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

B662564741

FACILITY: International Automotive Components		**SRN / ID:** B6625
LOCATION: 1905 BEARD ST, PORT HURON		**DISTRICT:** Warren
CITY: PORT HURON		**COUNTY:** SAINT CLAIR
CONTACT: Marsha Hicks , Senior Environmental Health and Safety Specialist		**ACTIVITY DATE:** 08/18/2022
STAFF: Noshin Khan	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: scheduled, announced inspection		
RESOLVED COMPLAINTS:		

On Thursday, August 18, 2022, I (Noshin Khan, EGLE-Air Quality Division) performed a scheduled, announced inspection of International Automotive Components (IAC) Port Huron Plant, located at 1905 Beard Street, Port Huron, Michigan 48060. Kerry Kelly (EGLE-AQD) joined me for the inspection. The purpose of the inspection was to determine the facility's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), the administrative rules, and the conditions of Permit to Install (PTI) No. 183-10.

Upon arrival, Kerry and I met with Marsha Hicks, Senior Environmental Health and Safety Specialist, Dave Damouth, Maintenance Manager, and Tom Richmond, Plant Manager. We showed our credentials and discussed the facility's current processes. IAC manufactures headliners (foam cushioning and vinyl material in the headspace of a vehicle interior) and foam buns from a box pour process. The facility currently has about 106 employees, and normal hours of operation are 7AM-11PM Monday through Friday. Marsha and Dave told us that there were no changes in raw materials since the last compliance inspection and that there were no boilers or emergency generators on site. The facility tracks the amount of each type of part produced and uses that information to calculate the amount of raw material used.

Below are the current production lines/emission units at the facility:

Emission Unit ID	Emission Unit Description	Updated Process/Notes
EU-LN0UROCORE	Process Sequence: Roll coater adhesive application on polyurethane foam; application of chopped fiberglass and fabric; compacting/adhesive activation in a heated press; and cutting by water jets.	Molding process that shares an exhaust stack with Line 1. Not running during inspection.
EU-LN1UROCORE	Process Sequence: Roll coater adhesive application on polyurethane foam; application of chopped fiberglass and fabric; compacting/adhesive activation in a heated press; and cutting by water jets.	
EU-LN2AZDEL	Azdel Thermo-forming Operation: A pre-fabricated polypropylene/fiberglass board is heated in an oven; transferred into a mold with fabric; shaped, cooled, and cut. Includes assembly of pre-manufactured parts with hot melt adhesive usage.	Old Azdel line was removed and became Azdel Edge Folder line. Takes existing formed Azdel substrate, uses hot melt glue and metal ring to wrap edges. Electric powered. Has its own stack. Now, for service requests only.
EU-LN3UROCORE	Process Sequence: Roll coater adhesive application on polyurethane foam; application of chopped fiberglass and fabric; compacting/adhesive activation in a heated press; and cutting by water jets.	Dismantled and removed approximately January 2021, according to facility records.
EU-LN4UROCORE	Assembly Process: Manual/robotic assembly of premanufactured parts. Includes hot melt adhesive usage.	Old line replaced with ultrasonic trim for headliner edges. No heat is used in this process.
EU-LN5UROCORE	Assembly Process: Manual/robotic assembly of premanufactured parts. Includes hot melt adhesive usage.	Old line replaced with marriage process. Urocore headliner and fabric

		are married with film adhesive. Parts come from Lines 1 or 6.
EU-LN6UROCORE	Process Sequence: Roll coater adhesive application on polyurethane foam; application of chopped fiberglass and fabric; compacting/adhesive activation in a heated press; and cutting by water jets.	Shares exhaust stack with Line 7.
EU-LN7UROCORE	Process Sequence: Roll coater adhesive application on polyurethane foam; application of chopped fiberglass and fabric; compacting/adhesive activation in a heated press; and cutting by water jets.	
EU-LN8TRULAM	TRU Lamination: Process uses heat and pressure to laminate TRU board, polyolefin film, and chopped glass with fabric.	Process is now a thermal set glass lamination process. Fiberglass is melted onto plastic using adhesive.
EU-LN9BOXSKIVER	Mechanical process to slice foam buns.	Foam buns from Line 10 are sliced.
EU-LN10BOXPOUR	Foam Buns formed by reactive foam process: polyol and isocyanate dispensed into roll-off box; roll-off box moved to curing location.	Produces polyurethane foam buns.
EU-LN12AZDELTRU	Process uses heat and pressure to laminate foam slice, polyolefin film, and chopped glass with fabric.	Same as Line 15.
EU-LN14AZDELTRU	Assembly Process: Manual assembly of premanufactured parts. Includes hot melt adhesive usage.	Receives parts from Line 15.
EU-LN15AZDEL	Process uses heat and pressure to laminate foam slice, polyolefin film, and chopped glass with fabric.	
EU-LN18AZDEL	Assembly Process: Manual assembly of premanufactured parts. Includes hot melt adhesive usage.	Same as line 5.
Line 16		Same as Line 2. Used for service requests only.
Line 19		New line. Die cutter for foam pieces

During the facility walkthrough, Dave and Marsha showed us each line and explained how they work. At Line 9, where foam buns are sliced into sheets, we observed dust collectors and bag filters. Dave told me that these bags are blown out when dust collection bags are replaced.

At Line 10, where foam buns are produced, Dave explained how foam rises from an initial polyurethane layer (a mix of polyol and MDI) to fill a box mold. The foam sets for 30 minutes and is cured for 48 hours before it can undergo cutting. The polyurethane line is flushed with hot water and resulting waste is collected in a container. This wastewater is filtered to separate solids. Dave and Marsha explained that the facility has permission from the city to discharge the filtered water into the sewer. In a separate building, Dave and Marsha showed us the foam bun storage. The buns are marked with the time of production so that they are not cut before curing for the full 48 hours.

At Line 16, Dave explained that the process is an Azdel edge folding process and is operated only for service requests, like Line 2. This line does not have its own stack and any emissions go to the general in-plant environment. The facility's potential to emit (PTE) data indicates that the adhesive used in this line does not contain or emit any VOC's or MDI. Consequently, the process appears to be exempt from PTI requirements per R 286(2)(d) and/or R 287(2)(i).

At Line 19, Dave showed us equipment for the new die cutting line. The facility receives polyester foam in rolls, and this material is stamped at this line. This process appears to be exempt from PTI requirements per R 285(2)(l)(vi)(B).

We observed 2 solvent-based parts washers with interfaces of less than 10 square feet. Both had lids and written procedures posted on them, in compliance with R 707. These are exempt from PTI requirements per R 281(2)(h).

The facility has 5 stacks: one for Lines 0 and 1; one for Lines 6 and 7; one for Line 10; one for Line 15; and one for Line 12. I did not observe any visible emissions during the facility walkthrough.

PTI 183-10 Emission Limit Compliance

Per PTI No. 183-10, FG-HEADLINER Special Condition (S.C.) I.1, the facility has a VOC emission limit of 46.4 tons per year (tpy) as a 12-month rolling value. The facility's VOC tracking records indicate that between July 2017 and July 2022, the highest VOC annual emission rate for FG-HEADLINER based on a 12-month rolling value was 7.642 tpy in December 2019. This is below the permitted limit and the facility appears to be in compliance with this condition.

Per FGFACILITY S.C. I.3, the facility has a VOC emission limit of less than 50.0 tpy as a 12-month rolling value. The facility's VOC tracking records indicate that between July 2017 and July 2022, the highest VOC annual emission rate for FGFACILITY based on a 12-month rolling value was 7.720 tpy in December 2019. This is below the permitted limit and the facility appears to be in compliance with this condition.

Per FGFACILITY S.C. I.1, the facility has an individual HAP emission limit of less than 9.0 tpy as a 12-month rolling value. Per FGFACILITY I.2, the facility has an aggregate HAPs emission limit of less than 22.5 tpy as a 12-month rolling value. The facility reports only MDI for HAP emissions. The facility's MDI tracking records indicate that between July 2017 and July 2022, the highest MDI annual emission rate based on a 12-month rolling value was 0.000423 tpy in January 2017. This is below both HAP emission limits and the facility appears to be in compliance with these conditions.

PTI 183-10 MDI Emission Compliance

Per FG-HEADLINER S.C. I.2 the facility has a methylene diphenyl diisocyanate (MDI) emission limit of 0.0084 lb/hour for UROCORE heated presses. Per FG-HEADLINER S.C. I.3, the facility has an emission limit of 0.0064 lb/hour for the foam box pour equipment. The monitoring method for compliance with this condition is listed as FG-HEADLINER S.C. V.1.

The facility performed a stack test in 2011, in accordance with S.C. V.1, which reported MDI emission rates of less than 0.00000963 lb/hr for UROCORE lines and less than 0.000018 lb/hr for the foam box pour line. These values are below the permitted limits and the facility appears to be in compliance with FG-HEADLINER S.C. I.2 and I.3.

PTI 183-10 Recordkeeping Compliance

Per FG-HEADLINER S.C. VI.2 and FGFACILITY S.C. VI.2, the facility shall maintain chemical composition data from the manufacturer for each raw material used. The facility provided manufacturer SDS's for the adhesives, catalysts, and other raw materials used, in compliance with these conditions.

Per FG-HEADLINER S.C. VI.3, the facility is responsible for recording the following information on a monthly basis: amount of each non-hot melt adhesive, catalyst, and other material used; the MDI content of each material containing it; VOC emission calculations by emission unit, including VOC contributions from MDI; and hours of operation for each emission unit. The facility VOC records indicate compliance with this condition—VOC emissions are calculated for each emission unit and the facility tracks usage of materials by the number and type of parts produced, in addition to hours of operation for each line.

Per FGFACILITY S.C. VI.3, the facility is responsible for recording the following information on a monthly basis: gallons or pounds of each HAP-containing material used and reclaimed; HAP content of each material containing it; individual and aggregate HAP emission calculations, including the contribution from MDI in the UROCORE lines; and 12-month rolling HAP emission calculations to determine annual emission rates. The facility appears to be in compliance with this condition—as noted above, the facility reports only MDI for HAPs, and the facility provided records showing MDI content of materials as well as monthly MDI emission calculations.

Per FGFACILITY S.C. VI.4, the facility is responsible for recording the following information on a monthly basis: amount of each VOC-containing material used and reclaimed; VOC content of each material containing it; monthly and 12-month rolling VOC emission calculations to determine annual emission rates. The facility's VOC records contain the items required by this condition, indicating compliance.

PTI 183-10 Process/Operational Restrictions

Per FG-HEADLINER S.C. III.1 and III.2, the facility is responsible for controlling fugitive emissions, including for VOC's and HAP's. Based on observations during the inspection, the facility appears to be in compliance with these conditions. The facility appears to have organized procedures for materials storage and disposal. At the foam box pour line, we observed that the wastewater collection tub was open with no lid. Dave and Marsha explained that the tub is in consistent use when the line is operating, and the tub itself was under the line's fume hood.

Other Compliance

The facility is subject to 40 CFR Part 63, Subpart A and Subpart OOOOOO (NESHAP for Flexible Polyurethane Foam Production and Fabrication Area Sources). Compliance with this rule was not evaluated since the AQD has not accepted delegation to implement or enforce this rule.

Overall, the facility appears to be in compliance with the above rules and regulations.

NAME Noshin Khan DATE 09/30/2022 SUPERVISOR K. Kelly