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

N820637425

FACILITY: SPRING ARBOR COATINGS (PROGRESSIVE COATINGS)		**SRN / ID:** N8206
LOCATION: 190 W MAIN, SPRING ARBOR		**DISTRICT:** Jackson
CITY: SPRING ARBOR		**COUNTY:** JACKSON
CONTACT: Kip Maddison , Maintenance		**ACTIVITY DATE:** 11/01/2016
STAFF: Mike Kovalchick	**COMPLIANCE STATUS:** Non Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Unannounced compliance inspection		
RESOLVED COMPLAINTS:		

Minor Source Inspection

Facility Contact

Kip Maddison (KM)-Maintenance Leader kip.maddison@springarborcoatings.com

Peter Schira-Plant Manager peter.schira@springarborcoatings.com

Purpose

On November 1, 2016, I conducted an unannounced inspection of Spring Arbor Coatings (Company) in Spring Arbor. 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.

Facility Location

The facility is located in the town of Spring Arbor. It is surrounded by commercial and residential areas on the West, North and East sides with closest residence approximately 300 feet away on East side of building. See attached aerial image.

Facility Background

The facility was last inspected on June 15, 2011 with no violations found. They E-Coat small steel automotive parts. Currently, there are 76 employees with work starting at 5:30 AM and ending at 11:00 PM, 5 days a week. It takes 1.5 hours for a part to go through the entire process. They are coating 200,000 parts per day, an increase from the 100,000 parts per day noted during the 2011 inspection.

Regulatory Applicability

No Active Permits.

Metal Cleaning using sodium hydroxide solution with dedicated exhaust exempt from Permitting per Rule 285(l)iii (Equipment for surface preparation of metals by use of aqueous solutions except for acid solutions.)

E-coat painting line previously considered not to be source of emissions and hence exempt from Permitting.

Natural gas combustion products from an oven used for drying E-Coat exempt from permitting per Rule 282 due to its small size.

A boiler used to heat E-Coat tank solutions is considered exempt from permitting per Rule 282 due to its small size.

Arrival & Facility Contact

Visible emissions were not observed upon my approach to the Company's facility. Some light E-coat

paint odors were noticed in the parking lot on the East side of the building. I arrived at approximately 9:30 AM, proceeded to the facility office to request access for an inspection, provided my identification, and met with Kip Maddison (KM) who is the facilities maintenance leader. A pre-inspection conference was held with KM and provided a copy of the MDEQ brochure: *Rights and Responsibilities Environmental Regulatory Inspections.* I informed KM of my intent to conduct a facility inspection and to review the various records as necessary. KM extended his full cooperation during the inspection, accompanied me during the entire duration of the inspection, and addressed all my questions.

Pre-Inspection Meeting

KM outlined some background information such as there have been no significant equipment changes to the operations since the Company was last inspected by the AQD but business had increased to the point that they are very close to the maximum sustainable level without having product quality issues. KM indicated that the plant manager, Pete Schira would normally be fielding any environmental questions but he was not in the office that day and wasn't reachable by phone.

We discussed the electro deposition (E-Coat) line and the associated oven/dryer and the current plant operating schedule and the results of the last compliance inspection back in 2011. I indicated I would like to look at some records after the onsite inspection was completed.

Onsite Inspection

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

The focus was on the E-Coat line. The temperature of the tank solution was at 140 degrees F. The E-coat process was preceeded by a metal cleaning process using sodium hydroxide with its own dedicated exhaust. See attached photo. There was also a zinc phosphate immersion tank. There was no dedicated exhaust associated with the E-coat although it was fully enclosed with some exhaust perhaps going out with the metal cleaning exhaust. The booth was open where the coated parts exited the booth and then entered the oven. The coated parts are brought via conveyor system into a drying oven that has 2 exhaust stacks with oven temperature of 365 degrees. F. There was very little odor in the vicinity of the E-Coat line or the dryer. Attachment (1) is a diagram that shows all the tanks.

A roof inspection was not conducted. Vertical exhaust stacks from oven can be seen on the right side of the building in attached photo.

Recordkeeping Review

After the plant tour, I reviewed the MSDS's for the cleaner they used for the metal and the purchases records for the last 12 months. (See Attachment (2) and (3).) The same purchase records also included the amount of butyl celosolve (2-butoxyethanol) that was purchased. This compound is a VOC but not a hazardous air pollutant (HAP). It is added to the E-Coat solution. The purchase records also show some sulfuric acid being purchased which is used to pretreat wastewater at the facility.

In the E-Coat line, they use Pre-Blend Cormax VI that contains about 0.5 lbs VOC/HAP per gallon plus some 2-butoxyethanol that is added periodically. Attachment (4) is the MSDS for the E-Coat Pre-Blend. (0.5 lbs VOC/gallon) Attachment (5) is the MSDS for the 2-butoxyethanol.

Attachment (6) is information submitted by the Company via email on November 2, 2016 that was reviewed on November 3. It includes VOC emission data for the facility going back to 2006, gallons of paint usage for 2015 & 2016, and information on the specific VOC's used. VOC emissions in 2015 were 9.87 tons. Year to date totals in 2016 were 8.89 tons. HAP emissions for 2015 were estimated to be 7.8 tons of a single HAP and the same for combined HAPs. 2016 year to date HAP emissions were estimated to be 7.13 tons of a single HAP and the same for combined HAPs. Coating usage is approximately 2500 gallons per month. It contains about 50% water so doing a minus water calculation works out to about 1250 gallons/month. This exceeds the Rule 287(c) permit exemption of 200 gallons/month as applied, minus water. It also exceeds the Rule 290 exemption of 1000 pounds of noncarcinogenic VOC's per month as the Company is emitted roughly 1600 pounds per month. Therefore, the E-Coat line is in violation of Rule 201, no Permit to Install. It was undetermined if the potential to emit of HAPs exceeded Major source thresholds of 10 tons per year of a single HAP or 25 tons of a combination of HAP. The Company contends that they are already very close to maximum production levels.

Post-Inspection Meeting

I held a brief post-inspection meeting with KM. I reviewed my findings with the Company and noted that I would need to spend some time after I got back to the office to review records to determine compliance. I also noted that I was concerned that the amount of coatings/VOC emissions at the facility was very close to requiring a Permit to Install and I would let them know the results of my review. I mentioned also that the E-coat paint odors could cause a problem in the future if they start to negatively impacting nearby residents. I thanked KM for his time and cooperation, and departed the facility at approximately 11:00 AM.

Note: After the Post-Inspection Meeting, plant manager Peter Schira forwarded me via email additional emission information that showed noncompliance with Rule 201 as outlined in the Records Review section of this report.

Compliance Summary

Based upon the facility inspection, review of the records, and review of applicable requirements, the Company is out of compliance with state air requirement that requires a Permit to Install for the E-coat process in order to operate it. This constitutes a violation of Rule 201, no Permit to Install. I will be sending a Violation Notice (VN) to the Company that will require a compliance program that will include submitting a Permit to Install application.

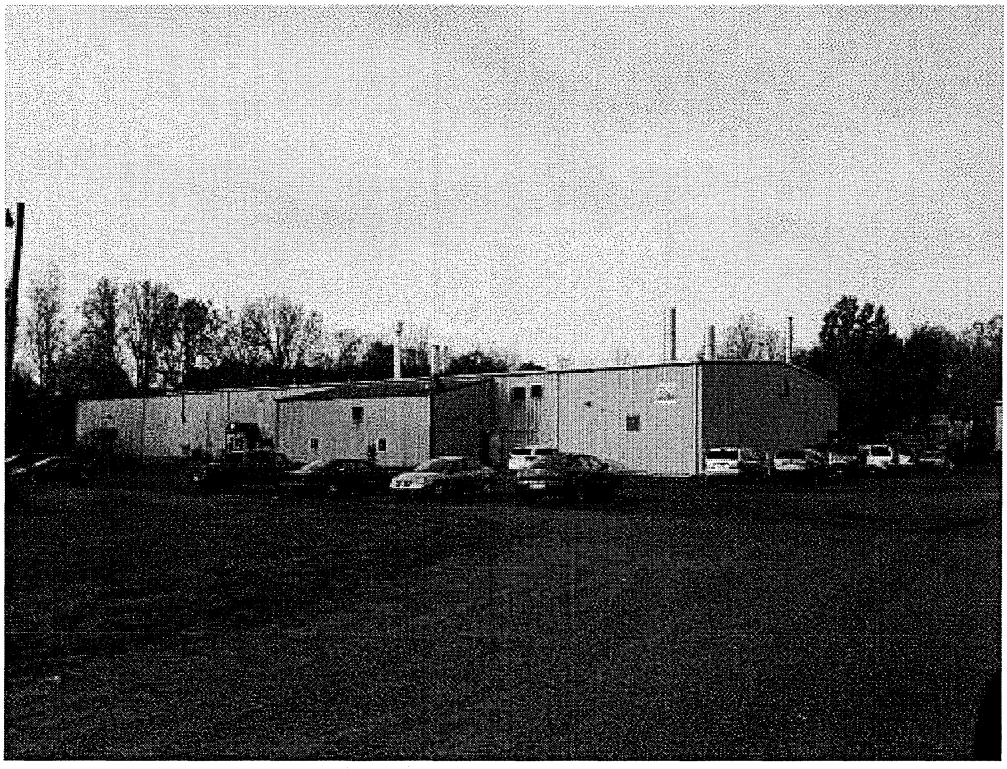

Image 1(exhaust stacks) : Oven stacks are on the right side of building.

Image 2(Aerial View) : Aerial View of Spring Arbor Coatings

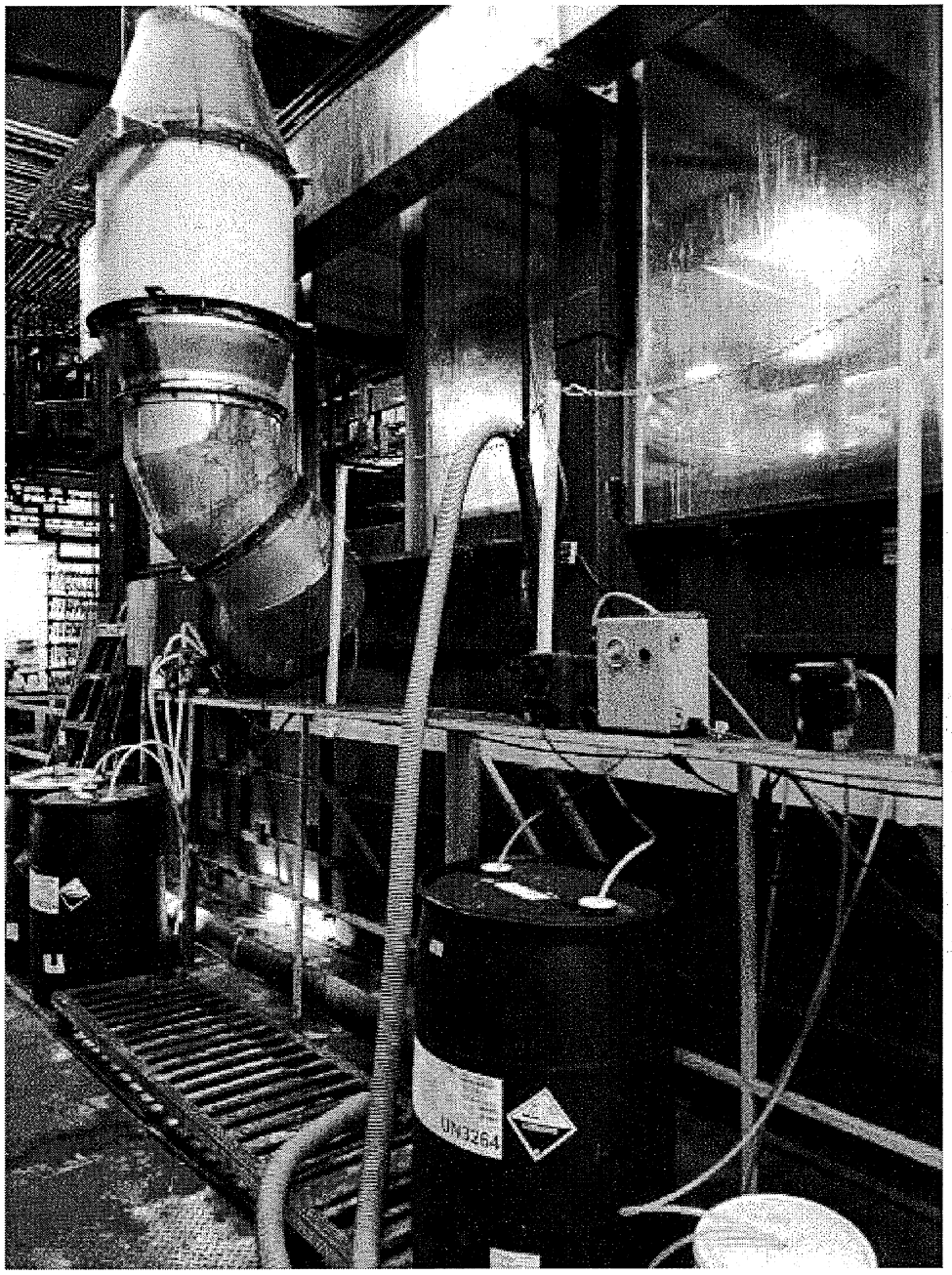

Image 3(Caustic exhaust) : Shows dedicated exhaust of metal cleaning tanks using a caustic solution. The E-Coat process is to the right of this picture in the same enclosed area.

NAME W. Kowalchuk DATE 11/3/2016 SUPERVISOR