

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

N312458535

FACILITY: AZON USA INC		SRN / ID: N3124
LOCATION: 2204 RAVINE RD, KALAMAZOO		DISTRICT: Kalamazoo
CITY: KALAMAZOO		COUNTY: KALAMAZOO
CONTACT: Steve Beck , Safety and Quality Coordinator		ACTIVITY DATE: 06/08/2021
STAFF: Monica Brothers	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Announced, Scheduled, On-site Inspection		
RESOLVED COMPLAINTS:		

Staff, Monica Brothers, arrived onsite at about 1:00 pm and met with Steve Beck, the Production Manager. We first sat down in his office to discuss the inspection process and to go over any records that might be relevant to the facility's processes. Steve said that this facility began operations in 1977. They currently have about 49 employees who work one shift per day, Monday through Friday. Azon blends and packages components for two-part polyurethane production, which is used in a variety of products, like aluminum insulated windows. They have one boiler at the facility that is used to heat a jacketed tank. They do not have any parts washers or emergency generators and do not have any air quality permits. After our initial discussion, we conducted the walk-through portion of the inspection.

Facility Walk-through:

There is a large open production area in the same building as the offices that is used for machining, welding, and producing extrusion equipment. These processes are considered exempt under Rule 285(2)(I)(vi) for machining and Rule 285(2)(i) for welding. This area also contains the small coating booth and electric ovens for curing plastic parts and curing powder-coating. There are four electric curing ovens for plastic parts and one for powder-coat curing. The coating booth mostly uses powder-coating, however, they do sometimes use it for solvent-based coating. Steve sent me their solvent-based paint and thinner usage for 2020, and they only used about 115 gallons for the whole year. Therefore, this coating booth can be considered exempt under Rule 287(2)(c). The powder-coating process and cure oven can be considered exempt under Rule 287 (d), which is the exemption for powder-coating operations that were installed prior to 2016.

In Building D, there are four main storage tanks. The ethylene glycol tank is 4,777 gallons, the Diethylene glycol tank is 4,444 gallons, the Polyol G 85-36 is 6,108 gallons, and the Dipropylene glycol is 4,333 gallons. There is also a 4,170 gallon storage tank for Diphenylmethane Diisocyanate (MDI) that is connected to a 55-gallon carbon drum. Steve said that the carbon gets changed about once per year. There are also four additional storage tanks for extra storage if needed. These storage tanks are contained within a separate room that is heated using electric baseboard heating. Their holding capacities are 5,500 gallons, 4,500 gallons, 5,400 gallons, and 3,900 gallons. There are also six blending tanks in this building, with capacities of 2,872 gallons, 731 gallons, 574 gallons, 940 gallons, 5,640 gallons, and 5,640 gallons. Steve said that these tanks are completely enclosed and never get cleaned out because only compatible materials are used in each blending tank.

In Building E there are about four reactor tanks. Steve said that they react isocyanate-based materials in the tanks and that they do not use any solvent-based materials in them. When they need to be cleaned out, they call an outside company that uses a water jet blast head with water

to clean the vessels. The water is immediately sucked out of the tanks and captured into a vacuum truck and hauled off-site as a non-hazardous waste. There is also one natural gas boiler in this building. It is a 2.4 MMTBU/hr Fulton (model FT 02400) boiler that was manufactured in 1999. It is used to heat a jacketed tank. This boiler is considered exempt under Rule 282(2)(b)(i).

In Building F there is some equipment for research and development purposes. There is some machining equipment and a baghouse that vents internally. Research and development processes can be considered exempt under Rule 283.

Recordkeeping:

Steve was able to provide purchase records and Safety Data Sheets for the materials used on-site. However, the facility could not provide any emissions calculations or exemption analyses to show that their storage, mixing, reacting, and filling processes were exempt from permitting. The facility will either need to provide documentation that those processes meet an exemption or apply for a Permit to Install from the Air Quality Division. A Violation Notice will be sent.

I thanked Steve for his time and left the facility at about 2:30 pm.

NAME Monica Brothers

DATE 9-22-2021

SUPERVISOR RAJ 9/23/21