

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

N062230947

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| FACILITY: PROGRESSIVE FINISHING, INC. | | SRN / ID: N0622 |
| LOCATION: 50800 Russell Schmidt Blvd, CHESTERFIELD | | DISTRICT: Southeast Michigan |
| CITY: CHESTERFIELD | | COUNTY: MACOMB |
| CONTACT: Paul Hinderliter, President | | ACTIVITY DATE: 07/28/2015 |
| STAFF: Francis Lim | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT |
| SUBJECT: | | |
| RESOLVED COMPLAINTS: | | |

On July 28, 2015 AQD staff conducted an inspection at Progressive Finishing, Inc located at 50800 E Russell Schmidt, Chesterfield. The purpose of the inspection is to determine the facility's compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, Natural Resources and Environmental Protection Act, Act 451 of 1994, as amended; Air Quality Administrative Rules; and conditions of Permit-to-Install No. 132-07 and No. 131-09A. Paul Hinderliter, Mike Stornant, and Chris Moore assisted during the inspection.

Progressive Finishing is an automotive plastic parts coater servicing Tier II suppliers. Facility coats some metal parts as well. This facility occupies the building vacated by Key Plastics, Inc. There is no transfer of ownership from Key Plastics to Progressive since Progressive did not purchase the coating equipment of Key Plastics. Facility operates one shift and has about 24 employees.

General Permit to Install No. 132-07 for a coating line (System 1) was issued on April 18, 2007. Progressive installed a chain-on-edge conveyor coating line consisting of 2 manual paint booths, oven, and flash off tunnels. System 1 is typically used to apply solvent based coatings.

A second coating line (System 2) was installed later. This is also a chain-on-edge conveyor line consisting of 2 automatic paint booths, oven and flash off tunnel. System 2 is typically used for water based coatings.

General Permit-to-Install No. 132-07 includes conditions that allow the permittee to install additional coatings lines without applying for a new general permit to install provided all general permit to install applicability criteria is met. However, this permit did not contain opt-out limits. When System 2 was later installed, HAP opt-out limits were needed. During the inspection on March 30, 2009, AQD staff advised the facility to obtain an opt-out permit. On September 15, 2009, an opt-out permit PTI No. 131-09 was issued to the facility.

On May 4, 2012, PTI No. 131-09A was issued to include System 3 coating line. System 3 is a chain-on-edge conveyor coating line with three automatic booths, electric oven and flash off tunnel.

A manual standalone booth is used for coating limited quantities of plastic parts. Coating usage at this booth is low. A batch oven is used for this booth. This booth is exempt under Rule 287(c), although it could also be covered under General Permit No. 132-07.

The ovens are generally maintained from 200-210 °F. If TPO (thermoplastic olefin) coatings are used, the oven temperature could be as high 350 °F. At these temperatures, the coating is no longer considered air dried (allowed temperature for air dried coatings is up to 194 °F). However, since the facility is not subject to Rule 632 (plastics part coatings) or Rule 621 (metal parts coating), it does not matter at this time whether the coatings are air-dried or not.

Presently, TPO are coated without an adhesion promoter. The facility is expecting to land a job for TPO parts that will require an adhesion promoter. Typically, adhesion promoter contains a high VOC. An adhesion promoter reduces the surface tension, which results in the coating flowing more freely in the plastic surface. The TPO plastic parts are precleaned (before coating) with IPA soaked in rags. The rags are disposed as hazardous waste. IPA usage is included in the booth emissions. Facility estimates annual usage of about 60 gallons. There are no cold solvent cleaners at this facility.

For purging, the gun is removed and paint is allowed to drip to a collection bucket. Water is used for purging water based coatings; acetone or MEK is used for purging solvent based coatings. Facility estimates 0.5 gallon of acetone or MEK is used for each purge. The waste purge cleaner is collected in waste drums. Spray guns are soaked in acetone or MEK for cleaning.

Dry filters for the paint spray booths are in place.

During the inspection, staff verified that a daily log of coating, per line, is kept. Staff obtained a copy of the log sheets and is attached to this report. Coating usage is logged based on the reduced coating. Acetone, sometimes xylene is used for paint reducing. The quantity of paint used daily is estimated by measuring the amount of coating remaining in the paint container using a calibrated stick. Every month Chris conducts an inventory of the coating and compares that with the total daily paint usage as measured and logged. If there is a difference, usage is adjusted. Chris refers to this adjustment as "over" or "under".

Staff reviewed record keeping of the facility. Staff went through the daily logs for January 2015 and verified the daily log entries are entered in the monthly records. Staff verified that total daily usage matched the entries in the monthly records. Staff also verified that the facility-wide VOC and HAPs monthly and 12-month rolling emissions calculations are kept. Staff also verified that monthly and 12-month rolling emissions calculations per emission unit are kept. In calculating material usage, this facility does not take credit for paint/solvent disposed as hazardous waste.

Staff reviewed the VOC content of coating used and how the VOC content was calculated. Since this is a job shop supplying to Tier 1 and Tier 2 suppliers, this facility uses several different coatings, with 3 or 4 "heavy runners". For these coatings, facility use actual VOC content. Many jobs are limited and may not be done again. They classify coatings used in these jobs as "sample coatings". VOC content of these coatings are assumed to be worst case at 6.8 pounds/gallon.

Attached are 12-month rolling records for the period ending in January 2015 and June 2015.

For the reporting period ending June 2015, 12-month rolling emissions are as follows:

System 1 VOC 1.74 tons

System 1 HAPs 0.24 tons

System 2 VOC 4.80 tons
 System 2 HAPs 1.13 tons

System 3 VOC 3.80 tons
 System 3 HAPs 0.58 tons

Paint System EB (manual booth) VOC 0.67 tons
 Paint System EB (manual booth) HAPs 0.04 tons

Facility-wide VOC 11.02 tons
 Facility-wide HAPs 1.99 tons

System 3 P-Chlorobenzotrifluoride 0.06 tons (limit is 1.6 tons per year)
 System 3 T-Butyl Acetate 0.27 tons (limit is 4.6 tons per year) NOTE: As specified in PTI No. 131-09A, only System 3 has a P-chlorobenzotrifluoride and T-Butyl Acetate limit.

Other miscellaneous operations at the facility are ultrasonic welding, pad printing and hot stamping. Ultrasonic welding is a process to stick together plastic parts using high frequency ultrasonic vibrations applied to workpieces being held together under pressure. The ultrasonic vibration at the common area creates a weld. In ultrasonic welding, there are no bolts, nails, soldering materials, or adhesives to bind the materials together.

Pad printing is similar to a stamp pad printing process. Facility tracks usage of stamp pad ink. Usage of stamp pad ink is negligible.

Hot stamping is a dry printing method in which predried ink or foil is transferred to a plastic surface at high temperatures. This is a non-polluting method of printing. Miscellaneous operations are exempt.

NAME J. A. J.

DATE 09-02-15

SUPERVISOR CJE

