

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

B371850410

FACILITY: Uniband USA		SRN / ID: B3718
LOCATION: 2555 Oak Industrial Drive NE, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Milco Marchetti, President		ACTIVITY DATE: 09/17/2019
STAFF: David Morgan	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT:		
RESOLVED COMPLAINTS:		

At 9:15 A.M. on September 20, 2019, Air Quality Division (AQD) staff, Dave Morgan, conducted an unannounced inspection of Uniband USA, LLC (Uniband) located at 2555 Oak Industrial Drive in Grand Rapids. The purpose of the inspection was to observe the installation and operation of the facility's newly installed electrostatic filter controls. Accompanying AQD staff on the inspection was Milco Marchetti, the owner.

FACILITY DESCRIPTION

Uniband USA manufactures polyvinylchloride (PVC) conveyor belting in which woven polyester fabric is coated with a PVC compound (or plastisol). The facility primarily consists of a web-coating line with ovens and PVC compound mixing. The equipment at the facility was originally installed in 2010 under permit exemption Rule 290, however, particulate emissions (in the form of oil mist or smoke) had not been quantified or evaluated relative to the Rule 290 thresholds. A Violation Notice was sent in August 2018 and the installation of the electrostatic filter was installed in August 2019 to address the violation. The pollutants from the ovens are primarily an oil-like liquid plasticizer called diisononyl phthalate (DINP) and other additives.

COMPLIANCE EVALUATION

The web coating line consists of three knife-edge spreader stations used to apply varying thicknesses of plastisol to polyester fabric and a corresponding infrared (IR) curing oven after each spreader edge.

The line was not initially operating however, once the line became operational, AQD staff observed white smoke at the outlet of the two IR ovens, which is considered normal operation. Oven exhaust gases are now vented through a singular duct which goes to the newly installed electrostatic filter system consisting of three filter boxes each containing two sets of filters. The filters are a series of metal plates and wires charged with 10,000 volts to collect the DINP which is then drained from the filter boxes as a reusable product. According to Mr. Marchetti, only two of the three filter boxes were working at the time as there is a wiring problem with filter box 1. Even though the filter system was not fully operational, no visible emissions were observed coming from the new exhaust stack.

AQD staff made observations on the roof and verified that the original oven exhausts are now connected to the singular duct. The old fans and goose neck stacks were still there, but Mr. Marchetti indicated that these would be removed and the roof cleaned.

Now that the electrostatic filter is operational, the company intends to conduct testing to determine emission rates and then decide whether to further pursue a Rule 290 demonstration or obtain an air use permit. Although the add on air pollution control equipment appears to have significantly reduced emissions from the process, it is noted that the Rule 201 violation cited in August 2018 will remain unresolved until an acceptable Rule 290 demonstration is made or an air use permit is obtained.

Mixing Room:

There are two vessels used to prepare the PVC material. Essentially PVC powder is mixed with the phthalate oil and additives to create the plastisol. The two vessels are used to mix noncarcinogenic, low vapor pressure materials and are therefore exempt from permitting under Rule 284(2)(i).

SUMMARY

Uniband USA appears to have addressed the oil mist/smoke issue by installing the electrostatic filter system. The company will need to evaluate the permitting status of the equipment in order to resolve the August 2018 violation.

NAME  DATE 9/20/19 SUPERVISOR 