

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

P079547205

<b>FACILITY:</b> Hastings Fiberglass Products		<b>SRN / ID:</b> P0795
<b>LOCATION:</b> W Green Street, HASTINGS		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> HASTINGS		<b>COUNTY:</b> BARRY
<b>CONTACT:</b> Joe Baumgartner, Engineer		<b>ACTIVITY DATE:</b> 12/04/2018
<b>STAFF:</b> Eric Grinstern	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Unannounced Inspection		
<b>RESOLVED COMPLAINTS:</b>		

**FACILITY DESCRIPTION**

The facility is located within the City of Hastings and manufactures insulated tools and equipment used in the maintenance and repair of high-voltage electric lines (hot line tools). The facility was previously located at 770 Cook Road prior to moving to the current location (1301 W. Green Street) and starting manufacturing in July 2018. Operations include pultrusion, resin mixing, gelcoat booth, open molding, use of adhesives, cleanup activities, sawing operations and fiberglass finishing equipment. Particulate sources have baghouse control.

**REGULATORY OVERVIEW**

The facility's operations are covered by Opt-Out Permit No. 33-17B. The facility has HAP opt-out limits and is therefore not subject to the Reinforced Plastic Composite NESHAP, Subpart WWWW.

**COMPLIANCE EVALUATION**

Prior to entering the facility, a survey of the perimeter was made. No abnormal odors were noted. Observation of the facility showed no visible emissions.

At the facility staff met with David Baum, CEO. Joseph Baumgartner, Engineer, is the is facility's environmental contact, but was not on-site at the time of the inspection. Mr. Baum provided a tour of the facility and follow-up questions and records were handled by Mr. Baumgartner.

Below is an evaluation of the facility's compliance with applicable air quality rules, regulations and permit.

**PTI No. 33-17A****EUCLEANUP**

Includes miscellaneous cleanup activities throughout the facility.

**EMISSION LIMITS/RECORDKEEPING**

Restricts the emission of acetone to 17.0 tons per year.

Compliance with the acetone emission limit is demonstrated through the requirement that the facility maintain records of acetone usage, reclamation and the monthly and 12-month emission rate.

The facility provided records from the start of operation under the permit until current. The highest monthly usage of acetone was 1.43 tons and the yearly rolling total was 3.8 tons. While the facility has only been operating since July 2018, acetone emissions should remain below the 17 tpy limit.

#### **PROCESS/OPERATIONAL RESTRICTIONS**

Requires the proper handling of cleanup materials to minimize the generation of fugitive emissions. No open container or other fugitive emissions from cleanup material was observed during the inspection.

All waste cleanup materials are required to be stored in closed containers and disposed of properly. Staff did not observe anything contrary of this requirement during the inspection.

#### **EUADHESIVE**

Use of adhesives at various product assembly stations.

#### **EMISSION LIMITS/RECORDKEEPING**

Restricts VOC emissions to 2.0 tpy on a 12-month rolling time period.

Compliance with the adhesive emission limit is demonstrated through the requirement that the facility maintain records of adhesive usage, reclamation and the monthly and 12-month emission rate.

The facility provided records from the start of operation under the permit until current. The accumulative total VOC emissions are 0.008 tons. The adhesive has a low reported VOC content (<1% by weight).

During the inspection, staff observed one of the three 2-part epoxy adhesive stations used at the facility.

#### **PROCESS/OPERATIONAL RESTRICTIONS**

Requires the proper handling of adhesive materials to minimize the generation of fugitive emissions. No open container or other fugitive emissions from adhesive material was observed during the inspection.

All waste adhesive materials are required to be stored in closed containers and disposed of properly. Staff did not observe anything contrary of this requirement during the inspection.

#### **FGPULTRUSION**

Four pultrusion molding lines to produce fiberglass tools and products. Operations include resin mixing and sawing of cured product.

#### **EMISSION LIMITS/RECORDKEEPING**

Restricts the emission of VOC to 8.6 tons per year.

Compliance with the VOC emission limit is demonstrated through the requirement that the facility maintain records of resin, additives, catalysts, mold release materials, etc. usage, and monthly and 12-month emission rate.

The facility provided records from the start of operation under the permit until current. Since start-up the facility reports a total of 0.07 tons of VOC emissions.

The facility records appear to combine emissions from FGPULTRUSION and FGGELCOAT. Even with combining the emissions, they are documenting compliance with the limits for FGPULTRUSION. The facility was requested to separate the records documenting the emissions from each flex group.

#### **MATERIAL LIMITS**

The VOC content of resin used in FGPULTRUSION is limited to 35%. Review of the SDSs for the resin showed no resin with a VOC content greater than 35%.

#### **PROCESS/OPERATIONAL RESTRICTIONS**

Requires the proper handling of all VOC and HAP containing materials to minimize the generation of fugitive emissions. No open containers or other fugitive emissions from pultrusion were observed during the inspection.

All waste materials are required to be stored in closed containers and disposed of properly. Staff did not observe anything contrary of this requirement during the inspection.

#### **MONITORING/RECORDKEEPING**

The facility is required to keep monthly records of material usage and emissions associated with FGPULTRUSION.

The facility provided the required records from the startup of the facility until current.

#### **Stack/Vent**

SVPULTRUSIONGEL is required to have a maximum exhaust diameter of 36 inches and a minimum height of 39 feet.

Actual measurements were not made during the inspection, however the stack appeared to be in compliance with the permit.

#### **FGGELCOAT**

Operation consisting EUGELCOATSPRAY, which includes an atomizing chop gun and EUHANDLAYUP, which includes hand layup molding with fiberglass mats, resin and gelcoat. Emissions are routed to SVPULTRUSIONGEL.

The facility did not transfer the chop operations to the new location, therefore they only conduct hand layup.

#### **EMISSION LIMITS/RECORDKEEPING**

Restricts the emission of VOC to 2.5 tons per year.

Compliance with the VOC emission limit is demonstrated through the requirement that the facility maintain records of resin, additives, catalysts, mold release materials, etc. usage, and monthly and 12-month emission rate.

The facility provided records from the start of operation under the permit until current. As previously noted, the facility is reported the combined emissions from FGPULTRUSION and FGGELCOAT. Even with combining the emissions, they are documenting compliance with the limits for FGGELCOAT. Since start-up the facility reports a total of 0.07 tons of VOC emissions.

#### **MATERIAL LIMITS**

The VOC content of resin used in FGGELCOAT is limited to 35%. Review of the SDSs for the resin showed no gelcoat with a VOC content greater than 35%.

#### **PROCESS/OPERATIONAL RESTRICTIONS**

Requires the proper handling of all VOC and HAP containing materials to minimize the generation of fugitive emissions. No open containers or other fugitive emissions from were observed during the inspection.

All spent filters shall be disposed of in a manner to minimize the introduction of air contaminants to the outer air. Staff did not observe anything contrary of this requirement during the inspection.

All waste gelcoat materials are required to be stored in closed containers and disposed of properly. Staff did not observe anything to the contrary of this requirement during the inspection.

#### **DESIGN/EQUIPMENT PARAMETERS**

The permittee is required to install and maintain an exhaust filter in the booth associated with FGGELCOAT. During the inspection the filters were in place and appeared to be in good condition.

#### **MONITORING/RECORDKEEPING**

The facility is required to keep monthly records of material usage and emissions associated with FGGELCOAT.

The facility provided the required records from the startup of the facility until current. As noted earlier, they facility will be separating the emission records for FGGELCOAT from the emissions for FGPULTRUSION.

#### **Stack/Vent**

SVPULTRUSIONGEL is required to have a maximum exhaust diameter of 36 inches and a minimum height of 39 feet.

Actual measurements were not made during the inspection, however the stack appeared to be in compliance with the permit.

**FGDUSTCOLLECTOR**

Operation consisting of finishing equipment (saws, routers, sanders, grinders, dowlers) and the cutting of fiberglass tools and products once they are cured and cooled. Particulate (dust) emissions from both operations are controlled by a common dust collector (50,000 cfm)

**EMISSION LIMITS/RECORDKEEPING**

Restricts the emission of PM to 0.010 lb per 1,000 lbs exhaust gas.

Compliance with the PM emission limit is based on proper operation of the baghouse and monitoring the pressure drop across the baghouse when the unit is exhausting to the atmosphere.

**PROCESS/OPERATIONAL RESTRICTIONS**

The facility is required to install, maintain and operate the baghouse in a satisfactory manner.

The facility is operating a new Dustar baghouse. Observation of the baghouse showed no visible emissions and excellent housekeeping practices.

**DESIGN/EQUIPMENT PARAMETERS**

The facility is required to install and operate a differential pressure gauge. During the inspection the gauge was observed and was operating. The gauge is located on the support leg of the baghouse.

**MONITORING/RECORDKEEPING**

The facility is required to maintain daily records indicating if the baghouse is exhausting to the ambient air. If exhausting to the ambient air, a record of the differential pressure is required to be made at least once per calendar day.

Records for the past 60 days were requested and received. The facility switched to exhausting the baghouse internally on October 17, 2018. The records show a pressure drop of 0.4 inches. The facility stated that the pressure drop has been 0.4 since startup. The facility established a pressure drop range of 1"-6". The facility will need to reevaluate the established range. The facility is only required to records the pressure drop when the unit is operating and exhausting to the ambient air. Staff will recommend that the facility note days that they are not operating to avoid any concerns that a recording was missed.

**Stack/Vent**

SV-DC is required to have a maximum exhaust diameter of 54 inches and a minimum height of 32 feet.

Actual measurements were not made during the inspection, however the stack appeared to be in compliance with the permit. The stack terminates horizontally, as allowed for by the permit.

**FGFACILITY**

Facility-wide HAP and styrene limits.

**EMISSION LIMITS/RECORDKEEPING**

Restricts the emission of each individual HAP to 8.9 tpy and aggregate HAPs to 22.4 tpy. It also limits the facility wide styrene emissions to 6.3 tpy.

Compliance with the emission limits is demonstrated through the requirement that the facility maintain records of material usage, and monthly and 12-month emission rate.

The facility provided records from the start of operation under the permit until current. Since start-up the facility reports the following emissions.

Highest emitted individual HAP: Styrene	0.9468 tons
Aggregate HAP emissions:	0.9629 tons
Styrene	0.9468 tons


**MISCELLANEOUS**

In addition to the above listed processes, the facility has a pole manufacturing process call "prepreg". The prepreg process is not addressed in the PTI. The process involves the rolling of sheets pre-impregnated with resin around a mandrel to form a pole. After the sheets are applied, a nylon coating is added after which the product is placed in a cure oven and cured at 275 degrees. After curing, the product is removed from the mandrel and the nylon is cut off with a water jet.

Based on the limited emissions described by the facility, it is likely that the process will be exempt from the requirement to obtain a permit to install. The facility has their consultant evaluation the process emissions and will follow-up with a plan to address the prepreg.

**Conclusion**

Based on the information and observations made during this inspection, the facility appears to be in compliance with all applicable air quality rules and regulations.

NAME 

DATE 4/25/19

SUPERVISOR 