

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

B882450536

FACILITY: Heartland Steel Products, LLC		SRN / ID: B8824
LOCATION: 302 Carleton St., MARYSVILLE		DISTRICT: Southeast Michigan
CITY: MARYSVILLE		COUNTY: SAINT CLAIR
CONTACT: John Lindsey, Continuous Improvement Leader		ACTIVITY DATE: 08/28/2019
STAFF: Joe Forth	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: On-site Inspection		
RESOLVED COMPLAINTS:		

On August 28, 2019, AQD staff Joseph Forth conducted scheduled inspection of Heartland Steel Products LLC located at 2420 Wills St, Marysville, MI 48040. 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 Permit to Install (PTI) No. 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 welding.

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 reviewed the permits with him, and he said he would provide all required records via email. We went to the burn-off oven; I confirmed that it is equipped with a secondary chamber, interlock system, and temperature monitor. I inquired if the stack for the burn-off oven exhaust stack had a rain cap on it. Mr. Lindsey stated that it did, I instructed Heartland to have to removed as it is in violation of their permit. I allowed Heartland a month to remove it without issuing a violation notice. Next, Mr. Lindsey showed me the coating line; the dry filters appeared to be installed properly. I once again inquired about the stacks of the process being unobstructed. The stacks for EU-COATINGLINE were in fact unobstructed. We then went to the building where they perform 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)(l)(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.

On, September 9, 2019 I received photos via email of the rain cap having been removed.

#### Compliance

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. For 2018, Heartland produced 37.7 tons of VOCs according to MAERS. Their 12-month rolling total as of July 2019 is 32.42 tons. (See Attachment
- 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). (See Attachment A)
- 1.3 The permittee shall not use more than 7,296 gallons per month of coating in EU-COATINGLINE. In 2018, the permittee never exceeded 7,296 gallons. In the past 12 months, the highest usage month was October 2018 at 5437.64 gallons. (See Attachment A)
- 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. 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. (See Attachment B)
- 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.

- 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 All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.
- 1.9 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each coating, reducer, cleanup solvent, etc., including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The uses manufacturer formulation data to calculate VOC emissions. Heartland was able to show SDS's for each material used in EU-COATINGLINE.
- 1.10 The permittee must keep records of the following:
  - a. Gallons of each coating, reducer, and solvent used. (See Attachments A and C)
  - b. VOC content of each coating, reducer, and solvent used. The facility was able to provide SDS's for all materials used in EU-COATINGLINE.
  - c. Monthly VOC mass emission calculations. (See Attachment C)
  - d. 12-month rolling time period VOC mass emission calculations. (See Attachments A and C)
- 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 does not use any HAP containing materials, so it appears they are in compliance with the conditions of this flexible group.

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.

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. The burn-off oven only uses natural gas for fuel.

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. 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. 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 PCB-containing 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. 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 it operates at a minimum of 1400°F.

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.

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 (See Attachment D). The permittee does not keep records of the secondary chamber temperature. A violation notice will be issued for this condition.

VI.1 The permittee shall continuously monitor the temperature in the burn-off oven secondary chamber or afterburner and record the temperature at least once every 15 minutes. he permittee does not keep records of the secondary chamber temperature. A violation notice will be issued for this condition.

VI.2 The permittee shall calibrate the thermocouples associated with the primary and secondary chambers at least once per year. The permittee calibrates the thermocouples at least once per calendar year (See Attachment D).

VI.3 The permittee shall keep, in a satisfactory manner, temperature data records for the burnoff oven secondary chamber or afterburner. he permittee does not keep records of the secondary chamber temperature. A violation notice will be issued for this condition.

VI.4 The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction of the control equipment, any maintenance performed and any testing results for EU-BURNOFF. Mr. Lindsey provided a maintenance manifest for EU-BURNOFF, showing maintenance performed and the thermocouple calibration. (See Attachment D)

VI.5 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (cured coating, oil or grease) processed in EU-BURNOFF, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. Heartland was able to show SDS's for each material used in EU-COATINGLINE and processed in EU-BURNOFF.

VI.6 The permittee shall maintain current information from the manufacturer that EU-BURNOFF is equipped with a secondary chamber or afterburner, an automatic temperature control system for the primary chamber and secondary chamber or afterburner, and an interlock system that shuts down the primary chamber burner when the secondary chamber or afterburner is not operating properly. Mr. Lindsey provided a maintenance manifest which shows inspection records for the burn-off oven. The secondary chamber and interlock system were evaluated and tuned for optimum operation.

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). At the time of inspection, the exhaust stack for EU-BURNOFF was obstructed by a rain cap, this is a violation of this permit condition. I instructed Mr. Lindsey that the cap would need to be removed and if they did so within a month of the inspection I would not issue a violation. On September 9, 2019, (less than one month from the inspection date) I received photos via email that the cap had been removed. No violation will be issued for this condition.

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.** Only maintenance has been done to the equipment thus far.

The permittee appears to not be operating in compliance with PTI No. 58-16. The permittee does appear to be operating in compliance with PTI No. 841-84C. A violation notice is being issued for the conditions violated in PTI No. 58-16.

NAME *Joseph M. Fort*

DATE 9-27-19

SUPERVISOR *SK*