

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

N764537655

FACILITY: LAKELAND FINISHING INC		SRN / ID: N7645
LOCATION: 5400 36TH ST SE, GRAND RAPIDS		DISTRICT: Grand Rapids
CITY: GRAND RAPIDS		COUNTY: KENT
CONTACT: Thomas Smith, President		ACTIVITY DATE: 11/18/2016
STAFF: David Morgan	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

At 10:30 A.M. on November 18, 2016, AQD staff Dave Morgan conducted a scheduled inspection of Lakeland Finishing 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 was Tom Smith, President, and Mark Tompkins, Plant Manager.

FACILITY DESCRIPTION

Lakeland Finishing paints plastic interior automotive parts, using air dried coatings. The facility is permitted for five water-based and solvent-based coating lines under PTI No. 224-06A. The company's VOC and HAP potential to emit is limited under PTI No. 224-06A.

COMPLIANCE EVALUATION

No equipment changes have been made since the last AQD inspection. At the time of the inspection, Mr. Smith indicated that the facility was in a production lull due to cycles in the automotive manufacturing.

FGCOATLINES:

This flexible group covers coating lines 1, 3 and 4 which are used to paint plastic automotive parts. Coating line 2 is also covered under FGCOATLINES but has not been installed.

-Line 1-

EUCOATLINE-01 consists of Booths 1 thru 4 and a natural gas-fired oven. Booths 1 and 2 are manual booths and booths 3 and 4 are robotic. All filters in the booths were installed and appeared well maintained.

The company uses Graco AirPro Pressure Feed guns which are considered "compliant" by the manufacturer. These guns are only used on this line because of a unique metallic coating that is applied which is better handled by the AirPro gun. During a previous inspection, documentation was provided which indicates that the transfer efficiency of the new guns are better than HVLP which meets the permit allowance for comparable technology with equivalent transfer efficiency. The gun manufacturer conducted transfer efficiency tests in accordance with European test standard EN13966. Additional documentation shows that these guns have been approved as an alternative to HVLP by other state regulating agencies as well as USEPA.

-Line 2-

EUCOATLINE02 has not been installed. Should the company choose to install this line, it will need to go back through the new source review process.

-Line 3-

EUCOATLINE03, consists of Booth Nos. 9 thru 13 and an associated oven. All filters were installed and appeared well maintained. HVLP guns are used in each booth.

-Line 4-

EUCOATLINE04 consists of three booths identified as Nos. 14, 15 and 16. Booth 14 is used for cleaning the parts with air. Booth 15 is used to apply water-based and some solvent-based coatings. Booth 16 is a robot booth that was added in October 2012. All filters were installed and appeared well maintained. HVLP guns are used in these coating booths. At the time of the inspection, the company was doing product trials.

EUCOATLINE05:

Coating Line 5, which began operating in October 2012, consists of Booth Nos. 17-19, an associated gas-fired convection oven, and a regenerative thermal oxidizer (RTO). In this line, Booth 17 uses one or two handspray guns, Booth 18 uses two robots that spray monocoat and Booth 19 uses two robots that spray clearcoat or topcoat. The spray guns used in this line consist of Graco HVLP guns in accordance with the permit. About 80% of the air in

these booths is recirculated with the remainder being sent to the RTO. All filters in the booths were installed and appeared well maintained. The company monitors airflow pressure across the filters to determine whether they need replacement.

It is noted that paint solvent odors were observed in the general plant environment around Coating Line 5. AQD staff and Mr. Smith discussed the potential source of these odors which included possible leaks in the ductwork to the paint staging and pumping areas located outside of the booths. AQD staff advised Mr. Smith that additional measures should be taken to minimize emissions and to conduct additional maintenance to address leaks in the system.

At the time of the inspection, the RTO was operating at a temperature around 1,602°F which is above the 1,450°F minimum temperature requirement in the permit. In addition, the company monitors and records the temperature on a continuous basis using a digital data acquisition system. Historical records indicate that the RTO has been operating above the 1,450°F requirement (see attached records).

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.

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.

From November 2015 to October 2016 the company had the following emissions:

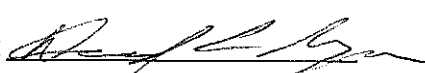
Equipment	Pollutant	Emissions	Limit	Comment
EUCoatLine01	VOC	22.35 tons	30.0 tpy	Compliant
EUCoatLine03	VOC	0.85 tons	36.6 tpy	Compliant
EUCoatLine04	VOC	50.00 tons	50.0 tpy	Compliant
EUCoatLine05	VOC	1.26 tons	11.6 tpy	Compliant
FGCoatinglines	VOC	29.85 tons	80.8 tpy	Compliant
FGCoatinglines	dimethylethanoamine	See attached records	5.6 lb/day	Compliant
FGCoatinglines	diethylene glycol monobutyl ether	See note below*	7.0 lb/day	Did not meet limit
FGCoatinglines	xylene	See attached records	35.4 lb/day	Compliant
FGCoatinglines	hexamethylene diisocyanate	See attached records	0.0034 lb/day	Compliant **
FGCoatinglines	naphthalene	0.0	3.3 lb/day	Compliant
FGcleanup	VOC	0.16 tons	6.1 tpy	All cleanup & purge
FGFacility	VOC	31.27 tons	90 tpy	Compliant
FGFacility	HAP (highest individual being glycol ethers)	1.02 tons	9.0 tpy	Compliant
FGFacility	HAP (aggregate)	2.90 tons	22.5 tpy	Compliant

** It is noted that the company is allowed to assume that 92% of the hexamethylene diisocyanate (HDI) used in the coating is consumed in a reaction because it is a catalyst. This is based on an HDI emission study conducted by the Ontario Ministry of the Environment in April 2006 titled "Determination of 1,6-Hexamethylene Diisocyanate (HDI) Emissions from Spray Booth Operations."

For coating lines 3 & 4, the as applied VOC content of coatings is required to meet the applicable limits in Rule 632, Table 66 for plastic parts coating. According to company records, the daily weighted average for each coating type under Table 66 is being met except for one occurrence on November 10, 2015 where the daily weighted average for air dried interior coatings was 5.09 lbs per gallon where the limit is 5.0 lbs/gallon.

EVALUATION SUMMARY

Based on the inspection and information provided by the company, Lakeland Finishing is in compliance with PTI No. 224-06A. Attached to this report are records necessary to demonstrate compliance.

NAME  DATE 12/9/16 SUPERVISOR 