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

B882457371		
FACILITY: Heartland Steel Products, LLC		SRN / ID: B8824
LOCATION: 302 Carleton St., MARYSVILLE		DISTRICT: Warren
CITY: MARYSVILLE		COUNTY: SAINT CLAIR
CONTACT: John Lindsey, Continuous Improvement Leader		ACTIVITY DATE: 03/09/2021
STAFF: Joe Forth	<b>COMPLIANCE STATUS:</b> Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: On-site inspection with digital records review.		
RESOLVED COMPLAINTS:		

On March 9, 2021, AQD staff Joseph Forth conducted scheduled inspection of Heartland Steel Products LLC located at 302 Carelton St, Marysville, MI. The purpose of this inspection was to determine the facility's compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, and Michigan's Air Pollution Control Rules, and Permits to Install (PTI) Nos. 841-84C and PTI No. 58-16.

Heartland Steel Products LLC is the parent company of SpaceRak and Eugene Welding Company. SpaceRak produces pallet racking systems. The two permits are for a coating line used to coat the metal parts for the racking systems and a burn-off oven to help finish the coating. Heartland Steel Products owns several other buildings in the area where they do stamping and some other machining type work on rolls of metal, the work done in the building appear to be exempt from permitting per Rule 336.1285(2)(I)(i). They also have a welding shop; the welding stations are performed essentially in the open plant environment, the operations in the building appear to be exempt from permitting per Rule 336.1285(2)(i). The facility has an air makeup system to bring fresh air into the building. The facility also uses some Rule 290 exempt materials which they keep track of the usage of (records for January and February provided).

I arrived at the location at 12:30 pm. I met with John Lindsey, Continuous Improvement Leader. I introduced myself, presented my credentials and stated the purpose for inspection. I requested all required records electronically for review. We went to the burn-off oven; Mr. Lindsey confirmed that it is equipped with a secondary chamber, interlock system, and temperature monitor. Mr. Lindsey stated that the burn-off oven had not been operating since May 8, 2020. Next, Mr. Lindsey showed me the coating line; the dry filters appeared to be installed properly. All permitted stacks appeared to be unobstructed.

## Compliance

All mentioned records were collected electronically and can be located in: S:\Air Quality Division\STAFF\Joe Forth\B8824 Heartland Steel FY21 Inspection

## PTI No. 841-84C

## **EU-COATINGLINE**

A miscellaneous metal parts coating line consisting of a 2-stage washer with dry-off, two (2) automatic spray paint booths (PB 1 and PB 2), two (2) manual spray paint booths (PB 3 and PB 4), and a natural gas-fired cure oven.

1.1 VOC emission limit of 81.6 tons per year. Their 12-month rolling total as of February 2021 is 28.66 tons. The highest 12-month rolling time period total was that which ended in January 2020 at 33.48 tons of VOCs.

1.2 VOC material limit for all coatings used in EU-COATINGLINE of 3.0 lbs/gal (minus water). The permittee does not use any coatings that exceed 3.0 lbs/gal (minus water). A few SDSs showing compliance with the material limit were provided.

1.3 The permittee shall not use more than 7,296 gallons per month of coating in EU-COATINGLINE. In the past 12 months, the highest usage month was June 2020 at 4740 gallons.

1.4 All waste materials shall be captured and stored in closed containers and shall be disposed of in an acceptable manner in compliance with all applicable rules and regulations. I was shown where the waste materials are kept. All waste materials from EU-COATINGLINE are kept in metal drums with the covers in place until they are picked up by an industrial waste company (MPC Environmental) for disposal.

1.5 The disposal of spent filters shall be performed in a manner which minimizes the introduction of air contaminants to the outer air. The permittee replaces dry filters at least once per 10-hour shift, these filters are stored before being disposed of by an industrial waste company according to Mr. Lindsey.

1.6 The permittee shall not operate the spray booth portions of EU-COATINGLINE unless all respective exhaust filters are installed, maintained and operated in a satisfactory manner. The filters for EU\_COATINGLINE appeared to be installed and maintained properly. Heartland replaces the dry filters at least once per 10-hour shift.

1.7 The VOC content, water content, and density of any coating as applied and as received, shall be determined using federal Reference Test Method 24. Upon prior written approval by the AQD District Supervisor, the VOC content may be determined from manufacturer's formulation data. If the Method 24 and the formulation values should differ, the Method 24 results shall be used to determine compliance. The permittee in lieu of Method 24 uses manufacturer formulation data to calculate VOC emissions, they received approval from the AQD supervisor in October 2009. Heartland was able to show SDS's for each material used in EU-COATINGLINE.

1.8 – 1.10 Permittee provided all required records.

1.11 a-i The exhaust stacks for EU-COATINGLINE discharged vertically unobstructed to the ambient air. Stack dimensions not confirmed at this time.

### FGFACILITY

All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment.

The conditions of this flexible group pertain to HAP emissions. The permittee claimed that they do not use any HAP containing materials but upon review it was discovered their solvent (Axalta Lacquer Thinner) did in fact contain HAPs (Xylene and Toluene), the facility appears to be in violation of FGFACILITY special conditions 2.1a&b, 2.2, 2.3, and 2.4 for failure to keep record of HAP usage. The facility did however, in response to discussion of these findings, provide calculations back to January 2015. The highest 12-month rolling total of HAPs according to these calculations ended in November 2017 at 0.237 tons of HAPs. A notice of violation will not be issued for failure to keep records because the company corrected the violation.

PTI No. 56-16

## **EU-BURNOFF**

One batch type natural gas-fired burnoff oven with a secondary chamber or afterburner, used to remove cured paints, oil or grease from metal parts by thermal decomposition in a primary chamber.

The oven is still on the premises but has not been used since May 2020. Mr. Lindsey stated the facility is evaluating what they want to do with the equipment. Currently, the facility outsources the work normally done by the oven.

I.1 There shall be no visible emissions from EU-BURNOFF. The oven was not operating during the time of my inspection, so I could not evaluate the opacity of the emissions.

II.1 The permittee shall burn only natural gas in EU-BURNOFF. According to Mr. Lindsey, the burn-off oven only uses natural gas for fuel. He showed me the natural-gas fuel line.

II.2 The permittee shall not process any material in EU-BURNOFF other than cured paints, oil or grease on metal parts, racks and/or hangers. According to Mr. Lindsey, the only material processed in EU-BURNOFF oven are the cured paints from EU-COATINGLINE.

III.1 The permittee shall not use EU-BURNOFF for the thermal destruction or removal of rubber, plastics, uncured paints, or any other materials containing sulfur or halogens (chlorine, fluorine, bromine, etc.) such as plastisol, polyvinyl chloride (PVC), or Teflon. According to Mr. Lindsey, the only material processed in EU-BURNOFF oven are the cured paints from EU-COATINGLINE.

III.2 The permittee shall not load any transformer cores, which may be contaminated with PCBcontaining dielectric fluid, wire or parts coated with lead or rubber, or any waste materials such as paint sludge or waste powder coatings into EU-BURNOFF. According to Mr. Lindsey, the only material processed in EU-BURNOFF oven are the cured paints from EU-COATINGLINE.

IV.1 The permittee shall not operate EU-BURNOFF unless a secondary chamber or afterburner is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the secondary chamber or afterburner includes maintaining a minimum temperature of 1400°F and a minimum retention time of 0.5 seconds. Mr. Lindsey showed me on the machine where the secondary chamber was located and stated that, when it does operate, it is ran at a minimum of 1400°F. Temperature records from before operation of the burnoff began were provided.

IV.2 The permittee shall not operate EU-BURNOFF unless an automatic temperature control system for the primary chamber and secondary chamber or afterburner is installed, maintained, and operated in a satisfactory manner. The emission unit is equipped with an automatic temperature control system for both the primary and secondary chambers.

IV.3 The permittee shall not operate EU-BURNOFF unless an interlock system that shuts down the primary chamber burner when the secondary chamber or afterburner is not operating properly, is installed, maintained and operated in a satisfactory manner. The burn-off oven is equipped with an interlock system according to Mr. Lindsey.

IV.4 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to continuously monitor the temperature in the burn-off oven secondary chamber or afterburner and record the temperature at least once every 15 minutes. The permittee calibrates the thermocouples at least once per calendar year. Mr. Lindsey provided the calibration from 2019 as they did not perform a calibration last year as they were not operating the oven when it came due for the calibration.

VI.1-6 The permittee provided all required records.

VIII.1 The exhaust gases from EU-BURNOFF shall be discharged unobstructed vertically upwards to the ambient air from a stack with an exit point not less than one and one half times the building height (from ground level to point of discharge). The stack for EU-BURNOFF is unobstructed.

IX.1 The permittee shall not replace or modify any portion of EU-BURNOFF, including control equipment, unless the permittee submits a Process Information Form to the permit section identifying the existing and new equipment a minimum of 10 days before replacement or medication, continue to meet all general PTI applicability after said replacement or modification, and keep records pertaining to the replacement or modification. The permittee has made no replacements or modifications to EU-BURNOFF according to Mr. Lindsey. Only maintenance has been done to the equipment thus far. I instructed Mr. Lindsey to notify myself and the permit section if he plans to move the burn-off oven in any way.

The permittee appears to be operating in compliance with the requirements of Permits to Install (PTI) Nos. 841-84C and 56-16.

NAME Jup M Fut DATE 7/30/2021 SUPERVISOR K. Kelly