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Lapeer

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N309045718

FACILITY: Lapeer Industries Inc., Plant 2		**SRN / ID:** N3090
LOCATION: 290 MCCORMICK DR, LAPEER		**DISTRICT:** Lansing
CITY: LAPEER		**COUNTY:** LAPEER
CONTACT: Laura Crawford , Health & Safety Manager		**ACTIVITY DATE:** 08/21/2018
STAFF: Daniel McGeen	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

On 8/21/2018, the Michigan Department of Environmental Quality (DEQ), Air Quality Division (AQD) conducted a scheduled inspection of Lapeer Industries Plant 2, a facility which was last inspected by AQD in 2013.

Environmental contact:

Laura Crawford, Health & Safety Manager; 810-664-1816, ext. 3427; laura.crawford@lapeerind.com

Facility description:

This facility manufactures metal parts for wind turbines, military vehicles, and the aerospace industry.

Emission units:

- Primer booth, with shared curing oven: subject to Rule 201, as coating use sometimes exceeds 200 gallons/month exemption threshold of Rule 287
- Paint booth with shared curing oven: subject to Rule 201, as coating use sometimes exceeds 200 gallons/month exemption threshold of Rule 287
- Metal machining processes: exempt under Rule 285(2)(l)(vi)(B)

Regulatory background:

This facility is considered a *minor source* of *criteria pollutants*, that is, those pollutants for which a National Ambient Air Quality Standard (NAAQS) exist. These include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VCOs), lead, particulate matter smaller than 10 microns (PM10), and particulate matter smaller than 2.5 microns (PM2.5). A *major source* of criteria pollutants has the potential to emit (PTE) of 100 tons per year (TPY) or more of any one of the criteria pollutants, and would be subject to the Renewable Operating Permit program.

This facility is also considered to be a minor or *area source* for hazardous air Pollutants (HAPs), because it has a PTE of less than 10 TPY for any single HAP and less than 25 TPY for all HAPs combined.

This facility has a prime booth and a paint booth which have a shared curing oven. These facilities occasionally use more than 200 gallons per month of coatings each, so the company will need to apply for a permit to install (PTI). The general PTI for coating operations is a viable option for this facility. It allows for up to 3 coating lines each emitting up to 10 tons per year (TPY) VOC, and a total for all 3 lines not to exceed 30 TPY VOC.

This facility has a number of processes which are exempted from the requirement of Rule 201 to obtain an air use permit. This includes metal machining processes which exhaust through mechanical collectors and subsequent baghouses, and then into the in-plant environment.

I was advised today that there are no boilers onsite, just two residential-sized hot water heaters for restrooms and a cafeteria. A hot water heater <120 gallons in size is considered exempt from 40 CFR Part 63, Subpart JJJJJJ, *National Emissions Standards for Hazardous Air Pollutants: Industrial,*

Commercial and Institutional Boilers, Area Sources.

Recent history:

Inspections by AQD in 2011, 2012, and 2013 identified no violations. There was discussion about the Rule 287 exemption from needing a permit to install for coating booths which use less than 200 gallons of coatings (minus water) per month.

I had recently attempted to conduct an unannounced, scheduled inspection of Lapeer Industries Plant 2, this summer. However, on the day I was there, the plant environmental contact was ill, and was leaving the office for the day. I therefore arranged a time and date to conduct this inspection with the plant contact, Ms. Laura Crawford, Health & Safety Manager for Lapeer Industries.

I arrived at the plant offices at 10:02 AM. There were no visible emissions or odors detectable from the parking lot just west of Plant 2. Weather conditions were lightly raining and 72 degrees F, with no wind.

I signed in at the office, and met with Ms. Crawford. I had previously provided my identification/credentials, per AQD procedure, on the day of my earlier visit. We discussed the goals of the inspection, to determine compliance wit the Michigan Air Pollution Control Rules, and to see if the processes onsite were exempt from needing an air use permit, otherwise known as a PTI. We then walked from the offices to Plant 2 itself. I could not see any visible emissions from Plant 2.

Inspection:

Plant 2 includes a machine shop, quality testing lab, assembly, shipping and receiving, and painting. Their customers have extremely rigorous standards which they adhere to.

They have a number of metal machining processes, such as drills and routers, which are controlled by mechanical pre-cleaners called chip collectors, and subsequent fabric filters. Because the fabric filters exhaust into the general, in-plant environment, the machining processes are exempt under Rule 285(l)(vi)(B). If these processes were to be vented to the outside of the plant, they would qualify for the Rule 285()(vi)(C) exemption. There were no visible emissions.

As of my 2012 inspection here, the machining processes all used a biodegradable lubricant, natural vegetable oil. They also used a biodegradable, water soluble coolant. Each machine was equipped with an oil separator. I am not aware of any changes to these processes.

Wash booths; Rule 281(e):

During my last inspection here, in 2012, I learned that the paint room has two wash booths to clean metal parts, before they are painted. The booths used only a solution of hot, soapy water, in 2012. The water is filtered and reused. Collected particulates/sediments are removed by Safety Kleen. I am not aware of any changes to the wash booths.

Prime and paint booths and associated curing oven; Rule 2201:

The paint area includes a prime booth, a paint booth, and a curing oven. The coating booths have mat or panel filters, and pressure drop gauges. The prime booth pressure drop was 0.07 inches, water column (w.c.), and the finish booth pressure drop was 0.06 inches, w.c.

***The* filters are changed when they reach 0.30 inches, w.c., according to a sign on the booths. The filters are also on a 30% cycle, I was advised. When they get 30% clogged, they are replaced. Operating procedures are posted on each booth. The booths were not in use, at the moment, as the paint shop was on break**

The two coating booths share a curing oven, which is natural gas-fired. Operating procedures were posted on the oven.

We discussed Rule 287(2)(c), which exempts coating lines from the requirement of Rule 201 to obtain a permit to install, if they meet the following criteria:

(c) A surface coating line if all of the following conditions are met:
(i) The coating use rate is not more than 200 gallons, as applied, minus water, per month.
(ii) Any exhaust system that serves only coating spray equipment is supplied with a dry filter control or water wash control which is installed, maintained, and operated in accordance with the manufacturer's specifications, or the owner or operator develops a plan which provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions.
(iii) Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the department upon request.

We went outside later in the inspection, to look at the exhaust stacks for the prime and paint booths. No visible emissions could be seen. I could not detect any odors.

Recordkeeping:

Subsequent to the inspection, on 9/26/2018, Ms.Crawford sent the attached spreadsheet for the prime and paint booths at Plant 2, showing that occasionally coating use goes over 200 gallons per month. AQD will send a Violation Notice (VN) to the company, requesting a written compliance program. That compliance program will be to apply for a permit to install, per Ms. Crawford's e-mail. please see attached.

Conclusion:

Lapeer Industries Plant 2 was clean and neat, and I saw no compliance problems during the inspection. The amount of coatings used in the prime booth and in the paint booths occasionally goes over 200 gallons per month, based on records Ms. Crawford provided. She indicated they intend to apply for a permit to install for the coating booths at Plant 2, and also at their Plant 4, nearby. A VN will be sent for the exceedance at Plant 2.

NAME _____ DATE 9/30/2018 SUPERVISOR B.M.