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

A272262425

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:** 02/15/2022
STAFF: Michael Cox	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: Scheduled Unannounced Inspection		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff Michael Cox (MTC) and Chris Robinson (CR) arrived at Expert Coating Company Inc. (Expert Coating) at 1:00pm on February 15, 2022, to complete a scheduled, unannounced inspection.

Facility Description

Expert Coating manufactures, coats and cleans off plating racks made of various metals such as steel and copper. The facility is an opt out source for Hydrogen Chloride (HCL) emissions, which is a hazardous air pollutant (HAP) and is in operation with Permit to Install (PTI) No. 317-74A. The company is also under Consent Order AQD No. 2-2015.

Offsite Compliance Evaluation

Expert Coating submitted a permit application to modify PTI No. 317-74A after the site visit on February 15, 2022, to include language that updates the record keeping requirements and data collection of the new continuous digital temperature monitor which was installed to address a violation notice issued on February 18, 2021. The PTI modification is currently under facility review prior to issuance.

Compliance Evaluation

Prior to entering the facility, offsite odor and visible emission observations were completed. No odors or visible emissions were noted during the inspection.

Upon entering the site, AQD staff MTC and CR met with Mr. Erik Klimek, President and Mr. Menno Klimek, Plant Manager, who provided a tour of the facility, answered site specific questions and provided requested records during/after the inspection.

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 and the digital temperature were most recently calibrated on October 18, 2022, by

Consolidated Controls Co. EUBURNOFF was observed in operation. A digital 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 365°F and the afterburner temperature was 1468°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 Expert Coating staff regarding the afterburner temperature it was observed that the afterburner temperature drops below 1400°F when the primary chamber air is introduced to the secondary chamber/afterburner. This temperature drop occurs for less than one minute during operation. Expert Coating staff stated that this is normal during operation for this emission unit. It was discussed with Expert Coating staff to increase the set-point of the afterburner so the introduced air from the primary chamber doesn't drop the secondary chamber temperature below 1400°F. Also it was discussed with Expert Coating staff that the required interlock system is installed and no changes have occurred to the system since the previous inspection.

During each burn-off or batch processed, Expert Coating is required to record the temperature of the afterburner three (3) times per cycle. Records were requested and reviewed for the time period of February 2021 through February 2022. No issues were noted during the review of the records provided.

It was verbally confirmed with Expert Coating staff that no malfunctions have occurred during the period covered by this inspection. As stated previously, EUBURNOFF was most recently calibrated on October 18, 2022, by Consolidated Controls Co. Expert Coating has recently resealed the doors to EUBURNOFF. Upon further inspection of the emission unit, MTC and CR noticed small pin holes and minor weld deterioration from around the outside and rear of EUBURNOFF. This deterioration should be noted to be normal for this emission unit since installation in 1997 and the deterioration did not appear to significantly alter the performance of EUBURNOFF.

Per SC VI.5, Expert Coating shall keep monthly and 12-month rolling time period records of the total number of batches processed in EUBURNOFF and is limited to 251 batches per a 12-month rolling time period. Records were requested and reviewed for the time period of February 2021 through February 2022. The highest number of monthly batches processed in EUBURNOFF occurred during the month of April 2021, when 19 batches were processed. As of February 2022, 64 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. Copies of MSDSs for the two PVC coating materials used on site were also provided and reviewed.

One stack is listed in association with EUBURNOFF and was observed during the site inspection. The stack 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 the time period of February 2021 through February 2022. Upon review of the records provided, emissions only appeared to be hydrogen chloride from EUBURNOFF. The highest monthly hydrogen chloride emission occurred during the month of May 2021 when 249.7 lbs of hydrogen chloride was emitted. The highest 12-month rolling hydrogen chloride emission occurred during the 12-consecutive month period ending in February 2022, when 0.92 ton of hydrogen chloride was emitted, which is well within the individual and aggregate HAP emission limits. Previous 12-month rolling time period records were reviewed and were to be within permitted limits.

Per SC VI.2.a-e, Expert Coating 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 Expert Coating 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. Media material was noted in the area of the dust collector and was stated by Expert Coating 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 consists 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, but are recorded as one coating line for ease in record keeping. Previously, the company had utilized the Rule 287(2)(c) exemption for the coating process. Expert Coating provided the facility's "Add Coating" record to demonstrate monthly usages for the time period of February 2021 through February 2022. Coatings are added to the dip tanks via 55-gallon drums. The highest monthly coating usage occurred during the month of February 2022 when 41.25 gallons of coating was used. It was concluded that the coating lines appear to be exempt per Rule 287(2)(c).
- 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, Expert Coating Company Inc. appears to be in compliance with PTI No. 317-74A.

NAME Michael T. Cox DATE 3/31/2022 SUPERVISOR HH