

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

U7007003265618

FACILITY: Apex Spring and Stamping, Corp		SRN /ID: U70070032
LOCATION: 11420 First Avenue, NW, Grand Rapids		DISTRICT: Grand Rapids
CITY: Grand Rapids		COUNTY: OTTAWA
CONTACT: Dennis Bhaskaran, President		ACTIVITY DATE: 12/01/2022
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: FY '23 inspection to determine compliance with applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

Apex Spring and Stamping (U70070032) is located at 11420 First Avenue Northwest in Grand Rapids, Michigan. This facility is a manufacturer of springs, stampings, wire forms and assemblies.

The facility was inspected by Michigan's Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) on December 1, 2022, by AQD staff Chris Robinson. The purpose of the inspection was to determine compliance with respect to applicable State and Federal air quality rules and regulations. Upon arrival CR surveyed the perimeter of the facility for odors and visible emissions, none were observed. CR then entered the facility and met with Dennis Bhaskaran, CEO/COO. Dennis was provided identification and notified of the purpose of the visit.

The previous inspection report and any changes that have taken place since the last inspection (2008) were discussed. According to Dennis, the process remains the same however they have more equipment. The previous inspection report noted they had approximately 20 punch presses, and 6 spring coilers. The facility now operates approximately 20 slides, 13 punch presses, and 50 spring coilers which all appear to be exempt from Rule 201 permitting requirements per Rule 285(2)(i)(i). Once the springs are made, they are sent through an electric oven that heats the springs to approximately 600°F to allow for stress relief from the manufacturing process. There are approximately 10-15 of these ovens in use with approximately 10 ovens added since the 2008 inspection. The facility has claimed these as being exempt from Rule 201 permitting requirements per Rule 290(2)(a)(i) which limits VOC emissions to equal to or less than 1,000 lbs. per month. Past demonstrations show combined monthly emissions of 6.6 lbs. per month, which is based on a worst-case scenario assuming 100% used is emitted. The facility has grown since the 2008 inspection but has not updated the Rule 290 demonstration to reflect the current usage. However, as noted in the calculation below, which is based on the 2008 demonstration, the facility still appears to meet the monthly limit. Apex currently uses approximately 2 drums of oil per year, each containing 50 gallons. This equates to a monthly usage of approximately 8.33 gallons. Therefore, current monthly emissions are approximately 69.3 pounds per month (831.6 lbs. per year). CR discussed recordkeeping requirements and the facility will update the records accordingly.


A - Cutting Oil Usage = 8.33 gallons/month
 B - Cutting Oil Density = 0.998
 C - Specific Gravity of Water = 8.33585 lbs./gallon
 Monthly emissions = A x B x C = 69.3 pounds
 Annual Emissions = 69.3 x 12 = 831.6 pounds

Per Mr. Bhaskaran the 10 newer ovens were added one at a time and as needed. Therefore, the installation of each represents its own project for evaluating significance. Since Rule 290 is now federally enforceable, which it was not during the 2008 inspection, the PTE for these ovens equals actual emissions which is 6 tons of VOCs per unit. The significance threshold for VOCs is 40 tpy per project. Since these units were added as needed and are considered to be individual projects the 40 tpy significance threshold has not been exceeded and these emission units are still eligible to use Rule 290.

Apex has three cold cleaners that are maintained by Crystal Kleen. No standing solvent was present in the tank and the air/vapor interface is less than 10 square feet; therefore, these appear exempt per Rule 281(2)(h).

Based on observations, discussions, and records, Apex Spring and Stamping Inc. appears to be operating in compliance with applicable air quality rules and regulations.

NAME



DATE

12/22/22

SUPERVISOR

