

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

B708542322

FACILITY: SPARKS BELTING CO		SRN / ID: B7085
LOCATION: 3800 STAHL DR SE, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Brian Phillips , Safety Coordinator		ACTIVITY DATE: 11/07/2017
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection and met with Martha Couturier, Vice President of Operations and Rick Nash, Operations Manager. They informed me that the regular contact, Brian Phillips, Safety Coordinator was out of the office this week at a different facility. They agreed to give me a brief facility tour, and I agreed to come back next week to meet with Mr. Phillips regarding permit compliance.

FACILITY DESCRIPTION

Sparks Belting Company manufactures conveyor belts for a variety of industries, from food grade belts to steel manufacturing uses. Basically, they purchase the 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 the Duradrive 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 832-79D. Facility Volatile Organic Compound (VOC) and Hazardous Air Pollutant (HAP) emissions are limited pursuant to Opt-out Permit to Install No. 831-79B.

COMPLIANCE EVALUATION

During the first on-site tour on November 7, 2017 with Ms. Couturier and Mr. Nash, I received a facility tour and basic operating principle information. I informed them that the facility is required to be keeping a daily log of the pressure drop across the permitted absolute filter control system on the EU-URETHANE process pursuant to 832-79D. We met with Al Koopmans who has operated the Urethane Department for 20 years. At the time of the inspection, daily records were not being maintained. However, Mr. Koopmans described in detail that they observe the pressure drop of the filters, and change them out when the gauge reads 0.25" H₂O, which is below the 1.0" H₂O required by the permit. I informed Ms. Couturier and Mr. Nash that this could be considered a compliance concern, but that I would get additional information from Mr. Phillips, and review past inspection reports to see if this was a reoccurring issue. In the meantime, they stated that they would start a formal log to comply.

During my second compliance evaluation on November 16, 2017 I met with Mr. Phillips and Jeff Simpkins, Human Resources Manager to further review facility operations, with a focus on the Urethane Department.

PTI No. 832-79D

EU-URETHANE

In the urethane department, Mr. Koopmans had prepared a belt for processing. The urethane is a 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. However, Sparks had an air monitoring study conducted to ensure employee exposures were within acceptable levels. In the monitoring report, it was determined that it is emitted, but below exposure levels.

The permit limits usage of the thermaclean gun flush to 1,500 pounds per 12-month rolling time period. The 12-month rolling record keeping format needs improvement. Actual usage of the gun flush through September 2017 was 191 pounds, however that is a 10-month total. Actual 12-month usage is ~245 pounds.

The urethane system has a hood and filter installed over top of the unit. However, the filter is no longer an absolute filter as indicated in the permit. A review of the permit application indicates that the company stated that they were installing an absolute filter, so AQD included that as a control device. It is unclear what the purpose of the filter is, because there are no particulates associated with this process and even an absolute filter would not reduce VOC emissions to the atmosphere. The reason the filter was changed was a result of the air monitoring study, which stated that additional air flow was needed to evacuate the urethane fumes from the urethane room. So, to achieve additional air flow, a less restrictive filter was installed. As indicated, neither filter is actually achieving any air pollution benefits. As such, the pressure drop records are not essential for compliance. It is noted that AQD permit staff was consulted in this evaluation who agreed with my conclusion. To rectify the issue, the AQD is requesting that Sparks Belting modify the permit to install to correctly identify the system in place. Initially, it was believed that Rule 290 was a possibility, however the use of Rule 290 is prohibited for this emission unit because the IRSL is less than 0.04 ug/m^3 for 2,4 toluene diisocyanate.


The AQD requests that Sparks Belting submit a permit application by January 31, 2018 to ensure the emission unit is properly permitted. As such, this inspection is considered a partial compliance evaluation. Mr. Phillips stated that they may be replacing the system, but it hasn't been officially decided. The AQD will work with Sparks Belting on the timeline for permit submittal depending on the equipment status.

Opt-out PTI No. 831-79B

The Opt-out PTI contains limits on VOC at 40 tons per 12-month rolling time period. Actual VOC emissions through October 2017 are 3.66 tons. Individual HAP emissions are limited to less than 8.9 tons per 12-month rolling time period. The highest reported HAP emission is from trichloroethylene, at 2.22 tons. Aggregate HAPs are limited to 22.4 tons per 12-month rolling time period. Reported aggregate HAPs are 3.11 tons through October 2017. Information obtained in the spreadsheet (attached) indicates compliance with emission limits and recordkeeping requirements.

SUMMARY

Sparks Belting Company was in compliance at the time of the inspection. Follow-up is necessary as indicated above.

NAME 

DATE 11-29-17

SUPERVISOR 