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

N664764700

FACILITY: Cutting Edge Abrasives, LLC		**SRN / ID:** N6647
LOCATION: 4455 Airwest Dr. SW, KENTWOOD		**DISTRICT:** Grand Rapids
CITY: KENTWOOD		**COUNTY:** KENT
CONTACT: Tim Dyer , Owner		**ACTIVITY DATE:** 09/21/2022
STAFF: April Lazzaro	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:**
SUBJECT: Unannounced inspection in response to odor complaint.		
RESOLVED COMPLAINTS: C-22-01709		

Staff, April Lazzaro arrived at the facility shortly after 8:00 AM to conduct an unannounced inspection as a result of an odor complaint. The complaint came through the online reporting system and indicated that there is a very strong toxic odor to neighboring businesses, especially in the morning. Upon arrival, no odors were noted. I was met by Larry Cumming who escorted me around the facility during the inspection.

FACILITY DESCRIPTION

Cutting Edge Abrasives, LLC conducts abrasive tumbling and also manufactures synthetic vibratory media using a variety of styrene resin and abrasive blends.

This facility has Permit to Install No. 205-99 for two small burn-off ovens that have been removed from the facility. A request to void the permit has been sent to Lansing.

COMPLIANCE EVALUATION

In the main plant area are five tumbling/rotary blasters, which use a variety of media to blast the surface of metal parts. There are also two vertical rack/rotary blasters. These are controlled by a baghouse, which has a pre-cleaner/knock-out box. The baghouse was not operating at the time of the inspection, so the operational status could not be verified. However, while rusty, the unit appeared sound and no significant particles or debris was noted in the area. Mr. Cumming stated that they conducted some larger repairs a couple years ago and conduct maintenance activities as needed. A full evaluation will be made when the unit is running during a future inspection, however the unit if properly operating is exempt from permitting pursuant to Rule 285(2)(l)(vi)(C).

In the back of the plant is a styrene resin abrasive manufacturing process. Styrene resin is mixed with an abrasive material in tanks and poured and skimmed by hand into molds to make the abrasive vibratory tumbling media. According to the company website, vibratory tumbling media is a pre-formed abrasive which is used to deburr, burnish, descale, clean and polish. There were two large tables where the molds were laid out, ready for the resin to be poured. After the resin hardens the media is removed from the molds and placed into bins. They then are run through a vibratory tub grinder to remove any imperfections or small particles. Following that they are repackaged for end use sales. There were two vibratory tub grinders present, however only one is currently used.

There were three raised styrene mixture tanks observed that were approximately 500-1,000 gallons in size. The labels on the tanks read, AFHC green, AFAC/gravilite and

AFPP yellow. Approximately four 55-gallon drums of styrene resin are used daily in this process. The workers put the drums of resin on a dolly and lift them one at a time using a forklift to the top of the tanks and dispense it in. They also dispense the abrasive media into the tank from a sack. There are various types of abrasive media used, and I observed bags of silica in use. The color of the final product denotes the type of abrasive used and the abrasive media comes in 15 different sizes and a variety of shapes.

Ventilation in the area consisted of two or three built in wall fans, one man door and one vehicle sized garage style door. Both the man door and garage door were open to ventilate the area, however the fumes were very strong. I expressed my concern for employee safety due to exposure to styrene and the silica dust. One employee had a medical grade mask on, and the other had none, and I asked if they had better respiratory protection available and I was told that they do. I also observed a floor to ceiling hood/booth in an adjacent room. It was once used for ventilation during product mixing, but now is only used to help ventilate fumes from the back of the building during the winter months when it is cold outside, and the man door and garage doors are kept closed.

The drum of resin I observed had a label of UN1866 on it, and I also observed gallon jugs of a product labeled Cadox D-50. According to the Safety Data Sheets found online, UN1866 is a composite matrix resin containing styrene monomer and vinyl ester resin. The Cadox D-50 is a multipurpose catalyst for the room temperature cure of polyester resins and contains methyl ethyl ketone peroxide. All ingredients listed are toxic air contaminants regulated by the Air Quality Division. Styrene is also a hazardous air pollutant and volatile organic compound.

Mr. Cumming told me that the owner of the company was Tim Dyer, and I asked him to let Mr. Dyer know I had been here and to ask him to call me to discuss the inspection and next steps. By mid-afternoon, I had not heard from Mr. Dyer so I called the main number for a related/parent company in Byron Center called Surface Prep and asked for him. I was told he was at a different office and was transferred. Mr. Dyer answered and upon introduction indicated he had not yet heard from Mr. Cumming about the morning's compliance inspection. I explained the process and asked if he is keeping emissions records for the styrene resin process and was told they are not, and he doesn't know what the emissions are. We also discussed worker exposure and safety. He mentioned that at his old location in Kalamazoo they had air testing done and it was fine, but it was also a bigger space.

I informed Mr. Dyer that a Violation Notice would be sent because there are no records at this time, and AQD is unable to determine whether the styrene resin abrasive process needs a permit. We discussed the Environmental Assistance Center (EAC) and the Small Business Assistance Program staff that can help him. We also discussed the Michigan Occupational Safety and Health Administration (MIOSHA) Consultative Education and Training (CET) program. Mr. Dyer indicated that this business has approximately 5 employees and is not owned by Surface Prep.

Following the phone call, I emailed the information to Mr. Dyer including the EAC contact name and number and links to both the MIOSHA CET program and the new silica exposure regulations. I then called Mr. Dyer to make sure he received my email, per his request and we discussed the Violation Notice further. I clarified that the letter would indicate that the violation is for failure to obtain a Permit to Install,

because at this time it is unknown whether or not a permit is needed. I further explained the need to respond with a correction plan within 21 days of the date of the letter.

ODOR COMPLAINT

The styrene resin process is the likely cause of the odor complaint, and due to the open doors and fans, the odors are emitted at ground level and not well dispersed into the ambient air. The complainant has been notified that no odors were smelled off site on the morning of the inspection, but that if they smell odors in the future to please reach out.

CONCLUSION

Cutting Edge Abrasives, LLC was in non-compliance at the time of the inspection.

NAME April Lazzaro DATE 09/22/2022 SUPERVISOR HH