

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

N820651450

FACILITY: SPRING ARBOR COATINGS (PROGRESSIVE COATINGS)		SRN / ID: N8206
LOCATION: 190 W MAIN, SPRING ARBOR		DISTRICT: Jackson
CITY: SPRING ARBOR		COUNTY: JACKSON
CONTACT: Pete Schira , Plant Manager		ACTIVITY DATE: 11/21/2019
STAFF: Stephanie Weems	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection.		
RESOLVED COMPLAINTS:		

Synthetic Minor/ Opt-Out Source Inspection and FCE of Spring Arbor Coatings (N8206)

Facility Contacts

Pete Schira – Plant Manager

Email: peter.schira@springarborcoatings.com

Phone: 517-750-2903

Purpose

On November 21, 2019 I conducted an unannounced compliance inspection of Spring Arbor Coatings located at 190 W. Main in Spring Arbor, Michigan. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules, and conditions of Permit to Install (PTI) number 23-17A.

Facility Location

The facility is located in the town of Spring Arbor. It is surrounded by commercial and residential areas to the West, North, and East, and the closest residence is approximately 300 feet away on the East side. See Image 1 for an aerial view.

NOTE: You must continue to the end of the dirt driveway to find the facility. The office entrance is located on the eastern most side of the building, so you must drive around the building to see it.

Facility Background

This facility uses an electrodeposition (E-coat) system to coat small steel parts (stamped by their parent company, Hatch Stamping) for the automotive industry.

This facility was last inspected on November 1, 2016 and was found to be out of compliance. At that time, AQD staff cited a Rule 201 violation for the E-coat process.

A response to the violation notice (VN) was received on December 9, 2016. The company indicated that they had submitted a permit application, and AQD staff determined that the facility's response was adequate in addressing the cited violations.

Regulatory Applicability

The facility operates under PTI 23-17A. This permit covers the following:

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUCOATING	Steel parts electrodeposition coating line and curing oven. A carrier lowers the steel parts into fourteen (14) sequential tanks: Tanks 1, 2, and 3 contain an alkaline cleaner and water solution, Tanks 4 and 5 are water rinses, Tank 6 is a titanium conditioner, Tank 7 contains a zinc phosphate primer, Tanks 8, 9, and 10 are water rinses, Tank 11 contains the E-coating, Tanks 12, 13, and 14 are water rinses, followed by a curing oven.	June 2001 / PTI DATE	FGFACILITY

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.			

Arrival & Facility Contact

No visible emissions or odors were observed upon my approach to the facility. I arrived at approximately 9:15 AM, proceeded to the facility office to request access for an inspection, provided my identification, and met with Pete Schira, Plant Manager. I informed him of my intent to conduct a compliance inspection and to review various records as necessary.

Pete extended his full cooperation throughout the duration of my visit and fully addressed all my questions.

Pre-Inspection Meeting

I began the meeting by providing Pete with a copy of the facility's PTI, a copy of the most recent inspection report, and a list of records that would be needed to determine compliance.

Pete outlined that there are approximately 63 employees at this location, and they typically operate 2 shifts between the hours of 5:30AM and 11:00 PM, Monday through Friday.

I then asked Pete about some of the processes at the facility, including if they had any emergency generators, cold cleaners, parts washers, or degreasers. Pete stated that they don't have any of these.

Furthermore, I asked if there had been any changes at the facility since the time of the last inspection. Pete indicated that there had not.

Onsite Inspection

Pete then escorted me as I conducted the onsite tour portion of the inspection.

He began by showing me the kind of parts that the facility coats. The facility currently coats fuel system parts. As Pete explained, the coatings are used as a corrosion prevention measure.

We then observed the E-coat line (EU-COATING). Pete explained the series of tanks that the parts are dipped into. The process starts with an alkaline cleaner and water solution, proceeds through a water rinse, goes into a titanium conditioner, then a zinc phosphate primer, and then gets dipped in another water rinse before getting the E-coating and a final water rinse.

After all this, the parts then run through a curing oven. Pete explained that the oven is kept at 375 degrees F, and it is equipped with high temperature and low temperature alarms.

After the parts leave the oven, facility employees conduct a visual quality check on the parts before preparing them for packaging.

Pete then took me around to the area where the facility's wastewater treatment system is. He explained that the site handles their own wastewater treatment and they follow the local and state rules regarding that.

Finally, Pete showed me the small maintenance area. There was no work being done in this area, and no processes that would appear to emit any air contaminants here.

Pete explained that the remainder of the facility is dedicated storage, shipping, and receiving areas.

Overall, the facility appeared well-maintained, with all materials stored in closed containers.

Post-Inspection Meeting

A brief post inspection meeting was held with Pete where we discussed the requested records and when they were expected by.

I thanked Pete for his time and cooperation and departed the facility at approximately 9:50 AM.

Recordkeeping Review

The following records request sheet was given to Pete during the inspection:

DOCUMENT REQUEST

ALL DOCUMENTS ARE REQUESTED FROM NOVEMBER 2018 TO PRESENT

1. Information showing how the company is complying with Testing/Sampling condition V.1 for EUCOATING.
2. Current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component.
3. The following monthly records for EUCOATING (VI.3)
 - a. Gallons (with water) of each material used
 - b. VOC content (minus water and with water) of each material as applied
 - c. VOC mass emission calculations determining the monthly emission rate in tons per calendar month
 - d. VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month
4. The following monthly records for FGFACILITY (VI.3)
 - a. Gallons or pounds of each HAP containing material used
 - b. Where applicable, gallons or pounds of each HAP containing material reclaimed
 - c. HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used,
 - d. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - e. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.
5. Heat input capacity of boiler.
6. Type of fuel used in boiler.

The company responded to the information request on November 22nd.

In regard to testing/sampling requirements that the company determine the VOC content using federal Reference Test Method 24, the company submitted documentation of emails exchanged between AQD and Spring Arbor Coatings (Attachment 1) indicating that they may use manufacturer's formulation data to meet the requirement. The facility supplied information from their manufacturer about the VOC content (Attachment 2) as well as information on how the calculations are done (Attachment 3).

EUCOATING has a material limit of 1.1 lb/gal of VOC (minus water) as applied where the phrase "minus water" shall also include compounds which are used as organic solvents and which are excluded from the definition of volatile organic compound. Based upon the facility's calculations in the attached spreadsheet (Attachment 7), EUCOATING stays around 0.7lb/gal VOC, well below their 1.1 lb/gal limit.

The facility also included the SDS information for the materials used on site (Attachments 4, 5, and 6). These include the current listing from the manufacturer of the chemical composition of each material.

Based upon the information provided for EUCOATING, the facility had emitted 3.1386 tons of VOC for the 12-month rolling period ending October 2019. This is well below their emission limit of 18.0 tpy as determined on a 12-month rolling time period.

Furthermore, based upon the information provided for FGFACILITY, the facility had emitted 2.339989 tons of aggregate HAPs for the 12-month rolling period ending October 2019. This is below their emission limit of 22.4 tpy as determined on a 12-month rolling time period. Additionally, they include 12-month rolling calculations for each individual HAP and they are each below the 8.9 tpy limit.

Boiler:

Based on information received from the company, the boiler has a heat input capacity of 8192 Btu/hr and it uses natural gas.

Since the boiler is below 10 MMBtu/hour heat input capacity it is not subject to 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

Furthermore, since the boiler is below 50,000,000 Btu/hour heat input capacity and it runs on natural gas it is exempt from permitting under Rule 282(2)(b)(i).

Finally, since the boiler burns only natural gas, it is not subject to 40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Source.

Compliance Summary

Based upon the facility inspection and review of the records, it appears that the facility is in compliance at the time of this inspection.



Image 1(1) : Aerial view

NAME Steph Weiss

DATE 11-22-19

SUPERVISOR [Signature]