

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

N514544301

FACILITY: INDUSTRIAL METAL COATINGS INC		SRN / ID: N5145
LOCATION: 6070 18 MILE RD, STERLING HTS		DISTRICT: Southeast Michigan
CITY: STERLING HTS		COUNTY: MACOMB
CONTACT: Scott Roach , General Manager		ACTIVITY DATE: 05/03/2018
STAFF: Joe Forth	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: On-Site Inspection		
RESOLVED COMPLAINTS:		

On May 3, 2018, I, Joseph Forth, Michigan Department of Environmental Quality-Air Quality Division (MDEQ-AQD) Staff, conducted an unannounced targeted inspection at Industrial Metal Coatings (IMC), located at 6070 18 Mile Rd, Sterling Heights, MI. For the inspection, I was accompanied by AQD inspectors Adam Bognar and Kerry Kelly. The purpose of the inspection was to determine the facility's compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended, MDEQ-AQD Air Pollution Rules, the National Emissions Standards for Hazardous Air Pollutants (40 CFR Subpart 63 Chrome NESHAP), and Permits to Install Nos. 25-16 and 106-94.

Facility Description

IMC is an automotive supplier. The primary activity at the facility is metal parts coating. There is some manual assembly of parts. The facility employs approximately 100 workers and works one long shift of 7 am to 7 pm. The main process at IMC is their e-coat coating line. The parts are put on racks which carry the parts through the process. First, they are cleaned with hot water and soap. Then a primer is applied. The parts are then coated with Powercron Black Feed coating via e-coat process. The racks are then taken through a drying oven for curing the coating. The oven operates at 350 °F. The parts are then removed from the racks and placed in shipping containers. Once certain racks have reached an amount of coating build up they are taken to burnoff ovens for cleaning. There are 4 burnoff ovens which can hold several racks each. The racks are loaded in and processed to remove the excess coating (process time of 1-2 hours).

IMC has a waste treatment system on-site to treat the waste water from the e-coat rinse tank. The facility occasionally has the filter cakes removed by an environmental service company (See Attachment A).

There is another facility located in the building, Industrial Metal Finishing (IMF). This is a sister company to IMC. IMF's main process is deburring metal parts. This is the process of removing jagged edges or protrusions. The process is vented to the general in plant environment. These processes are exempt from permitting per R336.1285(2)(I)(vi)(B).

IMC does not use any cold cleaners or solvent based washing units. The facility does not have any back up generators. There is a natural gas boiler in the facility that is used to heat up the water wash for the parts. The information plate on the boiler states that the max BTU input of the boiler is 6,000,000 BTU/hour. This boiler is exempt from permit to install requirements per R 336.1282(2)(a). There have been no changes or additions to the process since the last inspection.

Facility Inspection

We arrived at the facility at 9:30 am. Scott Roach (General Manager) met with us to represent the facility. We stated the purpose of the inspection and presented our credentials. We discussed the required records for compliance with the facility's permits. Mr. Roach explained which of the records the facility did not have on hand (See Compliance section). Next, we were given a tour of the facility. Mr. Roach showed us the production line for the e-coat process. He showed us the boiler and hot water wash. We saw the water treatment process and where IMF performs their processes. Next, Mr. Roach showed us the four burnoff ovens, located in the back of the facility. In violation of PTI No. 25-16, the stacks for the burnoff ovens had rain caps attached to them preventing unobstructed vertical emissions. This is an issue that IMC and Mr. Roach have been told several times to fix and that he would be receiving a violation notice for having stacks with the rain caps and suggesting to remove them as soon as possible. During the inspection, one of the ovens, Oven #1, was operating. From Oven #1 it appeared that there were fugitive emissions escaping through some of the seams of the oven, AQD staff were able to take a picture (See Attachment B).

We finalized the inspection by reiterating the required records, both how and what to keep. A copy of permit 25-16 was given to Mr. Roach. We left the facility at 11:45 am.

*AQD staff did not conduct an odor observation along with the inspection due to heavy rain the day of the inspection.

Compliance

PTI No. 106-94 Special Conditions:

15. Total VOC emission rate from E-Coat line of 7.7 lbs/hr or 21.5 tons/year, on a 12-month rolling average. From May 1st 2017 to April 30th 2018, IMC emitted 8208 lbs or 4.104 tons of VOC, this equates to an emission rate of 1.874 lbs/hr (Based on 12 hour daily hours of operation)(See Attachment C).

16. VOC emission rate shall not exceed 3.5 lbs/gal (minus water). The VOC (minus water) content of the coating used is 0.43 lbs/gal.

17. No visible emission from any portion of the E-coat paint line. There appeared to be no emissions from the E-coat paint line.

18. Verification of emission rates may be required for operating approval. Stack test not required at this time.

19. The facility must keep the following records:

a. The total gallons and VOC content (minus water) of each coating used. The facility only uses the POWERCRON BLACK FEED. (See Attachment D)

b. The amount in gallons and VOC content of each reducer used. Mr. Roach said the facility does not use any reducers.

c. Documentation showing the applied VOC content of all coatings used. (See attachment D)

d. Calculations determining a 12-month rolling average VOC emission rate from the E-Coat line. The facility provided monthly VOC emissions. (See Attachment C)

20. Exhaust from the E-Coat dip tank must be discharged unobstructed vertically, and with a maximum diameter of 24 inches and an exit point of no less than 36 feet above ground level. Stack parameters not confirmed during this inspection, however they appeared to be unobstructed.

21. Disposal of collected sludge and waste coatings shall be done in a manner that minimizes additional air contaminants. The facility uses an environmental disposal company to remove its waste from the facility for treatment (See Attachment A)

PTI No. 25-16 Special Conditions:

I(1). 0% visible emissions from FGOVENS for a Six-Minute Average. There were no visible emissions from the stacks. There were, however, fugitive emissions seeping through some seams of Oven #1.

II(1). The facility shall not burnoff more than one cart of paint racks at a time in each oven, and no more than 1920 carts in FGOVENS per 12-month rolling time period. The facility was unable to provide evidence of meeting this limit. This is a violation of the permit conditions.

II(2) The facility shall burn only natural gas in each oven in FGOVENS. The only fuel input to the ovens was a natural gas line. Mr. Roach showed us the only fuel line for the ovens which is confirmed as natural gas.

II(3). The facility shall not process any material in FGOVENS, other than cured paints on metal parts, racks and/or hangers. We were shown where the facility keeps the racks to be burned, and shown inside the ovens. Only racks were inside the ovens and in the area surrounding. The facility appears to be in compliance with this condition.

III(1). The facility shall not use any oven in FGOVENS for the thermal destruction or removal of rubber, plastics, uncured paints, or any other materials containing sulfur or halogens. The facility claims they only burn of the POWERCRON BLACK FEED that builds up on the racks.

III(2). The permittee shall not load any transformer cores, which may be contaminated with PCB-

containing dielectric fluid, wire or parts coated with lead or rubber, or any waste materials such as paint sludge into FGOVENS. The facility claims they do not load any of the previously stated materials into the ovens, only the racks.

III(3). The permittee shall calibrate the thermocouples associated with the primary chamber of each oven at least once per calendar year. The facility was unable to provide evidence of meeting this limit. This is a violation of the permit conditions.

IV(1). The permittee shall not operate any oven in FGOVENS unless an automatic temperature control system for the primary chamber is installed, maintained and operated in a satisfactory manner for each oven. Only Oven #4 was operating at the time of inspection, the temperature control system appeared to be operational.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.

VI(1). The permittee shall complete all required records in a format acceptable to the AQD District Supervisor by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. There are several records that were not being kept; therefore, the facility is in violation of this condition.

VI(2). The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (coating) processed in each oven in FGOVENS, including the weight percent of each component. Mr. Roach claimed the only material that is burned off in the ovens is the POWERCRON BLACK FEED (See Attachment D).

VI(3). The permittee shall keep, in a satisfactory manner, records of the number of carts processed in each oven in FGOVENS, on a monthly basis and 12-month rolling time period basis as determined at the end of each calendar month. Records not received, therefore the facility is in violation of this condition.

VI(4). The permittee shall monitor the burnoff ovens to verify that they are operating properly, by taking visible emission readings a minimum of once per calendar day during operation of any oven in FGOVENS. Either a certified or non-certified reader shall take each visible emission reading during routine operating conditions. If any visible emissions (other than uncombined water vapor) are observed, the permittee shall immediately inspect the oven, verify the type of coating that is being burned off the racks and perform any required maintenance on the oven. The facility was not keeping records of visible emissions testing; therefore, the facility is in violation of this condition.

VI(5). The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGOVENS. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The facility was not keeping records of visible emissions testing; therefore, the facility is in violation of this condition.

VI(6). The permittee shall monitor and record the operating temperature of each oven in FGOVENS at least once per batch cycle. The permittee shall keep records of the operating temperature for each oven for each batch cycle including the date and time of each batch. The facility was not keeping these records; therefore, the facility is in violation of this condition.

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted. The stacks were not vertically unobstructed. At the time of inspection there were rain caps on each of the 4 burnoff oven stacks. I explained to Mr. Roach that this is a violation of the facility's permit and they must be removed. The facility has been told several times to do so. I returned on May 14, 2018 to conduct an odor observation and found the rain caps to still be on each of the 4 burnoff oven stacks.

Conclusion

Based on the inspection and records review, the facility appears to be operating in non-compliance with PTI No. 25-16. The facility appears to be in operating in compliance with PTI No. 106-94. A violation notice would be sent to the facility seeking compliance with requirements of PTI No. 25-16.

Attachment B

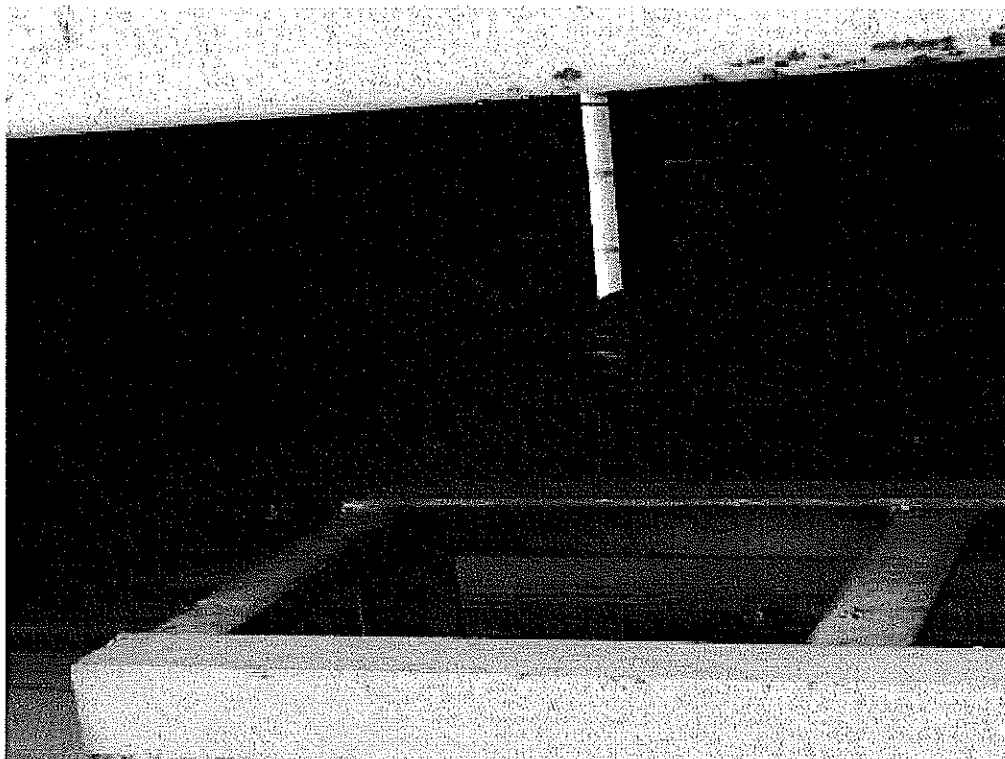


Image 1(Visible Emissions) : Photo taken by AQD staff Kerry Kelly, pictured is smoke/visible emissions escaping out of one of the seems of burnoff oven #1.

NAME *Jerry M. Furtt*

DATE 7-17-18

SUPERVISOR *SK*