obtaining a permit to install.

In another room just through the main area, there is a powder storage tank used for storage and blending that has an associated externally vented baghouse to control particulate emissions. This process is exempt from Rule 201 permitting under Rule 284(k).

Additionally, there is a plastic extrusion and plastic blow molding area located in the north building. This area extrudes the plastic, which is then brought through a water bath to cool it before it is rolled and cut. The extrusion process is exempt from Rule 201 permitting under Rule 286(a). The plastic blow molding process is exempt from Rule 201 permitting under Rule 286(c). In that same area, Haviland has grinding equipment that grinds up any waste plastic for re-use. The grinding equipment is exhausted back into the in-plant environment. This process is exempt from Rule 201 permitting under Rule 285(l)(vi)(B).

Finally, per Mr. Mueller, Haviland does not have any cold-cleaners.

Compliance Determination

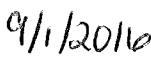
Based on the observations made during the inspection and a subsequent review of the records, it appears as if Haviland is not in compliance with all applicable air quality rules and regulations. A violation notice will be sent for the following:

1. Rule 201 – East Campus – Failure to obtain a permit to install for all processes with chromium trioxide process equipment.
2. Rule 910 – Corner Building – Failure to properly maintain and operate an air-cleaning device
3. Rule 201 – Corner Building – Failure to obtain a permit to install for the powder packaging equipment
4. Rule 201 – North Building – Failure to obtain a permit to install for the six (6) externally vented chemical storage tanks.

NAME



DATE



SUPERVISOR

