

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

A272251267

FACILITY: EXPERT COATING CO INC.		SRN / ID: A2722
LOCATION: 2855 MARLIN COURT NW, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Erik Klimek, President		ACTIVITY DATE: 11/07/2019
STAFF: Adam Shaffer	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled unannounced inspection.		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff Adam Shaffer (AS) arrived at Expert Coating Company Inc. (EC) at 9:23 am on November 7, 2019 to complete a scheduled, unannounced inspection.

Facility Description

EC manufactures, coats and cleans off plating racks made of various metals such as steel and copper. The facility is an opt out source for hazardous air pollutants (HAPs) and is in operation with Permit to Install (PTI) No. 317-74A. Additionally, the company is under Consent Order AQD No. 2-2015.

Offsite Compliance Evaluation

Due to the timing of the inspection, the 2018 Michigan Air Emissions Reporting System (MAERS) Report was reviewed. Emissions reported for 2018 were similar to the records that were provided. The 2018 MAERS Report was determined to be acceptable.

Compliance Evaluation

Prior to entering the facility, offsite odor and visible emission observations were completed. Weather conditions at the time of the inspection were partly cloudy skies, middle 20's°F, and winds from the north/northwest at 5-10 mph. Several odors that appear to be related to metal processes were noted in areas to the east and south of the site. The site is surrounded by various commercial businesses and it was not verified if the odors in question were coming from the subject facility; however, no recent odor complaints have been received from this area. No significant emissions were observed.

Upon entering the site, AQD staff AS met with Mr. Erik Klimek, President, who provided a tour of the facility, answered site specific questions and provided requested records during/after the inspection. Additional records were also provided by EC's consultant after the site inspection. During the site inspection, AQD staff AS also met with Mr. Menno Klimek, Co-Owner, who helped answer site specific questions.

Opt Out PTI No. 317-74A

EUBURNOFF

This emission unit is for a batch type natural gas-fired burn-off oven for removal of plastisol coatings from metal parts (Bayco Model BB469). The oven is equipped with a 1 MMBTU/hr afterburner control system.

During the inspection, it was verified that the burn off oven only uses natural gas and does not process materials other than polyvinyl chloride (PVC) / plastisol coatings, cured paints, oil or grease on metal parts, racks and/or hangers. The thermocouples were most recently

calibrated on October 9, 2019. EUBURNOFF was observed in operation. A temperature monitor was observed in place for the primary chamber temperature and afterburner temperature. At the time of the inspection, the primary chamber temperature was 262°F and the afterburner temperature was 1300°F. Per Special Condition (SC) IV.1, the permittee shall not operate EUBURNOFF unless the secondary chamber or afterburner is operating in a satisfactory operation which includes maintaining a minimum temperature of 1400°F. While speaking with EC staff regarding the afterburner temperature it was determined that the afterburner temperature doesn't reach 1400°F until more than halfway through a batch job. Based on the temperature of the afterburner observed while in operation, this is a violation of PTI No. 317-74A, EUBURNOFF, SC IV.1 and Consent Order AQD No. 2-2015, paragraph 9.c.

Per SC. IV.3, the permittee shall not operate EUBURNOFF 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. While speaking with EC staff, it appears that the interlock system is installed and since the last inspection no changes have occurred to the system.

As stated previously, a digital temperature device used to monitor the temperatures for the primary chamber and afterburner was observed. During each burn-off batch job EC is required to record the temperature of the afterburner three (3) times per cycle. Records were reviewed on site from September 2019 back to September 2018. Upon review, records were noted to not have the three required temperature recordings per cycle, especially prior to March 2019. This is a violation per PTI No. 317-74A, EUBURNOFF, SC VI.2.

Upon speaking with EC staff, it was determined that no malfunctions have occurred recently. As stated previously, EUBURNOFF was most recently calibrated on October 9, 2019. Receipts for various maintenance completed was also requested and reviewed on site. Copies of MSDS for the two PVC coating materials used on site were provided upon request.

Per SC VI.5, EC shall keep monthly and 12-month rolling time period records of the total number of batches processed by EUBURNOFF and is limited to 251 batches per a 12-month rolling time period. Records were requested and reviewed back to September 2018. For the month of October 2019, one batch of materials was processed by EUBURNOFF. As of October 2019, 55 batches have been processed by EUBURNOFF per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods of batches processed were also within the permitted limit.

One stack is listed in association with EUBURNOFF and was observed during the site inspection. The stack was noted to be discharging unobstructed vertically. Though the exact dimensions were not measured, they appeared to be consistent with the dimensions listed in PTI No. 317-74A.

FGFACILITY

This flexible group is for all process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment.

This flexible group is subject to individual and aggregate HAP emission limits of less than 9.0 tons per year (tpy) and less than 22.5 tpy respectively per a 12-month rolling time period. Records were requested and provided for select months. Upon review of the records provided, emissions only appeared to be hydrogen chloride from EUBURNOFF. For the month of October 2019, 49.0 lbs of hydrogen chloride was emitted. As of October 2019, 0.95

tons of hydrogen chloride was emitted per a 12-month rolling time period which is well within the individual and aggregate HAP emission limits. Previous 12-month rolling time period records were reviewed and appeared to be within permitted limits.

Per SC VI.2.a-e, EC shall keep records of gallons or pounds of HAP containing material combusted, and reclaimed, if applicable, and HAP contents of each HAP containing material used, and monthly / 12-month rolling time period of individual / aggregate HAP emissions. Upon review, it does not appear that any reclaim is being done. Based on the records reviewed, it appears that EC is adequately keeping track of materials combusted, HAP contents and individual / aggregate monthly / 12-month rolling time period emission records.

Additional Observations

- Various machining operations including cutting and drilling of metal products were observed. The operations observed are vented inside and appear to be exempt per Rule 285(2)(l)(vi)(B).
- Several welding / soldering areas were observed and appear to be exempt per Rule 285(2)(i).
- A sandblasting area was observed where parts are sandblasted. Particulate emissions from the sandblasting room are captured in a dust collector and collected in two 55-gallon drums. Emissions from the dust collector are vented inside. Minor amounts of particulate were noted in the area of the dust collector and were stated by EC staff to be cleaned up when the particulate collected in the drums is transferred to white super sacks. Based on the observations made the sandblasting area appears to be exempt per Rule 285(2)(l)(vi)(B).
- A primer coating area and two dip tanks were observed during the inspection. Parts that are to be coated prior to being shipped offsite are first coated with a primer coating. The primer coating area consisted of one hand application paint booth that is vented externally. Following the primer application and sufficient heating of the unit, the parts then proceed to the PVC dip tanks. There are two PVC dip tanks (green and black) where parts are dip coated. Most of the PVC coating usage is the black PVC. All materials to be coated with PVC are coated with the black PVC, but not necessarily with the green PVC. Based on this information, there are two coating lines. Previously, the company had utilized the Rule 287(2)(c) exemption for the coating process. EC provided purchase records to demonstrate monthly usages. Each purchase record was for six 55-gallon drums of black PVC coating materials. Additionally, it appears that 55-gallons of green PVC coating material and 24.25 gallons of primer coating were used so far in 2019. Coating materials bought are used up before repurchasing and not stockpiled. Based on the numbers provided it appears that EC went over the 200-gallon usage limit but would appear to be back presently below the 200-gallon limit. It was concluded that the coating lines overall appear to be exempt per Rule 287(2)(c). Moving forward, it was discussed with EC staff that in order to utilize the Rule 287(2)(c) exemption, usage records shall be used instead of purchase records. Also, it was suggested that in order to keep recordkeeping simple, the dip tanks and primer coating booth would be one coating line.
- Two ovens were observed during the site inspection. The first oven is a preheat oven that is used to warm the part up after the primer coating application. This makes the PVC coating stick to the part. Once the PVC coating has been applied the part is put into the second oven, which is a curing oven. This oven is used to bake the PVC coating material onto the part in question. The two ovens were previously included in the coating process that was exempt per Rule 287(2)(c) and this still appears to be applicable.

Conclusion

Based on the review of the records provided and the facility walk through, EC is not in compliance with PTI No. 317-74A and Consent Order AQD No. 2-2015. A violation notice (VN) will be sent for the following violations identified:

- At the time of the inspection, EUBURNOFF was in operation with the afterburner operating at less than the required minimum 1400°F operating temperature. This is a violation of PTI No. 317-74A, EUBURNOFF, SC IV.1 and Consent Order AQD No. 2-2015, SC 9.c.
- Temperature records reviewed on site back to September 2018 showed that EC was not adequately recording temperature readings three times per batch processed. This is a violation of PTI No. 317-74A, EUBURNOFF, SC VI.2.

NAME Adam J. HoffDATE 11/19/19SUPERVISOR [Signature]