

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

N087126956

FACILITY: CONFORMANCE COATINGS & PROTOTYPE, INC.		SRN / ID: N0871
LOCATION: 2321 BUSHAW HWY, MARYSVILLE		DISTRICT: Southeast Michigan
CITY: MARYSVILLE		COUNTY: SAINT CLAIR
CONTACT: Bruce Douglass, Manager		ACTIVITY DATE: 09/04/2014
STAFF: Francis Lim	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection		
RESOLVED COMPLAINTS:		

On September 4, 2014, I conducted an inspection at Conformance Coatings and Prototype located at 2321 Busha Highway, Marysville, Michigan. Mr. Bruce Douglass, owner/manager assisted during the inspection.

The purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) Administrative Rules; and the conditions of Permit-To-Install (PTI) No. 75-04.

Conformance Coatings paints automotive and non-automotive plastic parts, and some plastic business machine parts (very limited at this time). The facility operates 6 paint spray booths, (3) natural gas-fired ovens (2 inline ovens with overhead conveyors and 1 batch oven), and (3) infrared lights for curing. Currently, facility operates just 1 shift, 5 days per week.

The facility was issued a renewable operating permit in January, 1998. Facility later obtained an opt-out permit, and void the ROP, since their VOC emissions and HAP emissions are consistently below major source thresholds. Since the facility is not a major source for HAPs, facility is not subject to the Plastic Parts Coating MACT, 40 CFR 60 Subpart PPPP. Opt-out Permit No. 75-04 was issued on May 4, 2004.

The facility has never exceeded 30 tons per year, therefore is not subject to Rule 632. Paint records are kept and logged in the computer. Paint usage is calculated monthly for each coating, based on monthly inventory of the coating. However, some of the booths are subject to the NSPS Subpart TTT (Coating of Plastic Business Machine Parts), therefore this source is a Category II fee facility.

Booth Nos. 1 and 2 are plastic parts coating booths with infrared light for curing. Booth No. 3 was converted into an enclosed clean room booth. Booth No. 4, controlled by a water curtain, has been removed and not replaced. Booth No. 5 is also a plastic parts coating booth. A batch oven is used for curing, if necessary. Booth Nos. 6 and 7 are newer booths that have conveyors, each with in-line gas ovens. All of the operating spray booths have dry filters installed. Facility use mostly 2-component solvent based coatings (high solids) and water based coatings as well. Most of the coatings used have VOC content below 5.0 pounds per gallon. Some coatings contain as high as 6.71 pounds/gallon. NOTE: Facility is not subject to Rule 621 limits, as long as emissions remain below 30 tons per year facility wide and 10 tons per year and 2000 pounds per month, per line.

Facility has a mask washer located between booth No. 2 and 3. A mask is a metal equipment where certain portions of the plastic part is "masked" so that that area does not get painted. After use, the masks are cleaned in a solvent based mask washer to remove the paint

overspray. Exhaust from the washer is vented out the stack for Booth No. 3. The washer tank holds about 40 gallons and it is covered. The solvent is replaced about 4 times per year. The mask washer has been installed since 1985. For reporting purposes, the facility includes the emissions from the mask washer with the emissions from Booth No. 3. The parts hanger is sent out for cleaning by incineration.

To generate more business, the facility has been doing other non-automotive parts. During the inspection, facility was coating small plastic parts like fish lures by airbrushing. Operator is airbrushing the small part with different colors and different designs. Paint usage is very small. Air brush pressure is from 25-35 psig.

Facility still occasionally paints plastic business machine parts. Since Booth Nos. 1 and 2 were installed before the NSPS Subpart TTT (Coating of Plastic Business Machine Parts) promulgation, the two booths are therefore exempt from that rule. Booth No. 5 was installed after NSPS Subpart TTT promulgation and therefore subject to the rule. Booth Nos. 6 and 7 are newer booths and also subject to NSPS Subpart TTT. For plastic business parts that use Polane coating, a lower VOC coating, it can be painted in any of the booths. A coating application that AQD previously believed could be subject to NSPS Subpart TTT is the application of shielding. A shielding prevents interference of electromagnetic field and radio frequency radiation on an electronic part. AQD staff verified that application of shielding coating is exempt from NSPS Subpart TTT.

Facility submits MAERS annually.

Opt-out Permit No. 75-04 has facility-wide limits and covers Booth No. 1 to Booth No. 7. Paint usage is determined at the end of each month and is based on monthly inventory of the each coating.

Booth No. 1 - open front dry filter bench spray booth with belt conveyor and infrared light to cure paint.

Booth No. 2 - open front dry filter spray booth with belt conveyor and infrared light to cure paint.

Booth No. 3 – Enclosed dry filter spray booth. Batch gas-fired oven is available for paint curing.

Booth No. 5 - open front dry filter spray booth with overhead conveyor. Batch gas-fired oven is available for paint curing.

Booth No. 6 - open front dry filter spray booth with overhead conveyor and in-line gas fired oven.

Booth No. 7 - open front dry filter spray booth with overhead conveyor and in-line gas fired oven.

Special Cond 1.1a. VOC limit for all coating lines, plus batch oven is 30 tons per year. Emissions for 2013 are 9.8 tons. See attached. This matches information submitted in MAERS. Facility submitted VOC emissions for the 12-month period ending in July 2014. However, the number appears too low (3.5 tons). This will be followed up with Mr. Douglass.

Special Cond 1.1b. VOC content limit when coating plastic business machine part is 11.96 pounds per gallon of solids applied. Facility still occasionally coats some plastic business

machines parts, but uses Polane, a low VOC coating. Facility applies shielding to some plastic non automotive parts. Shielding application is not subject to NSPS Subpart TTT.

Special Cond 1.1c and 1.1d. VOC emission limit for each individual coating booth is 2000 pounds per month, 10 tons per year. Staff verified from records kept that emission limits are not exceeded. See attached.

Special Cond 1.2. All waste coatings and solvents are stored in closed containers.

Special Cond 1.3. Spent filters are disposed properly and sent to regular landfill.

Special Cond 1.4. Facility still does a limited number of plastic business machine parts. These parts are coated in Booth Nos. 1 and 2 or can be painted in any of the other booths if the low VOC Polane is used.

Special Cond 1.5. All dry filters are installed properly.

Special Cond 1.6. HVLP spray guns are used, except for the airbrushing of fish lures. Conventional high pressure spray guns are not used.

Special Cond 1.7. Formulation data is used for determining VOC content of all coatings, including 2-component coatings. See attached.

Special Cond 1.8. Facility established a spreadsheet where usage data is entered and VOC emissions are calculated automatically based on the VOC content of the coating and solvent.

Special Cond 1.9. VOC content and chemical composition of the different coatings and solvents are kept on file and entered in the computer.

Special Cond. 1.10. The following information is kept, on a monthly basis: gallons of each coating and reducer used; VOC content of coating and reducer; VOC emissions calculation, per month, and on a rolling 12-month time period; and hours of operation. In the past, facility was erroneously calculating the monthly hourly emissions using the wrong number of production hours. The facility was calculating the hourly emissions per booth, instead of calculating hourly emissions for all booths, as specified in permit. Recordkeeping of production hours and hourly emissions are simpler now.

Special Cond 1.11. Facility keeps monthly and annual emission rate for each emission unit.

Special Cond 1.12. Facility coats a limited number of plastic business machine parts. Also refer to Special Cond 1.1b.

Special Cond 1.13. Facility coats a limited number of plastic business machine parts. Also refer to Special cond 1.1b.

Special Cond 1.14. Stack dimensions appear to be as specified in permit condition.

Special Cond 2.1 AQD staff verified that HAP emissions for each individual HAP is less than 9 tons per year and total aggregate HAPs facility wide is less than 22.5 tons per year. Total HAPs emissions for 2013 are 0.25 tons. See attached. With the delisting of MEK as a HAP, facility's HAPs emissions were drastically reduced. MEK is the most widely used solvent and reducer at the facility.

Special Cond 2.2. HAP content of coating and reducer is kept and entered in the computer.

Special Cond 2.3. Spreadsheet to automatically calculate emissions is in place. Emissions are automatically calculated from coating and reducer usage.

Special Cond 2.4. The following records are kept in the computer for FG-FACILITY: gallons of each HAP containing material; HAP content of each HAP containing material; individual and aggregate HAP emission calculation per month; individual and aggregate HAP emission rate in tons per year based on a rolling 12-month time period.

NAME J. A. J.

DATE 09-17-14

SUPERVISOR CTE