

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

N742655310

<b>FACILITY:</b> CROWN GROUP SHELBY TWP PLANT		<b>SRN / ID:</b> N7426
<b>LOCATION:</b> 12020 SHELBY TECH DR, SHELBY TWP		<b>DISTRICT:</b> Warren
<b>CITY:</b> SHELBY TWP		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b>		<b>ACTIVITY DATE:</b> 08/26/2020
<b>STAFF:</b> Joe Forth	<b>COMPLIANCE STATUS:</b> Non Compliance	<b>SOURCE CLASS:</b> MINOR
<b>SUBJECT:</b> On-site Inspection		
<b>RESOLVED COMPLAINTS:</b>		

On August 26, 2020, AQD staff Joseph Forth conducted a scheduled targeted inspection at Crown Group Shelby (PPG) located at 12020 Shelby Technical Drive, Shelby Township, Michigan. The purpose of the inspection was to determine facility's compliance with the Federal Clean Air Act; and Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451 and Permit to Install (PTI) No. 187-18.

The facility coats miscellaneous metal parts using e-coat system and powder coating process. The powder coating process was exempt under AQD Rule 287(2)(d). The powder coating booth appeared to have properly installed and maintained filters. Metal parts to be coated go through an 11-stage cleaning process that starts with Stages 1 & 2 metal parts cleaning using soapy water cleaner sprays at 125°F (124°F during inspection). Stage 3 is hot water cleaning through immersion at around 130°F (129°F during inspection). Stages 4 & 5 are city water rinsing processes. Stage 6 is alkaline cleaning/conditioning. Stage 7 is Zinc phosphating process and observed to be operating at 112°F. Stages 8 & 9 are city water rinsing processes. Stage 10 is a sealing process. Stage 11 is RO (reverse osmosis) water immersion rinse process. After the 11- stage cleaning process, the parts go through electrodeposition coating (e-coat) process and 3 stages of post rinsing. The e-coat process utilizes a very low VOC water-based coating. The coated parts go through a curing oven followed by 7 stages of powder coating process and another curing oven. The curing ovens operate around 370°F to 385°F. From the curing oven, the parts go through final inspection and packing for shipment to customers.

The coating process may be exempt from permitting per Rule 290, which allows an emission unit to be exempt from permit to install (Rule 201) requirements. Upon evaluation of the E-coat coating, it appears the E-Coating material contains a carcinogenic material, dibutyltin oxide (CAS No.818-08-6.). In order for the coating process to operate under the rule 290(2)(a)(ii) permitting exemption, the initial risk screening level for dibutyltin oxide must be within 0.04 mg/m<sup>3</sup> and 2.0 mg/m<sup>3</sup>, and the uncontrolled monthly emissions shall not exceed 20 pounds per month. The AQD does not currently have a screening level for dibutyltin oxide, therefore I will request the EGLE-AQD Toxics unit to develop a screening level for dibutyltin oxide and reevaluate the applicability of Rule 290 for this process. Crown Group provided emissions records from January 2017 to July 2020, no monthly emissions exceeded the 1000 pounds per month VOC limit in Rule 290(2)(a)(ii).

The facility also has a permitted burn-off oven that is used to remove built up coatings on the metal racks used in the e-coat process.

I arrived at the facility at 1:30 pm, and was met by Mr. Jason Nowak, Regional Environmental Manager. I introduced myself, presented my credentials, and stated the purpose of the inspection. Mr. Nowak had provided the VOC records prior to the inspection, so the main focus of the inspection was to look at the powder coating booth and burn-off oven. Upon inspection it was discovered that while the burn-off oven has a temperature monitor, the facility had not been recording the temperatures. This is a violation of PTI No. 187-18, Special Conditions VI.1 and 3, IX.1(b). A violation notice will be issued.

AQD did receive notice from Mr. Nowak that on September 15, 2020, the burn-off oven had been equipped with a temperature logger. Despite the quick action to fix the issue, Crown Group was not maintaining records prior to the installation of the logger and the violation notice will be issued for this violation.

Crown Group Shelby does not have any back-up generators, cold cleaners, or boilers.

#### Compliance

All records were provided electronically and can be located in: S:\Air Quality Division\STAFF\Joe

**Forth\N7426 Crown Group Shelby FY20 Inspection****PTI No. 187-18****EUBURNOFF**

**I.1 EUBURNOFF was not operating at the time of inspection, so visible emissions were not able to be evaluated.**

**II.1 The only fuel used in EUBURNOFF is natural gas.**

**II.2 The permittee appears to only process cured coatings on metal racks in EUBURNOFF.**

**II.3 None of the materials processed in EUBURNOFF contain halogens.**

**III.1 and 2 The only materials processed in EUBURNOFF are cured coatings.**

**IV.1 EUBURNOFF is equipped with a secondary chamber/afterburner. The afterburner is kept at a minimum of 1400 °F according to recently provided temperature data.**

**IV.2 EUBURNOFF is equipped with an automatic temperature control for both the primary chamber and afterburner.**

**IV.3 EUBURNOFF is equipped with an interlock system, as described in the oven manual.**

**VI.1 EUBURNOFF is equipped with a device to monitor the temperature of both chambers. At the time of inspection, it was not equipped with a device to record the temperatures. A violation notice will be issued.**

**VI.2 Calibrations for both chambers in EUBURNOFF were provided.**

**VI.3 EUBURNOFF was not equipped with a device to record temperature data at the time of inspection, this condition will be included in the violation notice.**

**VI.4 Maintenance records for EUBURNOFF were available on-site, reviewed but copies were not requested.**

**VI.5 A current listing of all materials processed in EUBURNOFF were provided, along with SDSs for each material.**

**VI.6 The manual for EUBURNOFF showed that it is equipped with an afterburner, temperature control for primary chamber and afterburner, and interlock system.**

**VII.1 (a) and (c) The permittee sent notice to the AQD of the stack height being raised to the 47.25 feet required by the permit, and the proof that EUBURNOFF was equipped with an interlock system.**

**VII.1(b) The facility did not install a device to record the temperatures of both chambers of EUBURNOFF before the inspection. However, after the inspection, the permittee notified the AQD within 7 days of the installation of the temperature recorder, as required by this condition. I will use discretion to not include this condition in the violation notice.**

**VIII.1 The exhaust stack for EUBURNOFF appeared to be unobstructed. And notice to the AQD stated the stack height was the permit required 47.25 feet.**

**IX.1(a) and (c) The permittee raised the stack height to 47.25 feet and installed the interlock system in EUBURNOFF before the required date of February 1, 2019.**

**IX.1(b) The permittee did not install the temperature recording device in EUBURNOFF before the required date of February 1, 2019. Violation of this condition will be included in the violation notice.**

**Conclusion**

**Crown Group Shelby appears to be in violation of PTI No. 187-18, Special Conditions VI.1 and 3, and IX.1 (b). A violation notice for these violations will be issued. Upon evaluation of the E-coat coating, it appears the E-Coating material contains a carcinogenic material, dibutyltin oxide (CAS No.818-08-6.). In order for the coating process to operate under the rule 290(2)(a)(ii) permitting exemption, the initial risk screening level for dibutyltin oxide must be within 0.04 mg/m<sup>3</sup> and 2.0 mg/m<sup>3</sup>, and the uncontrolled**

monthly emissions shall not exceed 20 pounds per month. The AQD does not currently have a screening level for dibutyltin oxide, therefore I will request the EGLE-AQD Toxics unit to develop a screening level for dibutyltin oxide and reevaluate the applicability of Rule 290 for this process.

NAME *Joseph M. Furt*

DATE 9-28-2020

SUPERVISOR *Sebastian Kallumkal*