

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

P112662164

FACILITY: Innotec		SRN / ID: P1126
LOCATION: 233 West Washington, ZEELAND		DISTRICT: Grand Rapids
CITY: ZEELAND		COUNTY: OTTAWA
CONTACT: Nic Berkenpas , Automation Division Environmental		ACTIVITY DATE: 03/16/2022
STAFF: Chris Robinson	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: Minor
SUBJECT: FY' 22 onsite inspection to determine compliance with applicable air quality rules and regulations and odor complaint investigation.		
RESOLVED COMPLAINTS: C-22-00506		

On March 16, 2022, AQD staff Chris Robinson (CR) conducted an onsite unannounced inspection of Innotec (SRN P1126) located at 233 West Washington Avenue in Zeeland, Michigan. The purpose of the inspection was to follow up on a February 25, 2022, odor complaint and to determine the facility's compliance status with applicable State and Federal air quality rules and regulations.

The Weather conditions were approximately 38^oF and cloudy with south-southeast winds at approximately 0-5 mph. Prior to the inspection an odor evaluation was conducted that resulted in odors at a level of 0-3/5 on the odor scale depending on the wind direction. With the plume directly upwind, odors were a constant level 3. Although weather conditions were not favorable for official visible emission readings, opacity was approximately 5-10% and white in color. At that time, odor frequency, duration, and intensity had not been met for a Rule 901 violation. Since the inspection, several odor evaluations and an additional complaint investigation have been conducted by CR. AQD Staff Mike Cox conducted an odor complaint along with CR on April 29, 2022, and similar results were observed. Every offsite evaluation/investigation resulted in level 3 odors that were constant with plume direction, demonstrating a frequent and constant duration. On April 7, 2022, CR observed level four (4) odors behind Mill Site apartments (~180-ft north-northeast) and in the Colonial Street cul-de-sac (~230-ft northeast). Based on the continued and frequent presence of the odors, the duration which is constant with plume direction, and the intensity of the odors observed, it is in CR's professional opinion that this represents an unreasonable interference with the comfortable enjoyment of life and property for the nearby residents and other businesses, which constitutes a Rule 901(b) violation. CR informed Mr. Berkenpas on April 8, 2022, by voice mail and Mr. Veldhuijzen on April 11, 2022, by email.

CR met Mr. Tom VanderHent at 233 West Washington and informed him of the purpose behind the visit. Mr. VanderHent introduced CR to Zachary Henley who is the operator of the mill scale/plastic extrusion line. Mr. Henley along with Mr. VanderHent provided pertinent information and a walk-through of the entire facility. After inspecting 233 West Washington CR requested access to the Roosevelt Street locations (Suites 50, 100, and 200). However, Mr. VanderHent preferred that the environmental contact, Nic Berkenpas, accompany CR on those inspections. Mr. Berkenpas could not be reached in

time; therefore, those inspections were conducted on a different day. Since the Roosevelt locations are adjacent to one another but some distance from 233 West Washington they are being considered a separate source and will not be discussed in this report. A separate inspection report will be prepared under that facility's SRN (P1267).

Innotec is a furniture component manufacturing facility that specializes in manufacturing counterweights for desk drawers. Innotec is in a primarily residential area with the nearest residential structure approximately 70 feet south and a school located approximately 330 feet to the northeast.

Innotec currently operates without a Permit to Install (PTI). A permit exemption determination was requested by the previous AQD inspector, which was provided and is discussed below. This location consists of three different cells (Urail, Tube Bending, and Counterweights). The exemption determination did not include any equipment for Tube Bending and Urail. However, CR discussed exemptions during the inspection.

The Urail cell utilizes coiled flat stock steel that is used to manufacture unirails for LED lighting. The flat stock is welded, stamped, and then powder coated. All the equipment used in this line is vented to the in-plant environment. Therefore, the cutting equipment appears to be exempt from Rule 201 permitting requirements per exemption Rule 285(2)(l)(vi)(B), the stamping equipment appears to be 285(2)(l)(i), and Powder coating appears to be exempt per Rule 287(2)(d). The particulate cartridges on the powder coating system are changed as needed and appeared to be in good condition. Welding appears to be exempt per Rule 285(2)(i).

The Tube bending cell is exactly as it sounds. Innotec purchases steel tube stock then cuts and bends it to their specifications. Tube cutting appears to be exempt from Rule 201 permitting requirements per Rule 285(2)(l)(vi)(B) since the exhaust for the process is only emitted to the in-plant environment. Tube bending appears to be exempt per Rule 285(2)(l)(i).

The main processes involved during the counterweight manufacturing includes material handling, drying, blending, and plastic extrusion. During this process mill scale is blended with plastic. Emissions are created during both the drying and extrusion process. Any emissions emitted from extrusion is vented directly through a stack in the roof and released to the ambient air. The dryer consists of a conveyor with ceramic natural gas-fired burners located a few inches directly above the conveyor. Exhaust from this process is captured by a hood then routed to a wet collector for particulate control and then to a scrubber. Exhaust is then released to ambient air through a stack. Innotec manufactured the scrubber to help control odors. It consists of an above ground vertical tank that was modified to contain baffles and layers of steel wool. CR discussed the

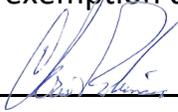
scrubber with AQD's Permit Section who confirmed that the "scrubber" is only acting as a knock-out pot for removing moisture from the exhaust stream. CR discussed this with Mr. Henley, onsite, on 3/21/2022. Mr. Henley confirmed that the "scrubber" contains a lot of water which is evident in the amount of corrosion on the inlet ductwork. Since the facility is not adding water directly to the "scrubber", the excessive water is confirmation that the scrubber is a knock-out pot, which do not control organic emissions or odors. CR discussed this and was informed the facility knew it wasn't a scrubber; they just call it that colloquially. CR discussed scrubbers, specifically packed bed scrubbers and the wiffle ball like packing material they use. The facility was aware of it and had explored adding this type of material to the wet collector, however they were informed by the manufacturer of the wet collector that it would not work for their application. The facility is exploring options for controlling odors and has reached out to their equipment consultant for recommendations. CR has also recommended that they work with an environmental consultant familiar with air quality rules and regulations.

In 2019 Innotec provided an exemption determination for this cell where Rule 282(2)(i) had been claimed for the burner on the dryer, Rules 290(2)(a)(iii)(A-C) and Rules 290(2)(b-d) were claimed for the control equipment and vertical stack, and Rule 286(2)(a-e) were claimed for plastic extrusion. Since plastic is not the only material used in the extrusion line, exemption Rule 286 would not apply. Also, when selecting an exemption, a single exemption must be chosen, not multiple as has been done for Rules 290(2)(b-d) and Rules 286(2)(a-e). To use Rule 290 a full screening level analysis must be conducted and demonstrated, which was not provided. In addition, older safety data sheets on file indicate that the mill scale used contains "oils and greases" and "lubricants and/or oils" but does not identify them. To use Rule 290 all components must be identified, and a screening level analysis conducted. This was explained to Innotec on 4/1/2022 during a phone call with Mr. Berkenpas, Mr. Henley, and Mr. VanderHenst.

Since every component on the counterweight line is dependent on each other, which CR confirmed with the group during the 4/1/2022 phone call, the emission unit is the entire line and only one exemption can be used per emission unit. AQD does not have an exemption for a mill scale/plastic extrusion line specifically. Rule 290 was discussed and may be applicable, however at this time the facility does not have enough information to determine Rule 290 applicability. Installing/operating unpermitted equipment without an exemption is a Rule 201 violation.

This facility also has a maintenance area that consists of several pieces of equipment used for cutting, welding, grinding...etc. such as drill press, saws, and portable welders. Exhaust from this area is only emitted to the in-plant environment, therefore Rule 285(2)(l)(vi)(B) appears to be appropriate for equipment used for cutting, grinding....etc. and Rule 285(2)(i) seems appropriate for welding.

Based on the observations and discussions during the inspection and multiple odor evaluations conducted offsite, Innotec is not in compliance with all applicable air quality rules and regulations, specifically Rule 901. A violation notice will be issued. In addition, Innotec may not be in compliance with Rule 201 which prohibits the construction, reconstruction, relocation, or modification of any process or process equipment without the use of an exemption or a Permit. The facility is being requested to provide a Rule 278(a) exemption demonstration for the Mill Scale/plastic extrusion line.

NAME DATE 4/15/2022SUPERVISOR 