

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

P115671572

<b>FACILITY:</b> Sparks Belting Company		<b>SRN / ID:</b> P1156
<b>LOCATION:</b> 5005 Kraft Avenue, GRAND RAPIDS		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> GRAND RAPIDS		<b>COUNTY:</b> KENT
<b>CONTACT:</b> Kevin Baney , Manufacturing Engineer		<b>ACTIVITY DATE:</b> 03/27/2024
<b>STAFF:</b> April Lazzaro	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Unannounced, scheduled inspection.		
<b>RESOLVED COMPLAINTS:</b>		

Staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection and met with Kevin Baney, Manufacturing Engineer. Upon arrival to the facility, no odors or visible emissions were observed.

#### FACILITY DESCRIPTION

Sparks Belting Company manufactures conveyor belts for a variety of industries, from food grade belts to steel manufacturing uses. Basically, they either manufacture or purchase premade belting in different widths, lengths and materials then craft the belt into a usable product for each particular customer. This includes adding stitches, urethane cleats and grommets to the product prior to finishing. In one area they manufacture the pulley with motor inside which is specific to the Sparks Belting Company conveyor product line.

The urethane coating and molding process is currently permitted pursuant to Permit to Install 182-20. The permit includes emission unit specific Volatile Organic Compound (VOC) limits as well as facility-wide limits on Hazardous Air Pollutants (HAPs). The facility has accepted restrictions to HAP emissions to below major source levels and as such PTI No. 182-20 is considered an Opt-out permit.

#### COMPLIANCE EVALUATION

I received a facility tour and basic operating principle information of the various process areas within the facility. This location, which the company moved to in 2021, has more square feet of manufacturing space than the old facility did. The permit describes two emission unit operations that are combined into a flexible group (FG-BELTPRODUCTION) for purposes of monitoring and recordkeeping. EU-URETHANE consists of urethane blending and molding used to produce flexible polyurethane resin conveyor belts. Emissions from EU-URETHANE blending/mixing are exhausted out a dedicated stack. The curing is exhausted into the in plant environment. EU-ADHESIVE consists of adhesive operations to bond belts together or to bond fittings to a belt. Emissions from EU-ADHESIVE are exhausted to the in plant environment.

PTI No. 182-20

#### FG-BELTPRODUCTION

The urethane department was not operating at the time of the inspection; however Mr. Baney showed me the machine that is fully enclosed and is used for mixing of the two component system. Each component is held in a separate container, until the machine is used to combine the parts in a heated chamber prior to dispensing the urethane product. The first part consists of 4,4-methylenebis and the second part contains 2,4-toluene diisocyanate. As is typical with a diisocyanate two-part combination, a majority of the diisocyanate emissions are consumed in the reaction as the urethane hardens. We observed the stack at the exterior of the building, which was observed with a gooseneck aperture with the exhaust pointing downward toward the ground. We reviewed the permit which states that the stack must be

discharged vertically upwards, however a rain cap is noted in the PTI conditions. Mr. Baney stated they would immediately correct the stack exhaust, and this fix was completed by the next day. Photos of the correction were sent as confirmation of the change which is acceptable.

The adhesive usage is spread out at various stations throughout the facility. These stations were observed, and each space was clean and well maintained. No uncovered solvent or adhesives were observed, indicating good management of materials.

One self-contained parts washer was observed, that is being maintained by a service that comes routinely to change out the solvent.

The permit limits VOC emissions from FG-BELTPRODUCTION to 9.0 tons per 12-month rolling time period. Emissions records were requested and received for 2022-2024. Reported VOC emissions for the time period of March 2023-February 2024 were 2.67 tons. The information provided indicates compliance with the emission limit. The permit also limits the VOC content of each adhesive to 8.0 lb/gal (minus water) as applied. This permit limit is based on materials identified at the time the application was reviewed. A review of the company's emissions spreadsheet found that it doesn't appear to clearly identify the VOC content by weight of the materials. The spreadsheet contains a line for the company to add information if an adhesive greater than 8.0 lb/gal VOC (minus water) as applied is used in EU-ADHESIVE. During the records review, it was identified that the company had not been updating the spreadsheet, nor assessing materials based on manufacturer's formulation data, and all information was the same as when their consultant created the spreadsheet upon permit issuance. All materials used should be re-evaluated by the facility when working with their consultant, and the spreadsheet updated as needed.

The permit limits VOC emissions from FG-BELTPRODUCTION to 9.0 tons per 12-month rolling time period. Reported VOC emissions through February 2024 are 2.67 tons.

During the records review, AQD staff noted that there was no reported usage of the gun flush product used on the urethane blending and molding operation. This was discussed with facility staff, and it was identified that they had replaced the gun flush product and had been using something different for about two years. The SDS for the material is dated 12/13/2018 and lists one ingredient, methanol at up to 0.2 percent. AQD requested that the facility conduct additional research into the remaining constituents of the product, FlexiSolv™ DBE® esters. This review found that the material contains multiple ingredients known as dibasic esters, as well as methanol which are VOC's and hydrocyanic acid (solution of hydrogen cyanide in water). In addition to the regulated VOC contents, all are also regulated as air toxics in Michigan.

Since the SDS states, "not a hazardous substance or mixture", the company did not conduct an assessment for a Meaningful Change Determination in accordance with Rule 285, nor were they tracking it on the spreadsheet used to calculate emissions for permit compliance. As such, this is a violation of PTI No 182-20, Special Condition VI.2 and 3 for failure to determine VOC content and chemical composition of the material used and for failure to calculate VOC emissions.

A conference call between AQD and facility representatives was held on April 29, 2024, and this information was shared with the company. They intend to retain the assistance of an environmental consultant to evaluate their materials and recordkeeping and determine next steps. Compliance with the VOC limit of 9.0 tons per year is currently unknown. Additional review of compliance with the emission limits in the permit will be conducted following the facilities assessment and response to the Violation Notice.

Following the conference call, an updated SDS was submitted to the AQD, however it still did not contain 100% of the materials found in the product. I provided the company with the

2021 letter where the AQD approved the use of formulation data to calculate emissions and let them know to request the formulation data from the supplier as the SDS is not sufficient.

It is also noted that the recordkeeping spreadsheet that was created by a consultant to align with the new facility permit requirements has a tab for Rule 287(2)(c) adhesive usage. Since the facility and the equipment therein were installed as one concurrent installation of process equipment that required a permit to install, none of the project would meet exemption criteria.

#### FGFACILITY

The permit also contains limits on HAPs of 9.0 tons per 12-month rolling time period for each individual HAP and 22.5 tons for aggregate HAPs. The highest reported individual HAP reported for the 12-month rolling time period ending in February 2024 is trichloroethylene (TCE) at 0.09 tons. In October 2023, the Environmental Protection Agency (EPA) proposed rules to ban the use of TCE in the United States because they found that it presents an unreasonable risk of injury to health.

The new gun cleaning material contains methanol, which is a HAP, however since no record of that products use or emissions is being maintained, actual emissions are unknown.

The reported aggregate HAP emissions for the 12-month rolling time period ending in February 2024 is 0.12 tons.

Since the emissions of methanol as a constituent in the new gun flush solvent are not being maintained and are currently unknown, this is a violation of FGFACILITY Special Condition VI.3, for failure to maintain records of HAP emissions on an individual or aggregate basis. Additional review of compliance with the emission limits in the permit will be conducted following the facilities assessment and response to the Violation Notice.

#### SUMMARY

Sparks Belting Company was in non-compliance at the time of the inspection.

NAME April Lazzaro

DATE 05/01/2024

SUPERVISOR HH