

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N087846298

FACILITY: HAVILAND ENTERPRISES, INC		SRN / ID: N0878
LOCATION: 421 ANN ST NW, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Brittany Albin, Environmental Engineer		ACTIVITY DATE: 08/30/2018
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to determine compliance with Permit to Install (PTI) No. 71-17C and other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

On Tuesday August 30, 2018 Air Quality Division (AQD) Staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled 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 Permit to Install (PTI) No. 71-17C and other applicable air quality rules and regulations.

KD arrived in the vicinity of the site at approximately 8:45 am and surveyed the area for odors and opacity. None were noted prior to entering the building. KD met with Ms. Brittany Albin, Environmental Engineer, who accompanied KD on the tour of the facility.

Facility Description

Haviland Enterprises, Inc. (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 buildings located on the vicinity including the corner building, Swagelok building, west building (of east campus) and several rooms within the main building.

Regulatory analysis

Haviland currently has one (1) permit through AQD, Opt-Out PTI No. 71-17C AQD is currently processing a modification to this permit, PTI No. 71-17B. PTI No. 71-17B was verbally accepted by Haviland on September 21, 2018. However, since the inspection took place while PTI No. 71-17C was active, this report evaluates compliance with PTI No. 71-17C. Haviland also relies on Rule 201 permitting exemptions for much of the facility; more specifically Rule 290 and Rule 291 for a majority of the processes.

Haviland is a synthetic minor source of Volatile Organic Compounds (VOC's) and Hazardous Air Pollutants (HAPs). Haviland is also under Consent Order (CO) 2018-1 with AQD.

Compliance Evaluation

PTI No. 71-17C

EUCHROME BLEND

This emission unit covers the chrome blending process located in the manufacturing area of the East building. The process consists of a blending tank, a blender, a reactor, a sparger, and treatment tanks. Emissions from the blending tank, the blender, the reactor, and the sparger are controlled by a wet scrubber.

Particulate Matter (PM) emissions are limited to 0.01 gr/dscf and to 0.17 pounds per hour (pph). PM_{10} and $PM_{2.5}$ emissions are also limited 0.17 pph, individually. While PM , $PM_{2.5}$, and PM_{10} stack testing has not been requested at this time, Haviland is tracking PM_{10} and $PM_{2.5}$ emissions in order to demonstrate compliance with these limits. The highest daily PM emissions were 0.0605 pph. Hexavalent chromium is limited to 2.74×10^{-4} pph. The most recent stack test conducted in July 2018 indicated a Hexavalent chromium emission rate of 6.07×10^{-6} pph.

This emission unit has a material throughout limit of 104,455 pounds of hexavalent chromium to be processed per 12-month rolling time period. The original issuance of this permit was in October 2017, therefore there has

not yet been a full 12-month rolling time period. As of July 2018, the 12-month rolling throughput was 34.1 tons, or 68,200 pounds.

Haviland is currently tracking the recirculation flow rate of the scrubber, as identified in the malfunction abatement plan (MAP). At the time of the inspection, the scrubber was operating with a flow rate of 60.8 gallons per minute (gpm). Ms. Albin expressed Haviland's desire to switch the indicator to pressure drop, due to the installation of the new scrubber earlier in 2018, KD noted that this could be done, but since the recordkeeping requirement is written into the permit, this should be addressed through the permitting process. Recirculation flow rate records indicate that Haviland is tracking the flow rate every 3 hours, during production, and the flow rate has a wide variability, ranging from 6.6 gpm to 63.2 gpm; both are above the 6.3 gpm specified in the MAP.

The stack parameters became applicable after January 1, 2018, however due to the installation of a new scrubber, the stack dimensions have changed, and are not what is in PTI No. 71-17C. The stack is now exhausting vertically, instead of horizontally, and the new stack dimensions will be addressed in the permit application that AQD's permit section is currently processing. No scrubber operational issues were noted during roof-top observations.

EUCORNERSCRUB

This emission unit covers the bagging and blending process located in the corner building of the East Campus. This line processes nickel containing compounds and consists of two (2) baggers and a fill line. The emissions from the baggers and the fill line are controlled by a wet scrubber or are internally vented to a portable dust collector, depending on the materials being processed. Nothing in the corner building was in operation during the time of the inspection.

Table 1 outlines the emission limitations for this emission unit, including the observed values. Testing may be required to verify the emission rates of nickel, total nitrotriacetic acids, total persulfates, PM, PM₁₀, and PM_{2.5}, but testing has not been requested at this time.

Table 1: Emission limits for EUCORNERSCRUB

Pollutant	Limit	Observed Value	Notes
PM	0.01 gr/dscf	Verifiable through stack testing.	Stack testing not requested at this time.
PM, PM ₁₀ , and PM _{2.5}	0.12 lb./hr	6.84x10 ⁻² lb./hr	Limit applies to each, individually
Nickel	1.34 x 10 ⁻³ lb./hr	2.5 x 10 ⁻⁵ lb./hr	This limit is for Nickel and Nickel containing compounds
Total Nitrotriacetic acids	3.0 x 10 ⁻⁵ lb./hr	5.10x10 ⁻⁶ lb./hr	Highest pound per hour emission on April 10, 2018
Total Persulfates	1.5 x 10 ⁻³ lb./hr.	7.04 x 10 ⁻⁴ lb./hr	Highest pound per hour emission on March 26, 2018.

This emission unit also has several material limits. Table 2 outlines the material limits and either the 12-month rolling observed value as of July 2018, or the highest throughput per 8-hour time period. Some materials are used in multiple locations at the facility and may have a combined limit with another emission unit.

Table 2: Material Limits for EUCORNERSCRUB

Material	Limit ^A	Observed Value	Notes
Ethylenediamine tetra-acetic acid, tetrasodium salt	5,565,652 pounds ^A	1400 pounds	12-month rolling time frame not yet met.
Aluminum Sulfate	6,809,359 pounds ^A	0 pounds	12-month rolling time frame not yet met.
Total Nitrolotriactic Acids	5,256 pounds ^A	1,602 pounds	12-month rolling time frame not yet met.
Disodium tetraborate	21,920 pounds ^{B,C}	2,226 pounds	Highest 8-hour usage on February 14, 2018
Disodium tetraborate	20, 210 pounds ^{B,D}	2,226 pounds	No product was vented out SV-7 during this time frame
Total Boric Acids	71,070 pounds ^{B,C}	2,654 pounds	Highest 8-hour usage on January 31, 2018
Total Boric Acids	27,311 pounds ^{B, D}	5,523.21	Highest 8-hr usage on June 28, 2018
Total Persulfates	2,400 pounds ^{B, C}	690 pounds	Highest 8-hour usage on February 1, 2018

^A Limit and observed value are based upon a 12-month rolling time period.

^B Limit and observed value are based upon an 8-hour time period.

^C This limit applies per 8-hour time period when exhausting only through SV-6, the scrubber associated with this emission unit.

^D This limit applies per 8-hour time period when exhausting though SV-6 (the scrubber associated with this emission unit) and SV-7 (the powder blending wet scrubber associated with FGWESTPOWDER)

KD was able to see the display area for the scrubber, but since the scrubber was not on, nothing was displayed. Ms. Albin supplied KD with the appropriate pressure drop readings for the scrubber. The pressure readings are taken every three (3) hour block, at least 1.5 hours apart. The MAP specifies that the scrubber should be operating at a pressure drop of 0.0 – 3.0" WC with a flow of greater than 5 gpm. Per the records, the scrubber operates at around an 8 gpm flow, and the pressure drop ranges from 0.06 – 0.8" WC. The scrubber most recently had preventative maintenance conducted on August 7, 2018 in which the belts, motor, packing and mist eliminators were inspected. The gauges were also inspected to ensure that they are reading correctly.

Certain products produced in this area are exhausted via the wet scrubber, while others are exhausted internally via a portable dust collector. The dust collector is similar to that of a shop-vac. Haviland is tracking which products are exhausted to which control device.

FGWESTPOWDER

This flexible group covers EUWESTPOTPERM and EUWESTPOW both located in the West Building. EUWESTPOTPERM is a powder blending process that processes potassium permanganate containing compounds, consisting of a blender and filling line. The emissions from the blender and filling line are controlled by a wet scrubber. The emissions from the double planetary mixer associated with this process, also exhaust through an internally vented portable dust collector, depending on the materials that are being processed. EUWESTPOW is a powder blending process in a powder room that processes nickel containing compounds, consisting of two (2) blending tanks. The emissions from the blend tank and the paddle powder blend tank are controlled by the same wet scrubber for EUWESTPOTPERM or a dust collector, depending on the type of materials being processed.

Several Emission limits are applicable to this flexible group and are outlined in Table 3. At this time, testing has not been requested to verify the emission limits.

Table 3: Emission Limits for FGWESTPOWDER

Pollutant	Limit	Observed Value	Notes
PM	0.01 gr/dscf ^A	Verifiable through stack testing.	Stack testing not requested at this time.
PM, PM ₁₀ , and PM _{2.5}	0.43 lb./hr ^A	0.00421 lb./Hr	The limit applies per pollutant, and the highest value was observed on February 12, 2018.
Total Subtilisins	2.33 x 10 ⁻⁴ lb./hr ^A	2.27 x 10 ⁻⁴ lb./hr	Highest hourly emission observed on December 12, 2017
Total nitrotriacetic acids	1.04 x 10 ⁻¹ lb./hr ^A	2.61 x 10 ⁻² lb./hr	Highest hourly emission observed on July 23, 2018
Total persulfates	1.30 x 10 ⁻¹ lb./hr ^A	6.98 x 10 ⁻² lb./hr	Highest hourly emission observed on January 29, 2018
Trisodium orthophosphate	5.0 x 10 ⁻² lb./hr ^A	4.87 x 10 ⁻² lb./hr	Highest hourly emission observed on April 4, 2018.
PM	0.01 gr/dscf ^B	Verifiable through stack testing.	Stack testing not requested at this time.
PM, PM ₁₀ , and PM _{2.5}	0.27 lb./hr ^B	0.00421 lb./Hr	The limit applies per pollutant, and the highest value was observed on February 12, 2018.
Nickel	5.27 x 10 ⁻⁴ lb./hr ^B	4.45 x 10 ⁻⁴ lb./hr	Highest hourly emission observed on March 22, 2018
Total Persulfates	3.33 x 10 ⁻³ lb./hr ^B	2.86 x 10 ⁻³ lb./hr	Highest hourly emission rate observed on May 22, 2018

equipment exhausting through SV-7, the wet scrubber associated with this flexible group.

^B This limit applies for equipment exhausting through SV-8, the dust collector associated with this flexible group

Table 4 outlines the material limits that are applicable to this flexible group. Some materials may only exhaust through one (1) of the two (2) control devices associated with this flexible group, either the wet scrubber or the dust collector. Additionally, some materials are applicable when concurrently running with EUCORNERSCRUB.

Table 4: Material Limits for FGWESTPOWDER

Material	Limit	Observed Value	Notes
Ethylenediamine tetra-acetic acid, tetrasodium salt	548,320 pounds ^A	200 pounds	12-month rolling time frame not yet met.
Zeolite	1,351,191 pounds ^A	0 pounds	12-month rolling time frame not yet met. Records indicate no zeolite has been produced.

Trisodium orthophosphate	450,312 pounds ^A	3,400 pounds	12-month rolling time frame not yet met.
Ammonium dihydrogen phosphate	3,002,077 pounds ^A	171,800 Pounds	12-month rolling time frame not yet met.
Sodium sulfite	840,582 pounds ^A	142,400 pounds	12-month rolling time frame not yet met.
Sodium ligno sulfonate	3,002,077 pounds ^A	3,000 poounds	12-month rolling time frame not yet met.
Sodium percarbonate	5,103,561 pounds ^A	31,400 pounds	12-month rolling time frame not yet met.
Oxirane, methyl-, polymer with oxirante, 8-methylnonylether	3,002,077 pounds ^A	1,400 pounds	12-month rolling time frame not yet met.
Benzenesulfonic acid, mono-C10-13-alkyl derivs., sodium salts	3,002,077 pounds ^A	0 pounds	12-month rolling time frame not yet met. Records indicate none of this compound has been produced.
Total nitroloacetic acids	808,898 pounds ^A	1,800 pounds	12-month rolling time frame not yet met.
Potassium iodide	3,133 pounds ^B	0 pounds	12-month rolling time frame not yet met. Records indicate none of this compound has been produced.
Potassium permanganate	2,136 pounds ^B	2,000 pounds	The mixing line and the filling line are not run at the same time.
Disodium tetraborate	24,320 pounds ^{B, C}	0 Pounds	Records indicate none of this compound has been produced.
Disodium tetraborate	22,423 pounds ^{B, D}	2,226 pounds	Highest 8-hour usage on February 14, 2018
Ferrous Sulfate heptahydrate	31,333 pounds ^B	0 Pounds	12-month rolling time frame not yet met. Records indicate none of this compound has been produced.
Total Boric Acids	31,333 pounds ^{B, C}	5,523.21 Pounds	Highest 8-hr usage on June 28, 2018
Total Boric Acids	19,292 pounds ^{B, D}	5,523.21 Pounds	Highest 8-hr usage on June 28, 2018
Total Persulfates	3,133 pounds ^{B, C}	955 Pounds	Highest 8-hr usage on April 25, 2018
Total Persulfates	2,080 pounds ^{B, D}	955 Pounds	Highest 8-hr usage on April 25, 2018
Total Persulfates	53,333 pounds ^{B, E}	7,844.1 Pounds	Highest 8-hr usage on February 12, 2018
Total Persulfates	39,955 pounds ^{B, F}	7,844.1 Pounds	Highest 8-hr usage on February 12, 2018

^A The limit is based upon a 12-month rolling time period

^B The limit is per 8-hour time period

^C This applies when exhausting through SV-7 only

^D This applies when exhausting through SV-6 (EUCORNERSCRUB Wet Scrubber) and SV-7 simultaneously

^E This applies when exhausting through SV-8 only

^F This applies when exhausting through SV-6 (EUCORNERSCRUB Wet Scrubber) and SV-8 simultaneously

The scrubber associated with this process was operating in conjunction with the line on the day of the inspection. Ms. Albin showed KD the pressure drop indicator and how Haviland is tracking the pressure drop. Roof-top observations were made on the West building, and white powder was very evident (Photo 1). KD told Ms. Albin that a properly operating scrubber should not be emitting any powder such as this. Since it was apparent that the scrubber was not properly operated, this is a Violation of Rule 910 and PTI No. 71-17C FGWESTPOWDER Special Condition IV.1. A violation notice will be issued. Follow-up correspondence with Ms. Albin indicated that while the root cause analysis is still ongoing, Haviland believes that the major reason for the white powder was due to the operators on second shift leaving the scrubber connection attached to the mixer while blending. Ms. Albin continued to say that additional corrective action and training will occur.

Normal operation of the scrubber should result in a pressure drop reading of 0-4 "WC, and a recirculation flow rate of greater than 25 gpm, as specified in their MAP. Records indicate that the scrubber runs at a pressure drop of 0.2 – 4" WC with a recirculation flow rate between 74-85 gpm.

Haviland is not allowed to process any hydroquinone in the Pot Perm Powder blender of the Pot Perm filling line, and records show no hydroquinone was processed in this area. The persulfate content of the products processed here, and exhausted through SV-7, the wet scrubber is limited to 39% by weight, or less. Records indicate that the total persulfate content used in this emission unit is less than 5%. No persulfates are allowed to be processed through SV-7 and SV-8 simultaneously, and records show that they were not processed simultaneously.

The stack dimensions for SV-8, were updated in the permit issuance of PTI No. 71-17B to be correct.

FGFACILITY

This flexible group covers all process equipment source-wide including equipment covered by other permits, grand-fathered equipment, and exempt equipment. Haviland has properly labeled all equipment on site, as per PTI No. 71-17C.

The facility has an individual HAP limit of 8.9 tons per year (tpy) and an aggregate HAP limit of 22.4 tpy, both based upon 12-month rolling time periods. Records indicate aggregate HAP emissions of 0.00879 tons, as of July 2018. Potassium permanganate had the highest individual emissions during the time period at 0.00869 tons. Since the Permit was issued in September 2017, a full 12-months has not yet been attained. VOC emissions are limited to 45 tpy, based upon a 12-month rolling time period. Records indicate that as of July 2018 VOC emissions were 0.0313 tons. Haviland is adequately tracking VOC and HAP content, as well as emissions.

The facility is required to implement and maintain a Malfunction Abatement Plan (MAP) for all permitted equipment. Haviland most recently submitted a MAP for their permitted equipment in January 2018.

Miscellaneous Exempt Equipment

The remainder of 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 (3) production areas. It is located at 421 Ann Street and contains several different areas which rely on Rule 201 permitting exemptions which will be described below.

The Acid Room is controlled by a wet scrubber located on the roof. This same scrubber also controls some (not all) of the tanks from the North Tank farm. 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. The control panel for this scrubber showed a pH jumping in the range of 3.5 – 7. Roof-top observations of the scrubber did not indicate any notable issues. Rule 290 records are used for all of these processes; records are attached.

Records indicate that the emissions for each of the contaminants, are below what is allowed, based upon their screening levels.

There are also two (2) batter acid storage tanks which are exempt from Rule 201 permitting under Rule 284(2) (h).

The Upper and Lower Manufacturing Areas are located near the Chromeblend area. These areas are primarily used for packaging, but there are some reactor vessels. All of the mixing tanks in this area exhaust to the common East Manufacturing scrubber. The tanks associated with with both the upper and lower manufacturing areas of East Manufacturing also rely on the Rule 290 permitting exemption to demonstrate compliance. Records show that the emissions are below what is allowed based upon the screening levels for the compounds.

A small, four (4) tank, tank farm is located directly outside of the manufacturing area. These tanks acids such as Hydrochloric Acid, Sulfuric Acid, and Nitric Acid. These tanks use Rule 201 permitting exemption Rule 284(2) (k).

There are also some other tanks in the East building that rely on Rule 291 to be exempt from Rule 201 permitting. The uncontrolled Potential to Emit (PTE) calculations show that the potential for all air contaminants, including VOC's and contaminants with various screening levels are below the allowable PTE.

The Resin Room is a semi-self-contained room that does resin blending. This is controlled by a dust collection system with two (2) air-vey vacuum exhausters. The Resin room relies on Rule 290 to demonstrate compliance. Particulate emission calculations show that monthly PM emission are at 0.01 lbs/1,000 pounds of exhaust gas, which is the maximum allowed per Rule 290(2)(a)(iii)(A)

A larger North 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, however, not all of the tanks are controlled by the scrubber. The seven (7) tanks contain various acids, such as sulfuric acid and nitric acid, and are either filled via truck or rail. The tanks exhausting to ambient air are exempt from Rule 201 permitting under Rule 284(2)(h). The tanks that exhaust to the scrubber utilize Rule 290 to demonstrate compliance and are associated with the Rule 290 records that were mentioned above for the Acid Room.

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(2)(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(2)(g).

Corner Building

Aside from the permitted process in the corner building, there is a bromine tablet line that is exhausted to an externally vented dust collector. Rule 290 is used for to demonstrate compliance. This unit was not in operation at the time of the inspection. Records indicate compliance with the PM limit established in Rule 290(2)(a)(iii)(A) at an emission a rate of 0.0086 lbs/1,000 pounds of exhaust gasses.

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. Aside from EUWESTPOTPERM and EUWESTPOW, which are permitted and have already been described above, the rest of the equipment in this building relies on Rule 201 permitting exemptions.

A majority of the building houses a large liquid processing and packaging area, the large tanks are exhausted through a wet scrubber; tank #11, however, has its own scrubber. Tank #11 was empty at the time of the inspection. The tanks that use the main scrubber, which is located on the roof-top, and tank 11 rely on Rule 290 to demonstrate compliance. A Haviland employee showed KD where the operational parameters of the scrubber are displayed, he was adding anti-foamer to the system at that time. The Haviland employee, who maintains the scrubber, mentioned that he did not think any of the parameters worked or were correct. The continuity that was displayed showed 3.6, and the pH displayed 7.6. KD asked him how he knew the scrubber was properly operating. He mentioned that he turns it off at night and on in the morning and he checks the liquid level and adds water to it every day. KD observed the scrubber from the rooftop and noted visible foam in the unit. KD also noted that the chevron mesh was a visible orange color. KD asked Ms. Albin what color the mesh is, and

she was unsure. Ms. Albin did state that the unit is identical to the unit on the East building, for which the chevron mesh was a whitish grey color. Further confirmation from Ms. Albin stated that there was miscommunication with the Haviland staff on ownership of maintaining these gauges, which is why the preventative maintenance was overdue. This is indicative of the scrubber not properly operating and is a violation of Rule 910, an air-cleaning device shall be installed, maintained, and operated in a satisfactory manner. A Violation Notice will be sent.

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(2)(k), however KD noted some particulate exhausting from the discharge area. Ms. Albin noted that this was due to an issue with the seal at the exhaust point. KD told Ms. Albin that even though this is exhausted back into the in-plant environment, this should be fixed.

Also located in this building is a separate powder mixing and packaging area with an externally vented baghouse used to control particulate. KD was unable to directly view the magnehelic for this baghouse due to Haviland's safety protocols, but KD had one of the workers in the area obtain the pressure drop. The pressure drop was 3.6" WC. 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 emission unit utilizes Rule 290 (a)(iii)(A) for compliance demonstration. Records indicate the highest PM emissions at 0.005 lbs/1,000 pounds of exhaust gas, records are attached.

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. No equipment in this building is permitted, but rather relies solely on permitting exemptions.

In the main area of the building, Haviland has three (3) liquid lines for which Haviland uses Rule 291 to demonstrate compliance. Haviland maintains PTE calculations, as required by Rule 291, showing the uncontrolled PTE for the lines for all air contaminants are below the maximum allowed. The PTE for VOC is the highest at 0.02 tons. There is a wet scrubber associated with those lines. Per Ms. Albin, this is the newest scrubber that Haviland has. At the time of the inspection, the scrubber was running with a pH of 8.36 with a pressure drop of 21.73 inches WC. Per Ms. Albin, this scrubber typically operates at a pH between 7 and 10. Haviland tracks operational parameters for this unit to ensure proper operation. Records indicate the scrubber has been operating at a pH between 6.1 and 9.7. The records also indicate when the pH or conductivity has been either high or low, and action has been taken to correct the issues. According to records, the most recent preventative maintenance was done on January 25, 2018. The unit was checked for leaks, the mist spray area was cleaned out and an inspection of the instruments was conducted. Roof-top observations were made around the discharge area of the scrubber, and no issues were noted.

Also located in the main area of the north building are six (6) large mixing, blending, and storage tanks. All of the tanks were labeled with what they were holding. All six (6) tanks are vented through a common duct which is externally exhausted without any controls. There are also some bulk storage tanks. Per Ms. Albin, Haviland relies on Rule 291 for these tanks. Rule 291 allows for a PTE of 5 tons for VOC, and the uncontrolled PTE for VOC emissions from these tanks is 0.04 tons and 0.48 tons. Adjacent to this area is a powder packaging line, which is exempt from Rule 201 permitting under Rule 284(2)(k).

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(2)(k).

In another room leading back towards 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(2)(e).

Haviland used to have a plastic extrusion and plastic blow molding area located in the north building, however, all of this equipment has since been removed. Haviland is considering moving some equipment from the East Building to the area that was formerly occupied by the extrusion and molding area. KD told Ms. Albin to make sure that if they were moving that equipment, to make sure that if they are moving anything and re-installing it, to

make sure that all of that activity was allowed under AQD's rules.

Miscellaneous

There is a total of eight (8) natural gas boilers located throughout the numerous buildings. Per one of Haviland's maintenance employees the largest boiler is 500,000 BTU/Hr. These boilers are exempt under Rule 282(2)(b)(i). Haviland also has two (2) natural gas emergency generators; one (1) is located outside of the West building and one (1) is located outside of the east building. The largest one is 60 kW (204,728 BTU/Hr). These generators are exempt from Rule 201 permitting under Rule 285(2)(g). Due to age, they do not appear to be to the provisions of the new source performances standards (NSPS) 40 CFR Part 60 Subpart JJJJ for stationary spark ignition internal combustion engines. These generators may, however, be subject to the provisions of 40 CFR Part 63 Subpart ZZZZ for stationary reciprocating internal combustion engines. AQD is not delegated for this regulation.

Currently, there are no parts cleaners located on site.

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 PTI No. 71-17C. A violation notice will be sent for the following:

1. FGWESTPOWDER – Special Condition IV.1 Failure to properly maintain and operate an air-cleaning device
2. EUWESTMFG – Rule 910 - Failure properly maintain and operate an air-cleaning device.

Additionally, Consent Order AQD-2018-01 specifies that Haviland must comply with the provisions of PTI No. 71-17 and any subsequent permit revisions, this is also a violation of the Consent Order.

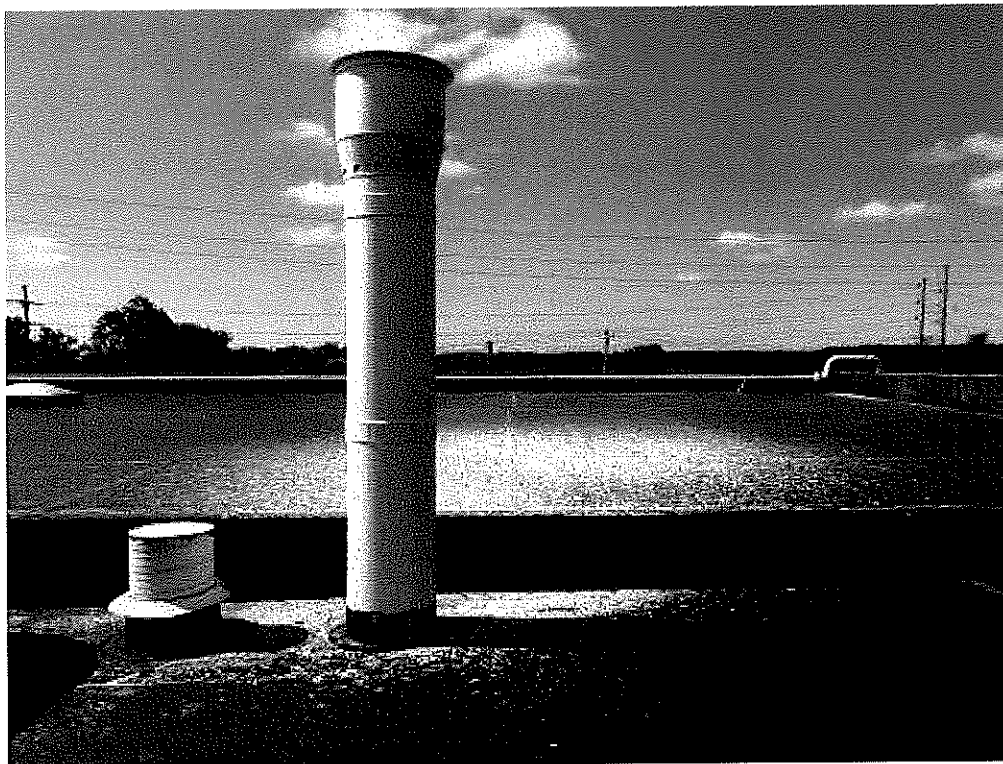


Image 1(FGWESTPOWDER Scrub1) : Scrubber exhaust for FGWESTPOWDER

NAME Kailyn Dule

DATE 9/26/2018

SUPERVISOR 