

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

P032831813

FACILITY: PREFIX COATINGS, LLC		SRN / ID: P0328
LOCATION: 3500 JOSLYN ROAD, AUBURN HILLS		DISTRICT: Southeast Michigan
CITY: AUBURN HILLS		COUNTY: OAKLAND
CONTACT: Ken Siuda, Paint Process Quality Engineer		ACTIVITY DATE: 10/02/2015
STAFF: Rebecca Loftus	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS: C-15-01490		

On October 2, 2015, I, Rebecca Loftus from the Department of Environmental Quality's (DEQ), Air Quality Division (AQD), conducted an inspection of Prefix Coatings, LLC. (Prefix), State Registration Number (SRN): P0328, located at 3500 Joslyn Road, in Auburn Hills, Michigan. The purpose of this inspection was to determine the facility's compliance with the Federal Clean Air Act, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, Michigan's Air Pollution Control Rules, Permit to Install (PTI) No. 40-12, and PTI No. 133-12.

In addition to determining compliance with state and federal air regulations, the inspection was follow-up to a paint odor complaint received on September 4, 2015. See complaint section below for more details.

Upon arriving at the facility, I met with Mr. Ken Siuda, Facility Manager and Ms. Barb Olson, New Paint Process Manager. During my inspection, Mr. Siuda and Ms. Olson escorted me through the building, discussed changes from my last inspection, and provided me with company records. Below is a summary of this information.

### Contacts

Mr. Ken Siuda, Facility Manager, 248-481-4900 x4907, ken.suida@prefix.com

Ms. Barb Olson, Paint Process Manager, 248-481-7900 x4926, barbara.olson@prefix.com

### Company Overview

Prefix has been in business at their Rochester Hills location (P0204) for over 38 years; the business includes engineering prototypes and designs for the automotive industry (e.g. show cars and concept cars).

At 3500 Joslyn Road (P0328), Prefix coats body panels as part of the production paint program for the Chrysler V1 (Viper). At full production of the Viper, Prefix intended to coat approximately 12 cars (car = two 12ft x 18ft racks) a day. The products on each rack consisted of mostly plastic or composite material; some parts were also aluminum.

Mr. Siuda explained that in 2013, the facility was completing approximately 12 cars per day, but by 2014, the production had dropped to approximately 4 cars per day. Currently, Prefix operates two shifts: the first shift paints (approximately 3 full cars) from 6:00am-9:00am and the remainder of the shift is dedicated to repairs and repaints; the second shift is for cleaning and maintenance activities.

Due to the drop in Viper production, Prefix is taking on new projects from Corporate including items from the Prefix Performance Division (unique vehicles/trucks), and other items including specialty parts, add-ons, auxiliary, and plastic bumpers.

**Permit Overview, Permit No. 40-12 and No. 133-12**

On March 8, 2012, Prefix applied for a General Permit to Install for six coating lines. On March 16, 2012, the AQD issued a general permit, PTI No. 40-12, for coating operations. After an AQD inspection in 2012, before operations at this facility had commenced, Prefix applied for PTI No. 133-12 to restrict the facility's emissions for Hazardous Air Pollutants (HAPs) to less than major source thresholds.

PTI No. 40-12 is a general coating permit and establishes the following emission limits:

Pollutant	Limit	Time Period	Equipment
VOC	2000 lbs/month	Calendar month	Each coating line plus all associated purge and clean-up operations.
VOC	10 tpy	12-month rolling	Each coating line plus all associated purge and clean-up operations.
VOC	30 tpy	12-month rolling	Facility-wide

PTI No. 133-12 establishes the following emission limits:

Pollutant	Limit	Time Period	Equipment
Each Individual HAP	9 tpy	12-month rolling	Facility-wide
Aggregate HAPs	22.5 tpy	12-month rolling	Facility-wide

On May 14, 2014, Prefix submitted a permit application (see attached) to add another down draft booth (Booth #7). Because PTI No. 40-12 is a general coating permit, permits section return the application and told Prefix the booth may be installed under this permit as long as Prefix can maintain compliance with the permit limits.

Because of the decrease in production/paint usage, it appears prefix is operating all 7 booths and is able to demonstrate compliance with both permits. More details are outline below under "Inspection Observations" and "Record Keeping/Emissions".

**Facility Overview and Inspection Observations**

Prefix receives raw parts which are hand sanded in the prep area and "priming room". In this area, the parts are also wiped down with isopropyl alcohol wipes and areas of the hoods are taped off before painting. Some of sanding/buffing equipment have attached dust collection vacuums and the room has an associated dust collector; these operations appear to be exempt from obtaining a PTI pursuant to Rule 285(l)(vi)(C).

After the parts are prepped, they can go to one of the six coating lines; each line has a 14ft x 48ft down draft booth and associated curing oven. Booths #1 and #2 are designated as

priming booths/repairs, booths #3 through #6 are used for color, strips and clear coat. At the time of the inspection, no one was painting so I did not take a paint sample. Booths #1 and #2 did have grey and black primed parts, but the painting was completed.

During the inspection, I noted that the booths appeared to be properly equipped with filters. Between each spray booth is a paint mixing area (one mixing area for every two booths) and employees use HVLP spray guns. This equipment appears to comply with the conditions of the general permit.

The new booth, Booth #7, was installed in 2014 and is used for spot repairs/repaints and for customer colors. This booth has an associated mixing room and is located in a separate area from the other six paint lines. If an item needs to be finished at a higher temperature, the item is taking to one of the curing ovens as this line does not have its own oven.

While inspecting the mixing areas, I noted the orange AQD stickers were posted near the parts washers. Previously, employees were using the cleaning solvent in uncovered mixing cups to soak parts and transfer the waste solvent. Currently, employees keep all open containers in the mixing rooms and when finished use the new flammable waste drums with covers, which are located just outside each mixing room. In addition to the new waste drums, electric paint shakers and flammable paint storage cabinets are located in between the booths.

During my inspection, Ms. Olson requested additional "cold cleaner operating procedures" (orange stickers) to replace the ones in the booths and add one to the mixing room for Booth #7.

After coating, the parts are cured in the natural gas ovens. Depending on the product the oven has different settings; low bake temperatures are around 180°F and high bake temperatures are around 250°F. Mr. Siuda explained, since my last inspection, Prefix now has a high bake primer and Ms. Olson has updated the records to account for this new coating.

After the oven, parts are sent to the staging area to fully cure (72 hours). Then they are completed in the polishing area and sent to Chrysler for assembly.

The remainder of the building has office space, a paint storage room, rack storage space, and approximately 30,000 ft<sup>2</sup> of space used for staging parts and custom car storage.

### **Record Keeping/Emissions**

During the inspection, Mr. Siuda showed me the hand written daily record keeping sheets (see attached example). At the time of my inspection, Mr. Siuda explained Prefix had recently hired Ms. Olson; she will now maintain the record keeping for the facility instead of their consultant. Ms. Olson said she was in the process of updating the electronic files with the hand written daily sheets and would be able to send me the updated records by October 16, 2015.

On October 16, 2015, and again on February 18, 2016, Ms. Olson emailed me copies of the daily/monthly electronic records (see attached CD). Each line has its own excel file; each file contains the following: detailed information for each coating used, daily usage, monthly totals, and 12 month rolling calculations.

From January through November 2015, Prefix recorded the following:

Booth	Coatings Used (gallons)	VOC Emissions (lbs)	HAP Emissions (Tons)	Purge/Clean-up Solvents (gallons)	Purge/Clean-up VOC Emissions (lbs)	Purge/Clean-up HAP Emissions (lbs)
1	643	2,834	0.2463	8.24	58.44	26.963
2	364	1,695	0.1567	12.48	88.46	40.815
3	391	1,917	0.1317	3.61	25.59	11.807
4	589	2,853	0.1778	8.30	58.88	27.167
5	537	2,730	0.1384	1.45	10.30	4.754
6	732	3,671	0.1613	1.90	13.46	6.210
7	46.63	240.95	0.0148	3.26	23.10	10.657
<b>Total (1-7)</b>	<b>3,302.63</b>	<b>15,940.95</b>	<b>1.027</b>	<b>39.24</b>	<b>278.23</b>	<b>128.37</b>

The highest 12-month rolling Aggregate HAP emissions occurred in October 2015 at 1.03 Tons; with Xylene, 2-Butoxyethyl Acetate, and Ethyl benzene as the highest individual HAPs.

Previously, based on reported emissions, Prefix was approaching their 30 ton VOC facility-wide limit. At the time of my inspection, Prefix was well below this limit due to the decrease in production.

### Coatings

Prefix uses several different coatings and each Safety Data Sheet/Environmental Data Sheets are available on-site (for the full list of coating see the excel files). All paints (primer, base colors, and a clear coat) are activated by a shared hardener. The VOC content of the coatings range from 2.20 lbs/gallon to 7.42 lbs/gallon. PTI No. 40-12 is a general permit, therefore, no pound per gallon VOC limits have been established in the permit.

### Federal Regulations

Prefix may be subject to the following Federal Regulations:

1. The National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products, Title 40 of the CFR, Part 63, Subpart Mmmm (NESHAP Mmmm).
2. The National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, Title 40 of the CFR, Part 63, Subpart HHHHHH (NESHAP HHHHHH).

Previously, during my 2012 inspection, I provided Mr. Siuda with information on both regulations. As an Opt-Out source Prefix may be subject to Subpart HHHHHH; if in the future Prefix applies for a Title V permit and becomes a major source of HAPs, they may be subject to Subpart Mmmm.

### Complaint Follow-up

In addition to determining compliance with state and federal air regulations, the inspection was prompted by a paint odor complaint received on September 4, 2015. The complainant left a message stating the following, the complainant "has noticed paint/solvent odors near his home

on average once per week since the spring of 2015. The frequency of odors depends on the wind direction; because of this it took him a long time to track the source of the paint odors but he was able to track the odors to the parking lot of Prefix. He is concerned about the odors because he does a lot of organic farming on his property and feels the odors/chemicals are toxic. He last observed the odors on Friday (9/4/15) afternoon."

Although my on-site inspection occurred on October 2, 2015, I contacted with Mr. Siuda on the following days:

9/21/15 2:16pm – I left a message for Mr. Siuda to see if any process changes had occurred early in September that would account for the paint odor. On 9/21/15 and 9/22/15, Mr. Siuda returned my call and reported that painting operations have slowed a lot in comparison to previous years. He did note that the parking lot was resealed over Labor Day Weekend and employees reported very strong odors from that process.

After completing an inspection at Prefix, I conducted odor observations near other facilities in the same commercial/industrial park to rule out other industries that may be contributing to the odors. I did not observe any paint odors at Prefix or at the other companies on 10/2/15.

I also attempted to contact the complainant; however, he was not home at the time of my site visit.

### Conclusions

Based on my inspection and review of company records, Prefix appears to be in compliance with the Federal Clean Air Act, Michigan's Air Pollution Control Rules, PTI No. 40-12, and PTI No 133-12.

As follow-up to the odor complaint, inspections will be conducted at Bae Industries, Autolive, and Haden, Inc. to determine their compliance with state and federal air regulations. Inalfa Roof Systems also has two buildings along Pacific Drive. Inalfa (N2332) has a permit with the AQD and the current inspector is Francis Lim. See aerial map for area details.

NAME Rebecca J. Hild

DATE 11/4/15

SUPERVISOR CTE

updated 2/19/16