

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

N356957763

FACILITY: Flexfab Horizons International		SRN / ID: N3569
LOCATION: 102 COOK RD, HASTINGS		DISTRICT: Grand Rapids
CITY: HASTINGS		COUNTY: BARRY
CONTACT: Patrick Lynch , Environmental Health and Safety Specialist		ACTIVITY DATE: 04/20/2021
STAFF: Eric Grinstern	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: On-site compliance inspection		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

Flexfab Horizons International (Flexfab Cook Road) manufactures silicone-based products, similar to the M-43 facility. The primary product produced at the facility is extruded hose, which is used as coolant hose, as well as other uses. In addition to extruders, the facility contains a small mill, autoclaves used in the forming of silicone parts, washing machines, parts washers and curing ovens.

At the facility, AQD staff met Patrick Lynch, Environmental Health and Safety Specialist. Mr. Lynch accompanied staff on a tour of the facility. This was an announced inspection to be able to coordinate COVID requirements.

Prior to starting the day EG completed both a State of Michigan and EGLE COVID screening questionnaire. Prior to the inspecting the Cook Road Facility, an inspection of the M-43 facility was conducted, a facility COVID health questionnaire was completed at that time and provided to Mr. Lynch. Face masks were utilized, and social distancing was practiced.

REGULATORY OVERVIEW

The facility currently does not hold any air use permits.

Mr. Lynch stated that the facility has completed a potential to emit evaluation for their facilities. Mr. Lynch provided a table summarizing the plant's air emitting processes along with the permitting exemptions.

Summary of exempt processes:

Ovens - The facility has three natural gas-fired ovens used for curing. The facility utilizes Rule 282 (2)(b)(i) to exempt the ovens from permitting.

Rubber Curing – The curing of the silicone rubber releases a small amount of formaldehyde during the curing process. The facility utilizes Rule 290 to exempt the curing emissions from permitting.

Pad Printing – The facility utilizes ink to label products. Exempted under Rule 285(2)(l)(ix)

Generator – Emergency natural gas generator. Exempted under Rule 285(2)(g)

Cold Cleaners – (4) Safety Kleen solvent cold cleaners. Exempted under Rule 281(2)(h)

Air Makeup units – Natural gas fired – Exempted under Rule 282(2)(b)(i)

Clean up solvent – Various solvent usage for cleaning – Exempted under Rule 290

Release agent and adhesives – Release agent for lathes and adhesives – Exempted under Rule 287 (2)(c)

Additionally, the small mill used for silicone does not use fillers and does not require venting. No emissions would be expected from the mill. The (5) autoclaves appear that they would be exempt from permitting under Rule 282(2)(b)(1).

COMPLIANCE EVALUATION

Silicone Extrusion

The extrusion processes are exempt from permitting under Rule 286(2)(a).

Silicone Curing

A small amount of formaldehyde is emitted during the silicone heat curing process. The facility utilizes Rule 290 to exempt the emissions from permitting. The facility takes a conservative approach to account for emissions, instead of documenting that each of the lines emits less than the allow 20 pounds per month, the facility documents that the entire facility emits less than 20 pounds of formaldehyde a month. The facility supplied records showing a monthly high emission rate of 7.287 pounds of formaldehyde.

Release Agents, Adhesive, paint usage

The facility utilizes various compounds as release agents to coat the lathes, as well as adhesives, catalysts, and paints. All of these are classified as coatings, as was documented in previous inspections. The facility utilizes Rule 287(2)(c) to exempt the use of the coatings. Rule 287(2)(c) allows for a usage of a maximum of 200 gallons of coatings per month, per coating line. The facility takes a conservative approach to account for usage, instead of tracking coating usage for each of the numerous lines, the facility demonstrates that the entire facility is below the 200 gallons of coating usage limit on a monthly basis. The facility provided records showing that they had an average usage of 28 gallons per month at the Cook Road Facility.

Solvent Usage

The facility utilizes solvent for cleanup and as a cutting agent throughout the facility. The facility utilizes Rule 290 to exempt the solvent usage from permitting. Once again, the facility takes a conservative approach to accounting for solvent emissions. The facility combines all of the solvent usage emissions from the Cook Road Facility and M-43 Facility and then attributes the emissions to three departments (Department 204, Department 300 and Department 333) which are located at the M-43 Facility. The facility assumes equal emissions from the three departments. The facility provided records demonstrating that the PTE, based on 2020 usage, was below the allowed 1,000 pound per month emission limit in each of the departments. The facility records show a maximum PTE of 425 pounds of emissions per Department. The facility provided the PTE demonstration to avoid having to calculate emissions on a monthly basis.

Miscellaneous

Additional processes observed included washing units that utilized water and non-VOC detergents.

CONCLUSION

Based on the information obtained and observations made during this inspection, the facility appears to be in compliance with all applicable air quality rules and regulations at this time.

NAME Eric GrinsternDATE 5/11/2021SUPERVISOR HH