

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

N560070392

<b>FACILITY:</b> Collision Craftsmen		<b>SRN / ID:</b> N5600
<b>LOCATION:</b> 14080 23 MILE RD, SHELBY TWP		<b>DISTRICT:</b> Warren
<b>CITY:</b> SHELBY TWP		<b>COUNTY:</b> MACOMB
<b>CONTACT:</b> Marco Grossi , Owner		<b>ACTIVITY DATE:</b> 01/04/2024
<b>STAFF:</b> Robert Joseph	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> SM OPT OUT
<b>SUBJECT:</b> Scheduled inspection auto-collision repair shop.		
<b>RESOLVED COMPLAINTS:</b>		

On January 4, 2024, I, Michigan Department Environment, Great Lakes, and Energy-Air Quality Division staff, Robert Joseph, conducted a scheduled inspection of Collision Craftsmen (also referred to as "the facility") located at 14080 23 Mile Road, Shelby Township, MI, 48315. The purpose of the inspection was to determine the facility's compliance with the requirements of the Federal Clean Air, Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; and the Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) Administrative Rules, and conditions of the facility's General Coating Lines Permit to Install (PTI) 148-06.

### **General Information**

I arrived at the facility shortly after 1 p.m. and met with Marco Grossi, facility owner. I stated my name, the purpose of my visit as a civil service AQD employee of the state, and presented my credentials. I then proceeded with Marco to begin the inspection of the facility. The facility is an auto-repair collision and glass replacement shop that has operated at this location for approximately five years. The facility is open weekdays 8 a.m. - 5 p.m. and there are approximately 10 employees on staff. Marco indicated that they have been unsuccessful in the pursuit to employ more staff personnel. The facility is classified as a synthetic minor source which has enforceable limits or restricts the PTE for a specific emission unit or process equipment. The facility's permit has a coating and source-wide limit on VOCs and operates two Garmat spray booths (one for prep and one for coating).

### **Background History**

Upon inspecting the facility last year in March 2023, the facility was found to be in violation of their permit due to unsatisfactory recordkeeping. The facility is required to record and calculate their monthly and 12-month rolling coating and solvent usage via the chemical composition of each coating, however, the facility had done so via their distributor's coating software (PPG) which did not adequately record the chemical compounds (VOCs) present in the materials used.

In addition, the facility also had not properly submitted their yearly emissions (MAERS) and had only done so via estimation. Marco previously stated that he was familiar with the facility's permit and that he was informed by previous AQD staff that the permit would no longer be applicable to the facility - which was verified to be untrue. I informed him that was incorrect and that the facility is bound by the permit's operational and recordkeeping requirements. Therefore, after last year's inspection the facility was issued two violation notices on March 7 and July 12, 2023, detailing four monitoring/recording keeping violations and their MAERS non-submittal, respectively.

The facility resolved the violation notices by obtaining a consultant, ASTI Environmental, to monitor and record the facility's coating and solvents usage. The facility's coating distributor (PPG) obtains the facility's daily usage via the coating software (once entered by staff) and then compiles the information and submits it to ASTI for calculating. The facility ultimately submitted their 2022 MAERS in September 2023.

In September 2023, the facility contacted the AQD requesting that PTI 148-06 be voided due to the facility's coating and solvent usage given that it meets the exemption requirements of R 336.1287(c); *A surface coating line if all of the following conditions are met:*

- (i) The coating use rate is not more than 200 gallons, as applied, minus water, per month.*
- (ii) Any exhaust system that serves only coating spray equipment is supplied with a dry filter control or water wash control which is installed, maintained, and operated in accordance with the manufacturer's specifications, or the owner or operator develops a plan which provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions.*
- (iii) Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the department upon request.*

The facility's stated its recordkeeping usage for 2022 and 2023 has been documented to be under 200 gallons per month, however, the facility was informed that the permit would not be voided at that time but that consideration for this would occur in 2024 based on its materials usage and further AQD discussion.

On December 15, 2023, the facility submitted a letter to the district office stating that its permit be voided based on Rule 287(c). In addition, the facility stated the following,

*The facility has committed to, and is in the process of changing its coating operations from a solvent based system to one using waterborne products. I understand that change over should be completed by the end of this month. The new operation will utilize BASF's Glasurit 100 line of coatings. Waterborne automotive paints typically contain around 10% solvents compared to solvent based paints, which contain 70% or more solvents. BASF claims its Glasurit coating line has a VOC value that is 40% lower than traditional waterborne coatings and as such, it has the lowest VOC content on the market.*

*Collision Craftsmen renews its request to terminate its air permit upon proof that it has completed its changeover to waterborne coatings. The new process will result in a significant reduction in the quantity and nature of emissions from this facility, which had already met the requirements for an exemption under Rule 287(c).*

## **Facility Tour**

The facility has two downdraft Garmat coating booths that are used to prep/coat automobiles or automotive parts. Marco stated that one booth is used to prep the items to be coated and the other is used to coat the items. The coating is performed using spray guns which utilize high-volume low-pressure spray guns (HVLP). These spray guns use large volumes of air to direct and move the coating application converting them into small droplets - allowing the coating to impact the surface of the object at a controlled and gentle

pace. The booths are fitted with exhaust filters along the top where air enters and exits within the filters located on the sides of the booths. The magnahelic gauge measured under 2.5 lb/in<sup>2</sup> on both paint booths. Marco stated the filters are replaced anywhere from two to four weeks and more frequently as needed.

The facility does not sandblast the items prior to them being coated, but rather performs this process via the use of mechanical orbiter. In addition, the facility maintains a dust collector indoors to minimize the fugitive dust within the working areas. Both processes are exempt from a permit to install since emissions are released into the general plant environment per Rule 285(l)(vi)(B).

I viewed the paint mixing room where the facility mixes paints and cleans the equipment with lacquer thinner. The lacquer thinner is emptied into a 55-gallon drum for disposal and I informed Marco to ensure that staff maintains the drum lid closed at all times when not in use. The cold cleaner due to its small area (less than 10 ft<sup>2</sup>) is exempt from a permit to install per Rule 281(2)(h).

Once the coatings are mixed, they are placed on a scale which provides the following data per the PPG software: amount sprayed (gal), actual VOC applied (lbs/gallons), regulatory VOC applied less water and exempt solvents, and the VOC emissions. Marco indicated that this information is generated from the coatings' SDS. This information is then obtained and provided to ASTI Environmental to record and calculate the facility's VOC emissions.

Upon reviewing this and the facility's SDS for the coatings/solvents used, Marco and I discussed the facility's permit, thier materials usage, as well as the consideration that will be given by the district office to reclassify the facility's air permitting designation as an exempt minor source.

### **Regulatory Summary**

U.S. EPA guidance for the Potential to Emit Guidance for Specific Source Categories details the following guidance for Auto Body Shops not requiring notifications under General Permits and Prohibitory Rules;

***If you own this type of auto body shop . . .***

***. . . then no formal notification is required by a State or local agency's prohibitory rule or general permit, if:***

Business entirely, or almost entirely, for collision repairs

. . . your shop has two or fewer bays devoted to painting.

Substantial portions of business devoted to repainting entire vehicles

. . . your shop has only one bay devoted to painting.

All auto body shops

.... your shop does not have the physical or operational capacity to do more than 50 jobs per week.

Based on facility records, the shop performs approximately 40 jobs per month averaging approximately 7 per week. The work involves refinishing work which typically are sections of a vehicle rather than it as a whole.

## **PTI 148-06**

### Attachment A - General Conditions

There were no concerns regarding these conditions at the facility. No visible emissions were observed, no malfunctioning equipment, and no obvious modifications of the facility's equipment was observed.

## ***FG - COATING***

### I. EMISSION LIMITS

Pollutant	Limit	Time Period
VOC	2000 lbs/month	Calendar month
VOC	10 tons/yr	12-month rolling time period

Facility records reveal VOC emissions to be between 20-30 lbs per month with a VOC 12-month rolling emission limit of 0.19 tons/yr.

### III. PROCESS/OPERATIONAL RESTRICTIONS

The facility disposes of the clean-up materials and waste coatings into a 55-gallon drum. The facility was reminded to maintain the lid closed at all times when not in use as it was observed open during inspection. Marco stated he has instructed staff to maintain that it remains closed.

### IV. DESIGN/EQUIPMENT PARAMETERS

The facility's coating applicators are HVLP (high-volume low-pressure) operated. Pressure caps were made available but not tested. The facility utilizes dry exhaust filters in the coating booths and there are no oxidizers on site (thermal nor catalytic).

### V. TESTING/SAMPLING

The AQD has not requested that the facility conduct a performance test for verification of VOC content or emissions using an EPA approved method.

### VI. MONITORING/RECORDKEEPING

The facility does not utilize an oxidizer (thermal nor catalytic). The facility maintains purchase orders for coating materials, clean-up materials, and coating primer materials. The facility also maintains the VOC content in pounds per gallons of each coating, clean-up material, and primer material used. Examples include Fine Titanium White (8.50 lbs/gal) and Perylene Violet (6.72 lbs/gal).

VOC monthly emissions range between 20-30 lbs per month (0.015 tons) and 12-month rolling emission totals range typically between 0.19-0.25 tons/yr. The facility also maintains SDS literature for each material used.

**VIII. STACK/VENT RESTRICTIONS**

There were no concerns observed with the facility's stack.

**IX. OTHER REQUIREMENTS**

The facility has not replaced or modified any portion of FG-COATING since operations began.

***FG - SOURCE***

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period
VOC	30 tons/yr	12-month rolling time period

**VI. MONITORING/RECORDKEEPING**

Facility records reveal a VOC 12-month rolling emission limit of 0.19 tons/yr.

**Appendix B**

The facility maintains their materials usage via the method in Appendix B (in-conjugation with the PPG software) to ensure proper documentation and recordkeeping of the materials used.

**Conclusion**

Based on the AQD inspection and records review, Collision Craftsmen is in compliance with the aforementioned requirements and conditions of the facility's General Coating Lines Permit to Install (PTI) 148-06. In addition, given the facility's eligibility per Rule 287(c) and U.S. EPA guidance, Potential to Emit for Specific Source Categories, the facility's permit will be recommended to be voided and their regulatory status reclassified to minor status. The facility will be required to continue to monitor and record their material usage to ensure the facility continues to meets Rule 287C eligibility.

NAME Robert Joseph

DATE 01-19-2024

SUPERVISOR Joyce