

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

N095963841

FACILITY: Global Integrated Flooring Solutions	SRN / ID: N0959
LOCATION: 3700 32ND ST SE, GRAND RAPIDS	DISTRICT: Grand Rapids
CITY: GRAND RAPIDS	COUNTY: KENT
CONTACT: Matthew Cooper , Maintenance Manager	ACTIVITY DATE: 07/21/2022
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance
SUBJECT: Unannounced, scheduled inspection.	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

Air Quality Division staff April Lazzaro conducted an unannounced scheduled inspection of Global Integrated Flooring Solutions (Global IFS), formerly Haworth Inc., located at 3700 32nd Street in Kentwood. The purpose of the inspection was to determine the facility's compliance with state and federal air pollution regulations. Accompanying staff on the inspection was Matthew Cooper, Maintenance Manager. We also met with Tammy Bendick, Director of Human Resources and Jay Hildreth, Chief Operating Officer.

FACILITY DESCRIPTION

This facility manufactures access floor panels for a variety of specialty uses. The panels are made with a steel frame, a hard core of concrete with a covering such as vinyl, micarta (Formica[®]), or carpet. The facility consists of metal fabrication equipment (i.e. welders, cutting machines, etc), a concrete batch plant used to make concrete cores, various grinding machines, roll coaters and contact adhesive processes.

COMPLIANCE EVALUATION

TecCrete Process:

In this process, 24"x24"x1.5" metal frames are sprayed with a mold release oil, then placed on a conveyor. Then concrete is poured into the metal frame from a concrete batch plant to form the core. The mixing of Portland cement, gypsum, and aggregate occurs in the concrete batch process which is controlled by a baghouse. Associated aggregate and cement storage bins are located in the plant and are vented into the plant with bin vent filters. This process is exempt per Rule 284(2)(k).

A mineral spirits based release agent is wiped into the molds prior to concrete pouring. Records maintained by the facility indicate that 713.8 gallons were used in 2021. This product appears to contain approximately 2.0 lb volatile organic compound (VOC)/gallon and emissions are less than 200 lbs/month. This usage is exempt per Rule 290. Global IFS will maintain records of the release agent. Once poured, the concrete panel is slightly air dried and then sent through a diamond drum grinder which shapes and

finishes the top surface of the concrete panels. The grinder is controlled by one of two baghouses located inside the building but is vented to the ambient air. All collected concrete material is then conveyed pneumatically to an additional baghouse located outside the plant. This baghouse was installed under Rule 285(2)(f). The haul-away bin that collects excess particulate is changed frequently. Recent modifications had been made to better contain dust as it is dropped into the haul-away bin.

After the grinders, the panels are dried in a 14.2 MMBtu natural gas-fired oven around 180°F for approximately 8-10 hours. The oven is exempt under Rule 282(2)(b)(i).

TecFlor Process:

In this process, panels are coated with an adhesive so that a cover, such as carpet, vinyl tile, or micarta, can be adhered to the panel. Either a hot melt polyurethane reactive adhesive roll coater is used or a sprayed on contact adhesive (water or solvent based) is used. Most parts use the hot melt adhesive which is exempt under Rule 287(2)(i). Mr. Cooper and I observed glue inside the walls behind where the filters should have been, and we also observed the exhaust stack which is horizontally vented to the ambient air. I observed that the inside of the stack had visible adhesive materials, and I informed him that the booth cannot be operated without filters. Following the inspection, Mr. Cooper emailed and said the booth is operated with filters, but that they are disposed of at the end of each use. Based on the presence of adhesive inside the stack, it was clear that the booth was used at some point without filters, and I informed Mr. Cooper that if the booth is observed operating with no filter, a Violation Notice would be issued. It is noted that during the previous AQD inspection, no filters were observed, and the booth was not operating.

The company has provided records that indicate compliance with the Rule 287(2)(c) exemption. (see attached) Approximately 53 total gallons of contact adhesive was used in 2021 and 143 gallons of spray adhesive were used. Each product is applied in a separate emission unit, and records demonstrate compliance with the 200 gallon per month limit established by the Rule 287(2)(c) exemption.

Also under the TecFlor process there is one small micarta grinder used to trim laminate. The grinder, is controlled by a baghouse and vented into the plant which is exempt under Rule 285(2)(l)(vi)(C).

Metal Fabrication Equipment:

The company has various metal fabricating equipment which is exempt under Rule 285(2)(l)(vi)(B). A pre-inspection review of the aerial perspective of the facility showed black staining on the roof around the exhaust of the

larger welding unit. Mr. Cooper and I accessed the roof to investigate the cause. We found that at some time in the past, grinding/buffing paste had accumulated onto the roof from the stack. Due to the fact that the paste had settled underneath the rocks that covered the roof, it was determined that the release was no longer ongoing, and it was not becoming an air contaminant. However, I did recommend that the company clean up the material and observe the area routinely. Mr. Cooper verbally committed to doing so.

I also suggested to Global IFS staff that they conduct a facility-wide assessment of criteria pollutant and hazardous air pollutant (HAP) emissions. I used the SDS's obtained, along with the restrictions contained in the permit exemptions and determined at a glance that this is a true minor source of emissions. It is still recommended that a formal evaluation by an experienced air quality professional be conducted.

SUMMARY

Global IFS was in compliance at the time of the inspection.

NAME April Lazzaro

DATE 08/12/2022

SUPERVISOR HH