

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

N764572507

FACILITY: Lakeland Monroe Group - Plant 2		SRN / ID: N7645
LOCATION: 5400 36TH ST SE, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Fernando Fernandez , Operations Manager		ACTIVITY DATE: 06/25/2024
STAFF: April Lazzaro	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff April Lazzaro conducted an unannounced, scheduled inspection of Lakeland Monroe Group Plant 2, located 5400 36th Street in Kentwood. The purpose of the inspection was to determine the facility's compliance with Permit to Install (PTI) No. 224-06A as well as state and federal air pollution regulations.

Accompanying staff on the inspection from Lakeland Monroe Group was Fernando Fernandez, Operations Manager and Javier Jimenez, Maintenance Supervisor. No odors or visible emissions were noted upon arrival, however mild solvent odors were experienced when leaving the site.

FACILITY DESCRIPTION

Lakeland Monroe Group Plant 2 paints plastic interior automotive parts, using air dried coatings. No coating of metal parts is currently conducted at the facility. The facility is permitted for five water-based and solvent-based coating lines under PTI No. 224-06A. Line 2 was never installed, and as such no information is available. Line 3 is not currently operating, and as such no data was available. The permit limits volatile organic compound (VOC) and hazardous air pollutant (HAP) to levels below major source criteria. Line 1 consists of four booths and an oven which exhaust uncontrolled to the ambient air. Line 4 consists of three booths and an oven which exhaust uncontrolled to the ambient air. Line 5 consists of three booths and an oven which are controlled by a regenerative thermal oxidizer (RTO).

COMPLIANCE EVALUATION

EU-CoatLine-05

As noted above, this line consists of three booths identified as 17, 18 & 19 and an oven identified as 05.

Emissions from Line 5 are limited to 11.6 tons per year (tpy) (excluding purge & cleanup) and 5.8 pounds per hour (pph). The facility is utilizing a 99.54% capture efficiency and a 97.46% destruction efficiency in the emissions calculations for this line based on testing conducted in 2013. Reported emissions for the 12-month rolling time period ending in May 2024 were 0.87 tons.

The permittee is required to recover and reclaim materials, as well as capture them in closed containers. Each booth has a capture system for robot purge solvents, flushes back into containers. During the inspection, it was noted that around each coating line, there were multiple containers of various sizes containing solvents and or waste materials that were not in use and not in closed containers. Within one day of the inspection, the facility retrained all staff on proper solvent and waste handling and disposal methods and provided that documentation. We observed filter

placement in the booths, and this appeared adequate. The coating lines utilize Graco AirPro Pressure Feed spray guns on all robots at the facility which have previously been determined to be HVLP equivalent.

At the time of the inspection, the thermal oxidizer was operating at 1,618°F, which is above the minimum requirement of 1,450°F. Temperature records were requested and reviewed, and no temperatures below the permit limit were identified.

A letter requesting the use of manufacturer's formulation data to determine VOC content of coatings was received in 2007, but that was prior to installation of this line. Lakeland Monroe should submit an additional request to utilize formulation data to determine VOC content of coatings for this line or conduct testing of coatings using federal Reference Test Method 24.

The recordkeeping was requested and reviewed for all of 2023, and through May 2024. The records are being maintained in a manner that aligns with the permit requirements. However, during the inspection we discussed that isopropyl alcohol (IPA) is applied to lint free towels and each part is wiped down by hand. Satellite containers of IPA are stationed at each line for this purpose. When reviewing the records, I did not identify a line item for IPA. It was determined that while Lakeland Monroe has purchase records for IPA use, they are not tracking the use of the material on a per line basis, nor are the emissions being calculated. This is a violation of PTI No. 224-06A, Special Condition VI.5. Actual IPA emissions contributions to Line 5 are unknown.

The facility is in the process of installing a wash line to pre-treat parts prior to being coated on Line 5. We discussed whether they had conducted an evaluation to determine whether or not that required a permit modification, and I learned that one had not been conducted. A request for a permit evaluation pursuant to Rule 278 will be made.

The stack height of the RTO appeared to be above the minimum height requirement of 36 feet and the diameter appeared to meet the maximum diameter of 36 inches. There were no visible emissions from the RTO stack and the ductwork integrity appeared acceptable.

The existing RTO is experiencing age related maintenance issues. A review of the last two annual inspections by outside contractors was conducted, and there were issues discovered that would affect the destruction efficiency of the unit. This was discussed with Javier Jimenez who stated that any issue identified during the inspections are corrected immediately, and the unit and coating line will not operate until that work is complete. We also discussed replacement of the unit, which is being quoted for the facility to assess financially.

FGCOATLINES

This flexible group covers EUCOATINGLINE01, EUCOATINGLINE03 and EUCOATINGLINE04 which are used to paint plastic automotive parts. As previously noted, Line 2 has not been installed, and Line 3 is not operating as such this compliance discussion will only apply to Line 1 and Line 4 as noted below. As noted during the previous inspection, Line 2 cannot be installed without a new PTI.

EUCOATLINE01 consists of Booths 1 thru 4 and a natural gas-fired oven. Since the last inspection, booths 1 and 2 were switched from manual to robotic, and as such all applicators are robotic on this line. All filters in the booths were installed and appeared well maintained. During the inspection, it was noted that around each coating line, there were multiple containers of various sizes containing solvents and or waste materials that were not in use and not in closed containers. Within one day of the inspection, the facility retrained all staff on proper solvent and waste handling and disposal methods and provided that documentation. The coating lines utilize Graco AirPro Pressure Feed spray guns on all robots at the facility which have previously been determined to be HVLP equivalent.

The company is required to maintain the curing oven temperature below 194°F. At the time of the inspection the oven temperature on EUCOATINGLINE01 was 175°F. The company is maintaining a daily oven temperature log as required by the permit. Records of the logs were requested and received during the inspection. The data collection appears adequate to demonstrate compliance.

EUCOATLINE04 consists of three booths identified as Nos. 14, 15 and 16. HVLP equivalent spray guns as noted above are used in these coating booths. All filters in the booths were installed and appeared well maintained. During the inspection, it was noted that around each coating line, there were multiple containers of various sizes containing solvents and or waste materials that were not in use and not in closed containers. Within one day of the inspection, the facility retrained all staff on proper solvent and waste handling and disposal methods and provided that documentation.

The company is required to maintain the curing oven temperature below 194°F for Line 4 when using air-dried coatings. The recordkeeping indicates that all coatings applied on this line are air dried interior coatings. At the time of the inspection the oven temperature was 175°F. A review of additional data for the EUCOATLINE04 oven showed that the oven temperature on June 27, 2024, was 195.6°F. This value exceeds the limit for air-dried coatings and is a violation of PTI No. 224-06A, FG-CoatLines, Special Condition IV.3.

The records are being maintained in a manner that aligns with the permit requirements. However, during the inspection we discussed that isopropyl alcohol (IPA) is applied to lint free towels and each part is wiped down by hand. Satellite containers of IPA are stationed at each line for this purpose. When reviewing the records, I did not identify a line item for IPA. It was determined that while Lakeland Monroe has purchase records for IPA use, they are not tracking the use of the material on a per line basis, nor are the emissions being calculated. This is a violation of PTI No. 224-06A, Special Condition VI.3. Actual IPA emissions contributions to EUCOATLINE1 and EUCOATLINE4 are unknown.

No changes to the stacks from FGCOATINGLINES were observed or discussed.

FGFACILITY, FGCLEANUP, FGCOATLINES and Recordkeeping:

Requirements under PTI No. 224-06A for FGFACILITY, FGCLEANUP and FGCOATLINES primarily consist of recordkeeping. The company uses spreadsheets that are maintained by Advanced Environmental, to keep track of emissions and material usage. The company is maintaining daily, monthly, and 12-month rolling

records in accordance with the permit. In addition, the company is approved to use manufacturers' formulation data rather than Method 24 testing to verify the VOC content of coatings, except for Line 5 as noted above.

From June 2023 through May 2024 the company reported the following emissions:

<u>Equipment</u>	<u>Pollutant</u>	<u>Emissions</u>	<u>Limit</u>	<u>Comment</u>
EUCoatLine01	VOC	19.46 tons	30.0 tpy	Compliant
EUCoatLine03	VOC	0 tons	36.6 tpy	Compliant
EUCoatLine04	VOC	21.10 tons	50.0 tpy	Compliant
EUCoatLine05	VOC	0.87 tons	11.6 tpy	Compliant
FG-CoatLines	VOC	40.56 tons	80.8 tpy	Compliant
FG-CoatLines	dimethylethanolamine	0.0 lbs/day	5.6 lb/day	Compliant
FG-CoatLines	diethylene glycol monobutyl ether	0.0 lbs/day	7.0 lb/day	Compliant
FG-CoatLines	xylene	36.25 lb/day, January 8, 2024	35.4 lb/day	Non-compliant
FG-CoatLines	hexamethylene diisocyanate	66 days over limit	0.0034 lb/day	Non-compliant
FG-CoatLines	naphthalene	0.0	3.3 lb/day	Compliant
FG-CoatLines	Part 6 VOC, Table 66 Air-dried coating-interior parts	28 days over	5.0 lb/gal (minus water) daily volume-weighted average	
FGCleanup	VOC	1.84 tons	6.1 tpy	Compliant (All cleanup & purge)

FG-Facility	VOC	43.27 tons	90 tpy	Compliant
FG-Facility	HAP (highest individual being xylene)	1.43 tons	9.0 tpy	Compliant
FG-Facility	HAP (aggregate)	4.13 tons	22.5 tpy	Compliant
FG-Facility	naphthalene	0.95	1,576.8 lb/year	Compliant
FG-Facility	cumene	40.97	2,014.8 lb/hr	Compliant

For EUCOATLINE04, the as applied VOC content of coatings is required to meet the applicable limits in Rule 632, Table 66 for plastic parts coating.

While the facility clearly knew which line was which, they did not appear to be labeled, nor has AQD received notification that the labels were added. Lakeland Monroe should complete the labeling and notify the AQD of the date of completion.

FG-Cleanup

This flexible group includes the clean-up and purge solvents used on all five lines and is limited to 6.1 tons of VOC emissions per 12-month rolling time period. As shown in the table above, the reported emissions are 1.84 tons.

FG-Facility

This flexible group limits VOC and HAP emissions facility wide from permitted and exempt equipment.

CONCLUSION

Based on the inspection and information provided by the company, Lakeland Monroe Group was in non-compliance at the time of the inspection.

NAME April Lazzaro

DATE 07/08/2024

SUPERVISOR HH