

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

A426562586

FACILITY: MICHIGAN SPRING AND STAMPING OF MUSKEGON, LLC		SRN / ID: A4265
LOCATION: 2700 WICKHAM DR, MUSKEGON		DISTRICT: Grand Rapids
CITY: MUSKEGON		COUNTY: MUSKEGON
CONTACT: Kim Tjapkes , Environmental Coordinator		ACTIVITY DATE: 03/23/2022
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: On site, unannounced inspection to assess compliance with Air Quality Regulations		
RESOLVED COMPLAINTS:		

Introduction

On March 23, 2022, at approximately 9:00 AM State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division (AQD) staff member Scott Evans (SE) conducted an on-site, unannounced inspection at the Michigan Spring and Stamping facility located at 2700 Wickham Dr. in Muskegon, Michigan, to assess compliance with air quality regulations. This unannounced inspection consisted of an on-site component where all process equipment within the facility was observed and a remote review of records provided by the facility.

Michigan Spring and Stamping is a manufacturer of components such as springs, coils, and stamped metal components. The facility primarily conducts machining operations on metals such as stainless steel, and nickel to produce the manufactured components. These parts are sometimes cleaned with various chemicals, heat treated, and painted as is required by the specific product being made. The facility has one active permit: Permit to Install (PTI) No. 731-83.

Upon arrival at the facility, SE observed no odors or visible emissions during an initial viewing of the perimeter of the facility. Upon entering the facility, SE was greeted by Kim Tjapkes (KT). After a brief discussion of the purpose of the visit, a walking inspection of the facility was conducted in which machining, heat treating, dip treating, component painting, paint storage, and maintenance rooms were observed. Records were viewed briefly on site to confirm completeness and compliance with retention requirements. Copies of these records were requested and provided remotely on March 25, 2022 for detailed review and analysis.

PTI No. 731-83

This permit was first applied for in November of 1983 and approved in February of 1984. It contains two Special Conditions (SC) that apply to the finishing system within the manufacturing process.

SC10 limits visible emissions from the dip finishing system to less than 20% opacity over a 6-minute average. This process includes dips into hot oil, rinse, Zinc phosphate, nitric acid, and degreaser baths. During the inspection there were minimal observed visible emissions equal to or less than 5% at the very surface of a few of the dip tanks. All tanks are serviced by ventilation hoods that capture vapors from the liquid surfaces in a closed loop filter system. The facility reported no incidents of opacity exceedances since the last inspection. The facility appears to be in compliance with this condition.

SC11 states that the facility cannot substitute raw materials outlined in the original permit application with new materials that will significantly increase air emissions without prior approval from the AQD. This process appears to operate with the same materials as originally permitted such

as nitric acid and zinc phosphate, which demonstrates compliance with the condition. KT was advised that changes to the process may require reevaluation by the AQD to assess necessity of permit modifications or new permits.

Exemptions

The facility utilizes various machining processes such as stamping, cutting, and grinding of materials. These pieces of equipment all either vent to a dust collection system or to the plant interior. The dust collector was not active at the time of the inspection. KT discussed the possibility of replacing the system in the future. SE provided KT a copy of the exemption handbook so that assessments could be made about whether any changes would be covered under exemptions or not. These processes appear to be exempt from air permitting requirements under Rule 285(2)(l)(vi) at this time.

The facility utilizes various ovens in the manufacturing process to harden some of the manufactured components. These ovens are either electric or have a heat input of less than 10 mmBtu/hr. These ovens appear to be exempt from permitting requirements by Rule 282(2)(a)(i).

Use of paint and other coatings within the facility as part of the manufacturing process is tracked by the facility. Records for the time period of March 2021 through February 2022 were provided upon request. Over the course of this 12-month period a total of 425 gallons of coatings were used, averaging approximately 35 gallons per month. These records demonstrate that the 200 gallon coating usage limit, as applied, minus water, per month in air permit exemption Rule 287(2)(C) is being met.

VOC emissions data was provided by the facility regarding paint usage, oil usage, and solvent usage. 100% VOC emissions are used for calculations to simulate worst case scenarios while calculating. Calculations show that facility wide monthly VOC emissions from the 12-month period of March 2021 through February 2022 were an average of approximately 260 lbs. per month. This is well below the 1000 lbs per month limit of permit exemption Rule 290(2)(a)(i).

The facility has several parts cleaners located on site. All were closed as required to meet permitting exemption Rule 281(2)(h).

The facility has a single water heater that is exempt from permitting by Rule 282(2)(b)(i) as the output rating is less than 50 mmBtu/hr. This water heater is not subject to New Source Performance Standard 40 CFR Part 60 Subpart Dc as its output is less than 10 mmBtu/hr. This heater is not subject to National Emission Standard for Hazardous Air Pollutants 40 CFR Part 63 Subpart JJJJJ as it meets the definition of a hot water heater as a unit with a heat input of under 1.6 mmBtu/hr, which are not units subject to this subpart.

There are no generators on site.

Conclusion

At the conclusion of this inspection the facility appeared to be compliant with the requirements of PTI No. 731-83 as well as all other applicable air quality regulations.

NAME Scott Evans

DATE 4/14/2022

SUPERVISOR HH