

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

N728261626

FACILITY: Systex Products Corporation		SRN / ID: N7282
LOCATION: 70 BUCKNER DR., BATTLE CREEK		DISTRICT: Kalamazoo
CITY: BATTLE CREEK		COUNTY: CALHOUN
CONTACT: John Maurer , Vice President of Operations		ACTIVITY DATE: 01/13/2022
STAFF: Amanda Chapel	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT:		
RESOLVED COMPLAINTS:		

On Thursday January 13, 2022 Amanda Chapel (staff) arrived at Systex Products Corporation to conduct an unannounced air quality inspection of the facility. The facility was last inspected by the AQD on November 12, 2009 and was determined to be in compliance at the time. The facility has two locations, 300 Buckner Rd and 70 Buckner Rd, Battle Creek, Calhoun County Michigan. The purpose of the inspection was to determine compliance with applicable state and federal air quality regulations.

I arrived on site and used the phone in the lobby to inform the receptionist that I was from the Department of Environment, Great Lakes, and Energy (EGLE) to perform an unannounced air quality inspection. She directed me to Mr. Mekonnen Beraki, EHS Coordinator who retrieved Mr. John Maurer, VP of Operations to join us in a conference room.

I explained my intent to complete an inspection and review any necessary associated records to show compliance with the applicable air quality regulations. I also informed them that the facility did not have an active permit to install (PTI) and operated under exemptions, according to the last inspection report. Mr. Maurer informed me that the remaining shares of Pyper Products were purchased by Systex in 2009 and that Pyper Products has been part of Systex since then. A sale contract was located online to confirm the sale.

The facility operates approximately 90 plastic injection molding machines between the two facilities. There are 17 located at the 70 Buckner street location and the rest are located at the main Systex facility. This process is exempt under Rule 286(2)(b) for plastic injection, compression, and transfer molding equipment and associated plastic resin handling, storage, and drying. They have approximately 220 employees and operate Monday to Friday 24/7.

The facility was asked to provide plastic usage for the previous month which was received in an email. They use approximately 20 different types of plastics at the two facilities. The machines range from 150 tons to 950 tons of pressure exerted on the plastic during molding. Based on records provided, September 2021 appeared to be representative of a month where higher volume of purchasing occurred. During this month, the facility purchased 990,800 pounds of plastic resin. The facility purchased about 13,600,000 pounds of plastic resin in 2021. Using the AQD emission factor of 30.7 pounds of VOC per million pounds of plastic, this is about 417.5 pounds of VOC per year. No colorant is used at the facility.

Mr. Beraki and Mr. Maurer walked me around the facility which was operational at the time of the inspection. There are 7 silos located on site to store plastic resin pellets. The resin is taken from the silos using an internal vacuum system and sent to the appropriate injection machine. The plastic is melted, molded, and cooled. Some assembly might be required for some of the

parts which are then packaged and shipped out at the facility. Most parts are shipped directly to Denso or some are shipped directly to the automotive manufacturer.

Some of the plastic used on site is polypropylene which may be glass filled. Some nylon is also used. There are about 8 dryers on site used to help dry the plastic pellets before they enter the machines. Three are used for drying and the rest used as hoppers for plastic. Some of the machines are also capable of rubber injection as well if plastic and rubber parts need to be made together. Deliveries of plastic happen between 2 times a week to once a month, depending on the type of plastic. The silos are vented externally with a screen to prevent dust. The area appears clean and free of any debris. No complaints have been received about the facility.

There are approximately 8 grinders on site, 1 large central grinder and 6-7 small grinders located next to machines. The large grinder takes scrap plastic from the machines, grinds it into small pellets, and the plastic is recycled in the facility. The large grinder is controlled by an internal dust collector. This process is exempt under Rule 285(2)(l)(vi)(B) for grinding of plastic released into the general in-plant environment. There was also waste plastic from machines stored which are sold to another company for recycling purposes. The small grinders are automated and located next to machines.

The facility makes hundreds of different plastic parts for cars including fans and shrouds for radiators. The shrouds are made of plastic that contains 25% fiberglass which is already in the plastic pellets when they are received. Some of these parts are “welded” or fused together with an internally vented machine that lightly melts the edges of the part which are then placed together and allowed to cool. This is exempt under Rule 286(2)(f).

The facility has two cold cleaners at the 300 Buckner Rd location and one cold cleaner at the 70 Buckner Rd location. The cold cleaners are identical, and all had the lids closed. According to the label, the cold cleaners contain Armakleen 4 in 1 cleaner and are serviced by Safety Kleen. The SDS was provided by the facility. The cold cleaners are exempt under Rule 281(2)(h).

The facility also uses Economy Silicone 50 aerosol mold release. This mold release are in aerosol cans. The purchase records were requested, and the facility purchased and used 850 cans of the mold release in 2021. According to the SDS, there are two VOCs in the formulation, Cyclopentane and N-Hexane totaling about 5-10% of the formulation. Based on the size of the cans and the formulation, this process emits approximately 50 pounds of VOC per year. These emissions can be added to the approximate VOC emissions created by the plastic injection process and should be considered exempt under the plastic injection exemption, Rule 286(2)(b).

There are no emergency engines on site and there is one small office boiler, located on the roof, used for office heat. This was not evaluated during the inspection.

Mr. Beraki and Mr. Maurer also accompanied me to the 70 Bucker Rd. location to observe the operations at this location. About half the machines were in operation during this walkthrough. The process at this location is identical to the process at the 300 Buckner Rd location. Like the larger location, there are about 19 plastic injection machines on site, 6 dryers of which 2 are used, 1 large silo for plastic pellets, and 1 central grinder. All these processes are exempt under the previously identified rules.

I thanked Mr. Beraki and Mr. Maurer for walking me around both facilities. Based on the provided records and SDS, the facility appears to be in compliance with all exemptions and applicable state and federal air quality regulations.

NAME *Amber Cliple*

DATE 1/26/22

SUPERVISOR *Rex A. Lane*