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

N820672473

FACILITY: SPRING ARBOR COATINGS (PROGRESSIVE COATINGS)		SRN / ID: N8206		
LOCATION: 190 W MAIN STREET, SPRING ARBOR		DISTRICT: Jackson		
CITY: SPRING ARBOR		COUNTY: JACKSON		
CONTACT: Jason Adair,		ACTIVITY DATE: 07/03/2024		
STAFF: Stephanie Weems	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT		
SUBJECT: Scheduled on-site inspection for FY24 and to address recent odor complaint.				
RESOLVED COMPLAINTS: C-24-01314				

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

Facility Contacts

Jason Adair

Ph: 734-593-0666

Email: jason.adair@springarborcoatings.com

Purpose

On July 3, 2024 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.

Additionally, AQD had been referred an odor complaint involving this facility, and this inspection was conducted to investigate that. U.S. EPA had received an odor complaint on June 7, 2024 and referred it to EGLE AQD on June 18, 2024.

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 21, 2019 and was found to be in compliance.

Regulatory Applicability

The facility operates under PTI 23-17A. This is an opt-out permit, limiting the facility's VOC and HAP emissions to below Title V threshold limits. Additionally, the facility has accepted HAP emission limits so that they can opt-out of 40 CFR Part 63, Subpart MMMM.

This permit covers the following:

Emission Unit ID	Emission Unit Description	Installation Date /	Flexible
	Devices)	Modification Date	Group ID
EUCOATING	Steel parts electrodeposition coating line and curing oven. A carrier lowers the steel parts into fourteen (14) sequential tanks:	June 2001 / PTI DATE	FGFACILITY
	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.		

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.

Odor Observation

I arrived in the area of Spring Arbor Coatings around 9AM. Winds were out of the West.

I proceeded to travel up and down Teft Street a few times, turning around so that I could drive past the downwind section of the facility. No odors were noted at any point. I then proceeded to turn down Marietta Street and then left on Moon Road. I sat in this parking area for a while. No odors were observed. I then proceeded back down

Marietta towards Teft, stopping and sitting at this intersection (directly west of the facility). No odors were noted. I then proceeded to the facility parking lot.

Arrival & Facility Contact

No visible emissions or odors were observed upon my approach to the facility. Upon parking I proceeded to the facility office to request access for an inspection, provided my identification, and met with Jason Adair, Quality Manager. We were also joined by Kip Maddison. I informed them of my intent to conduct a compliance inspection and to review various records as necessary.

Jason and Kip extended their full cooperation throughout the duration of my visit and fully addressed all my questions.

Pre-Inspection Meeting

I began the meeting by explaining that I was there to conduct our routine inspection but also because we had received an odor complaint that was submitted to EPA. We discussed the fact that this facility hasn't had odor complaints in the past and that no odors have been detected on our drives around the facility. I then asked if the facility has received any complaints or been made aware of any complaints received by the local government. Jason and Kip indicated that they have not had any complaints. They said that if they had, they would document it and try to follow up on what may have been happening that day to cause an issue. We then discussed AQD's process for investigating complaints, and I stated that if we ever verified odors from the facility, we would let them know.

I then asked about the facility's operations. Jason outlined that there are approximately 45 employees at this location, and they typically operate 2 shifts between the hours of 5:30AM and 11:30 PM, Monday through Friday.

I asked if there had been any changes at the facility since the time of the last inspection. Jason and Kip both indicated that they had replaced the boilers a few years ago, but that was it. I asked if there had been any changes in the materials used and Jason explained that they coat parts for the auto industry, so everything has to be OEM approved. Therefore, there is very little wiggle room for changing materials, and they have not changed anything.

Jason and Kip also explained that the facility is currently down for maintenance. Jason said that the weeks of July 4th and Christmas are the two times when the facility is completely shut down for maintenance.

Onsite Inspection

Jason and Kip then escorted me as I conducted the onsite tour portion of the inspection. As stated above, the facility was not in operation at the time of this inspection due to them conducting facility-wide maintenance and cleaning.

Jason and Kip then escorted me to the plant floor where I was able to observe the Ecoat line (EUCOATING). Jason 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. Jason 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.

No odors were observed at any point near the tanks or the oven. Kip explained that the oven filters are cleaned every 3 weeks and the oven itself is cleaned every 2 weeks.

Jason 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.

We then observed the new boilers that were installed. Jason and Kip indicated that the boilers were installed around 2022. They are two, small hot water boilers, installed under a Rule 282 exemption.

Finally, Jason and Kip showed me the small maintenance area. There is a small shot blaster that is routed to a dust collector that vents internally. Jason explained that the dust from this unit is sent to OmniSource.

We then walked through the remainder of the facility, which 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 Jason and Kip where we discussed the requested records and when they were expected by. I also told Jason and Kip that if any more odor complaints were received we would conduct odor observations in the area and stop by if any odors were verified.

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

Recordkeeping Review

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

ALL DOCUMENTS ARE REQUESTED FROM AUGUST 2023 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.

The company responded to the information request on July 8th with spreadsheets outlining the facility's VOC calculations.

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, EUCOATING is meeting this limit.

Based upon the information provided for EUCOATING, the facility had emitted 3.59 tons of VOC for the 12-month rolling period ending June 2024. This is well below their emission limit of 18.0 tpy as determined on a 12-month rolling time period.

The email that was submitted with the information indicated that the facility is not using any HAP containing materials. A review of the AQD PTI evaluation for the initial permit showed that the facility had been using a material for their zinc phosphate process that contained hydrogen fluoride, and that this was the only non-solid HAP that was used at the facility. On July 9, I responded to Jason's email asking for clarification on whether the facility is still using this material, and if so, the associated HAP records for use. Jason responded by email the same day indicating that they have switched manufacturers since the permit was issued and he has verified that there is no hydrogen fluoride in the zinc phosphate process materials. See file for this email correspondence.

Also, to note, the initial permit's evaluation document indicates that it was approved for the company to use manufacturer's data to comply with the testing/sampling requirements of their permit.

Boilers:

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Based on information received from the company, the boilers have a heat input capacity of 3,000,000 Btu/hr and use 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 boilers 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.

The shot blaster that is used on site appears to meet Rule 285(2)(I)(vi)(B).

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.

NAME_______

DATE 07/19/2024 SUPERVISOR