

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

B708534361

FACILITY: SPARKS BELTING CO		SRN / ID: B7085
LOCATION: 3800 STAHL DR SE, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Caton Don , Safety Manager		ACTIVITY DATE: 04/28/2016
STAFF: David Morgan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

At 10:30 A.M. on April 28, 2016, Air Quality Division staff, Dave Morgan conducted an unannounced scheduled inspection of the Sparks Belting Company located at 3800 Stahl Drive in Grand Rapids. The purpose of the inspection was to determine the facility's compliance with federal and state air pollution rules as well as Permit to Install (PTI) Nos. 831-79B and 832-79D. Don Caton, Safety Manager; Brian Philips, Safety Manager; Terry Hedgen, Plant Manager accompanied AQD staff on the inspection.

DESCRIPTION

Sparks Belting Company manufactures light-weight to medium-weight conveyor belts for various industries. Essentially the company adds cleats, guides, laces, grommets and other accessories to pre-made plastic, rubber, or fabric belt material. The facility's air emission sources consist of polyvinyl chloride (PVC) heat welding, polyurethane application, adhesive application, grinding, sanding and wire brushing. The facility is a synthetic minor source of HAP emissions. The facility currently operates five days per week.

COMPLIANCE ISSUES

PVC Heat Welding:

There are three PVC heat welding machines at the facility - the V-guide, the Cleat press, and the super cleat press. All heat welding machines are used to adhere PVC cleats and/or sidewalls to the PVC backing on the belt. Each unit consists of a small rectangular heater which melts two PVC parts, which are then adhered together. The PVC material is considered a thermoplastic material which means the plastic can be melted together for adhesion. Any smoke or emissions are collected by a vent and discharged to atmosphere through a single stack.

These units operate under the Rule 285(i) exemption. Essentially Rule 285(i) does not distinguish between metal and plastic welding. Plastic welding is considered a standard industrial process.

There is an additional press which uses high frequency waves (with a temperature around 200°F) to bond thermoplastic materials; there are no external emissions. This unit is also considered exempt under Rule 285(i).

Polyurethane Manufacturing Process (PTI No. 832-79D):

PTI No. 832-79D covers the polyurethane manufacturing process under EU-URETHANE. In the polyurethane manufacturing process, molten MOCA (4,4'-methylene-bis (2 chloroaniline)) a curing agent, also known as Curene 442, is pulled into the mixing machine from a melting pot while at the same time a heated liquid polymer is pumped into the mixing unit. The mixed compound is drawn out at a dispenser into 1-gallon plastic pails. Vapors from the dispenser station on the mixer are vented through a 2' x 5' hood then through absolute filters, then through a single stack.

After the polyurethane is mixed it is taken to the belt process tables where cleats are die cast or where it is spread over belts to increase the stiffness and durability of the belt. Any emissions from the polyurethane application are vented to the in-plant environment.

At the time of the inspection, the process was not operating, including the fan for the hood. The company is required to continuously monitor and record daily the pressure drop across the absolute filter control system. There is a pressure gauge mounted in the room and the company is recording the pressure on a daily basis. Records indicate that the filter is operated with a pressure around 0.5 inches of w.g. The permit also requires that an alarm sounds if the pressure exceeds 1.0 inch of w.g.

From April 2015 through March 2016 the company used 183 pounds of Thermaclean gun flush which is below the 1,500 pounds limit in the permit.

Adhesive Application (PTI No. 831-79B):

PTI No. 831-79B covers all adhesive application processes at the facility under EUADHESIVE as well as all facility-wide VOC and HAP emission limits under FGFACILITY. The company uses heat-set adhesives that cure under temperature and pressure and cold-cure adhesives which cure under ambient temperature and pressure. Toluene is used as a thinning agent to the adhesive, and acetone is used to clean the belts. All emissions from the adhesive application are fugitive in nature. There are no specific equipment or process requirements in the permit.

PTI No. 831-79B limits VOC emissions from the facility to 40.0 tons per year based on a 12-month rolling average. According to company records (see attached) VOC emissions from all solvent adhesive operations for April 2015 through March 2016 were less than 3.5 tons which is well below the 40 tpy limit.

Baghouse for material cutting:

A sander, grinder, and wire brush machine controlled by a Torit cartridge dust collector is exempt from permitting under Rule 285(l)(vi). This equipment was not operating at the time of inspection.

Miscellaneous:

VOC and HAP emissions are being recorded on a monthly and 12-month rolling basis. In addition sufficient documentation (Safety Data Sheets) regarding specific materials was available to verify compliance with VOC and HAP emission limits. However, the company needs to update their records to account for the most up-to-date and accurate information. The company will be requested to provide updated records with 30 days from the date of this report.

FGFACILITY:

Based on company records the facility-wide combined HAP emissions are below 2.54 tons which is below the 22.5 ton per year limit in the permit. Facility VOCs were 3.4 tons.

SUMMARY

Sparks Belting Company appears to be in compliance with all applicable requirements. Attached to this report are the company's usage records.

NAME 

DATE 5-20-16

SUPERVISOR 