

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

B662530441

FACILITY: International Automotive Components		SRN / ID: B6625
LOCATION: 1905 BEARD ST, PORT HURON		DISTRICT: Southeast Michigan
CITY: PORT HURON		COUNTY: SAINT CLAIR
CONTACT: Gail Eschenberg, Health and Safety Coordinator		ACTIVITY DATE: 05/08/2015
STAFF: Rebecca Loftus	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT:		
RESOLVED COMPLAINTS:		

On May 8, 2015, I, Rebecca Loftus, Air Quality Division (AQD), and Joyce Zhu, AQD, conducted an unannounced inspection at International Automotive Components (IAC), SRN: B6625, located at 1905 Beard Street, Port Huron, Michigan. The purpose of this inspection was to determine the facility's compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, Michigan's Air Pollution Control Rules, and Permit to Install No. 183-10.

We arrived on-site at 11:00am and at 11:15am Ms. Jennifer Brown stated that Gail Eschenberg, EH&S Coordinator, was on her way and that we would have to wait until she arrived to conduct our inspection.

Facility Overview

At this location IAC manufactures headliners (top panel inside vehicles) for the automotive industry. IAC also produces foam buns from a box pour process. Below is an updated list of each line. Note lines 2 and 16 have changed since the AQD's last inspection in 2013. Ms. Eschenberg took me to each of the following processes:

Line #	Process	Notes
0	Urocore	Some parts are sent to Lines 4 & 5 for assembly. The exhaust system for Line 0 shares a stack with Line 1.
1	Urocore	Some parts are sent to Lines 4 & 5 for assembly. The exhaust system for Line 1 shares a stack with Line 0.
2*	Azdel	Old Azdel line removed. New Line - Azdel Edge Folder: Takes existing formed Azdel substrate, uses hot melt glue and metal ring to wrap the edges (for sunroof); used hot melt only. Equipment is electric powered. Previously the equipment had no exhaust stack; during my inspection I noted this equipment now exhaust to the roof through a stack.
3	Urocore	Has its own exhaust stack. Most likely shared with Line 4 when Line 4 was a Urocore Process Line.
4	Urocore Assembly	Assembly for Line 0 & 1. Manual and robotic assembly; hot melt adhesive is used.
5	Urocore Assembly	Assembly for Line 0 & 1. Manual and robotic assembly; hot melt adhesive is used.
6	Urocore	Produces Urocore parts that are not assembled at this facility. The exhaust system for Line 6 shares a stack with Line 7.

Line #	Process	Notes
7	Urocore	Produces Urocore parts that are not assembled at this facility. The exhaust system for Line 7 shares a stack with Line 6.
8	TRU Lamination	Process uses heat and pressure to laminate TRU board, polyolefin film, and chopped glass with fabric. Some of these products are used on Line 12, the rest go to the plant in Kentucky.
9	Box Skiver	Foam Buns from Line 10 are mechanical sliced into foam sheets. Some are used in-plant; others are shipped to other plants.
10	Foam Box Pour	Process produces Polyurethane Foam Buns. This area uses solvent to clean the machine nozzles.
11	na	No Line 11.
12	Azdel	Azdel Headliner Process uses heat and pressure to bond foam slice, polyolefin film, and chopped glass with fabric.
13	na	No Line 13.
14	Azdel Assembly	Manual assembly using hot melt adhesive. Receives parts from Line 12.
15	Azdel	Azdel Headliner Process uses heat and pressure to laminate foam slice, polyolefin film, and chopped glass with fabric.
		Old Azdel line removed. New line: Robtic station. Machine No. 1 glues the metal ring around the sunroof and Machine No. 2 folds the product around the metal.
16*	Azdel	Previously the equipment had no exhaust stack; during my inspection I noted this equipment now exhaust to the roof through a stack.
17	na	No Line 17.
18	Azdel Assembly	Manual assembly using hot melt adhesive. Receives parts from Line 15.

*The new Line No. 2 was installed around March 2013 and Line No. 16 was installed in the end of March 2012.

PTI No. 183-10

As a remedial action in resolving violations with the AQD and a consent order with the EPA, IAC applied for a Permit to Install in 2010. PTI No. 183-10 was issued to IAC in 2011 and covers the following emission units: Lines 0, 1, old line 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, and 18 (Group as FG-HEADLINER in the PTI).

The permit establishes the following emission limits:

Equipment	Pollutant	Limit
FG-HEADLINER	VOC	46.4 Tons/year
UROCORE (5 Lines)	MDI	0.0084 lbs/hour
Foam Box Pour	MDI	0.0064 lb/hr
FG-FACILITY	VOC	50.0 Tons/year
FG-FACILITY	Individual HAPs	9.0 Tons/year
FG-FACILITY	Aggregate HAPs	22.5 Tons/year

For VOCs, IAC has established emission factors on a per part basis and calculates emissions based on the number of parts produced on each line; and for MDI, IAC has established a lbs/hour emission factor and calculates MDI based on hours of operation of each Urocore line(see Appendix of Permit/File). For FG-Headliner IAC uses an emission factor of 9.44E-6 lb/hr MDI; the equation used by IAC for the MDI from the Box Pour Process is:

$$\text{MDI Emissions in lbs} = \# \text{ buns} * \text{worst case iso}(209.7\text{lbs}) * 8\text{E-}07\%$$

MAERS/Record Keeping

During the inspection, I requested record keeping for 2013 through 2015 and copies of the Safety Data Sheets (SDS) for all adhesives, catalyst, and mold release products. IAC was unable to produce 12-month rolling records for VOCs, 12-month rolling records for HAPs, and monthly/yearly emission records for 2014. It was also noted that the data reported for 2014 to Michigan Air Emissions Reporting System (MAERS) was a copy of the 2013 MAERS data. Subsequently, Ms. Eschenberg submitted an updated 2014 MAERS database; however the database did not reflect changes in the formulation of the materials used at the facility.

Upon review of the SDSs, it was noted that the formulations for the adhesives used in the UROCORE process have changed; specifically the methylene diphenyl diisocyanate (MDI) content of adhesive 2U010 has increase from 14% to 50-70% (see SDS for details). The SDS provided by IAC indicates the formulation change at some point in 2012 (the SDS is dated 8-6-2012). The formulation of adhesive 2U010 was also confirmed via email by H.B. Fuller on June 8, 2015. IAC has not updated the facilities record keeping to reflect the changes in material formulations.

Based on the information provided, I am unable to determine if IAC is in compliance with the emission limits for FG-HEADLINER, FG-FACILITY, the Urocore Lines, and the Foam Box Pourer.

New/Other Equipment

Line No. 2 has been replaced with an Azdel part edge folding machine. This equipment, is electric, uses a hot melt glue, and now has an exhaust stack to the roof to vent the heat produced by the equipment.

The new Line No. 16 is similar to Line No. 2, but has of two robotic machines: one uses hot melt to glue a metal ring around the sunroof hole and the second folds the substrate around the metal. This equipment now has an exhaust stack to the roof to vent the heat produced by the equipment.

IAC also has a small tub of solvent near line 10 which is used for washing parts from the box pour process.

These emissions will need to be accounted for in next year's MAERS report.

Conclusions

At this time, IAC appears to be in violation PTI No.183-10, FG-HEADLINER Special Conditions VI.1, VI.2, VI.3, FG-FACILITY Special Conditions V.1, VI.1, VI.2, VI.3, and VI.4.

A violation notice letter will be sent to IAC.

Updates

On May 29, 2015, Chris Ethridge, AQD, Erick Thorson, DNR-EIS, Gail Eschenberg, IAC, and I met to discuss IAC's recordkeeping and MAERS submittal. During our discussion, Ms. Eschenberg

explained that the 2014 MAERS data had been mistakenly deleted and the 2013 data was unknowingly re-submitted. I explained to Ms. Eschenberg that not having the records is a violation of IAC's permit. Ms. Eschenberg stated she would update the 2014 MAERS with the correct data and provide a corrected database to me via email. We also recommended having a checks and balances system for the data entry; including having someone in management certify for MAERS. Ms. Eschenberg agreed and stated she would discuss this with upper management.

On July 1, 2015, a violation noticed was issued to IAC for the violations of the above mentioned permit conditions. See details in letter.

On August 13, 2015, the AQD received a 277 page pdf response to the violation letter (see full response in file). Upon reviewing the response, it was noted that IAC believed no violations of the permit occurred. The AQD disagrees and believes the lack of record keeping/MSDSs were violations of the permit. Based on the supplemental data provided by IAC, it appears IAC has updated the way their electronic records are backed-up. They also provided updated SDSs for each material used at the facility and an explanation for the perceived increase in MDI for the adhesive (H.B. Fuller updated the MSDS to MDI%). IAC believes because the formulation didn't change the previous stack test conducted in 2011 accurately reflects their current operations

11/5/2015 - Although violations occurred, it appears IAC has taken corrective actions. Based on the updated emissions calculations, IAC appears to be in compliance with the emission limits established in PTI No. 183-10. At this time, the AQD is not requesting any additional information from IAC.

NAME

Rebecca Joffe

DATE

6/17/15
updated 11/5/15

SUPERVISOR

CJE