

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

N586241298

FACILITY: INDUSTRIAL TECTONICS		SRN / ID: N5862
LOCATION: 7222 W HURON RIVER DR, DEXTER		DISTRICT: Jackson
CITY: DEXTER		COUNTY: WASHTENAW
CONTACT:		ACTIVITY DATE: 08/29/2017
STAFF: Brian Carley	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: Unannounced scheduled inspection.		
RESOLVED COMPLAINTS:		

Facility Contact: Rex Heckaman, Manufacturing Process Engineer II  
Phone: 734-426-4681 Ext. 113  
Email: [rheckaman@kaydon.com](mailto:rheckaman@kaydon.com)

Zack Durham and I arrived at the facility and met with Rex Heckaman, Manufacturing Process Engineer II. They manufacture specialty high-precision balls and other spherical products using a wide range of materials in sizes ranging from 0.5 mm to 14" in diameter for applications in the aerospace, automotive, industrial, medical, nuclear, and oil & gas industries. The material is rough cut to size and shape and then is ground down to size and shape using a process called lapping. Lapping is where they run the balls between two metal plates with an abrasive mixture to smooth and polish the balls.

In 2005, it was determined that this facility was exempt from needing a permit to install per Rule 290. The reason that they operate under this exemption is that they use hydrochloric acid (HCl) and nitric acid (HNO<sub>3</sub>) to clean certain specialty balls based on customer needs. The acids are used in one room under a hood that is vented out to the atmosphere. The used acid that remains is diluted and run through limestone filled crocks before being discharged as effluent. Rex produced records of HCl and HNO<sub>3</sub> that the facility has bought in recent years. In 2016 they purchased a total of 445.6 lbs of HNO<sub>3</sub> and HCl and in 2017 they purchased 69.2 lbs in the first quarter and 107.6 lbs in the second quarter of HNO<sub>3</sub> and HCl. Even though only a small portion is exhausted through the hood and the remaining is treated and discharged through their drains, using the total weight of these acids that they bought still has them well under the limits of Rule 290(2)(A)(ii).

Rex then offered to show Zack and me the process including the room where the acids are used. As we were walking through the facility I saw that they also had many parts cleaners on the premises. The parts cleaners use a solvent base cleaning solution and the solvents are bought from and disposed through Safety-Kleen. There were instructions posted on the front of the parts cleaners but used a small font which could be larger to make it more prominent. Five of the ten parts cleaners had their lid open with no one using it at that time. These open parts cleaners were in only one section of the plant while the other section of the plant had closed parts cleaners. I reminded Rex that they need to have their personnel close the lid when they are not using the parts cleaners and he said that he would be talking with the supervisor of that section and have more training on the proper use of the parts cleaners. In the room with the acids there were two hoods in the room to capture the emissions, neither of which was operating at the time of the inspection since nothing was being cleaned at the time of the inspection. The hood over the bench was about 3 feet long and about 2 feet deep. They use this when they have a small batch that they need to be cleaned. They have a small line that they use for the larger batches with a hood that was about 3 feet by 3 feet over the acid portion of the line. The containers containing the acids were closed at the time of the inspection.

When we returned to his office, I gave Rex the parts cleaner stickers that he could use to emphasize the proper use of the parts cleaners. With Rex saying that he work to fix this minor issue, I determined that this facility is in compliance. We thanked Rex for his time and left.

NAME Brian Carley DATE 8/30/17 SUPERVISOR 