## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

## **ACTIVITY REPORT: Self Initiated Inspection**

	U631	61	075	736	592
--	------	----	-----	-----	-----

FACILITY: Autoliv North Amer	ica	SRN / ID: U631610757		
LOCATION: 1320 Pacific Drive		DISTRICT: Southeast Michigan		
CITY: Auburn Hills		COUNTY: OAKLAND		
CONTACT: Warren Short, Env	ironmental Coordinator	ACTIVITY DATE: 08/16/2016		
STAFF: Rebecca Loftus	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Exempt Equipment		
SUBJECT:				
RESOLVED COMPLAINTS:				

On August 16, 2016, I, Rebecca Loftus, from the Department of Environmental Quality's (DEQ), Air Quality Division (AQD), conducted an inspection of Autoliv, located at 1320 Pacific Drive, in Auburn Hills, 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, and Michigan's Air Pollution Control Rules.

The inspection was prompted by a paint odor complaint received in the fall of 2015. Upon completing the odor observation, I noted multiple facilities along the Pacific Drive commercial/industrial park that had never been inspected by the AQD and therefore planned inspections of these facilities.

I arrived on-site at 1:00pm and spoke with Mr. Warren Short, Environmental Coordinator, 248-276-3840, warren.short@autoliv.com.

## Inspection Observations

Mr. Short escorted me through the facility and explained that, at this location, Autolive is a R&D facility which designs, engineers, and tests seatbelts and airbags for the automotive industry. The building has many different sections: engineering/office space, a Durability Lab/Seatbelt Testing area, a Polyurethane Prototype Lab, Airbag Testing Chambers, a fabrication area, a part prep area, and warehouse storage.

In the Durability Lab/Seatbelt Testing area, seatbelts are subjected to a variety of test. This area has a steam and salt corrosion tank with stack to exhaust the heat (steam) and a tensile strength machine that utilizes very small amounts (less than 1g) of gun powder and is enclosed and exhausted for worker safety. The adjacent Seatbelt Chamber Room is used for extreme hot and cold temperature testing of seatbelts and has 15 electric ovens/cambers that can produce temperatures ranging from -40°C to 40°C; each chamber has a stack to exhaust heat when necessary. These processes only exhaust steam or insignificant amounts of air pollutants (spent gun powder) and do not appear to require an air Permit to Install (PTI).

In the Polyurethane Prototype Lab, Autoliv conducts tooling trials and prototype trial runs. This area has two clamp machines which currently use a water-based mold release, water-based paint, and acetone as the mold rinse (see attached MSDS). Mr. Short provided the potential to emit calculations for when the equipment was originally installed (see attached). In addition, he provided the current materials used in the machine and number of shots made in 2013 through 2016. At the maximum output of the two machines, 175,200 shot could be made if they were operated 24 hours per day for 365 days. At the maximum production rate, the

volatile organic compounds and non-carcinogenic air contaminants are each less than 1000 lbs for the year (see attached calculations). The following table list the actual shots produced per year at this facility.

	# of Shots
Year	Produced
2013	3566
2014	2383
2015	1003
Jan-June 2016	928

Based on the calculations and information provided, this equipment appears to be exempt from obtaining a PTI pursuant to Rule 290(a)(i) and Rule 290(a)(ii)(A).

The building also has four large Airbag Testing Chambers that can create environments ranging in temperature from -50°C to 100°C; these chambers exhaust heat/air to the in-plant environment.

In the remainder of the building (fabrication area, part prep area, and warehouse storage area), Autolive utilizes hand welders, spray cans of water-based paint, and a laser cutter for the airbag fabrics. The welders and spray paint appear to be exempt from obtaining a PTI pursuant to Rules 285(i) and 287(b). The laser fabric cutter only exhausts to the in-plant environment and appears to be exempt from obtaining a PTI pursuant to Rule 285(I)(vi)(B)

Autoliv also has one emergency generator located outside. The generator, serial # K0729166, is a 200Kw, natural gas-fired, Kohler, and was installed prior to 2002. At the time of my inspection, the generator had 806 hours on the meter and Mr. Short explained the generator is tested each Monday without load. The emergency generator appears to be exempt from obtaining a PTI pursuant to Rule 285 (g), however is subject to the following Federal Regulation: 40 CFR Part 63 Subpart ZZZZ, the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines – Area Sources.

## **Conclusion**

Based on my inspection observations and information provided, Autoliv appears to be in compliance with the Federal Clean Air Act and Michigan's Air Pollution Control Rules.

A copy of 40 CFR Part 63 Subpart ZZZZ and Michigan's Air Pollution Control Rule Exemptions will be provided to Mr. Short with a copy of the inspection report.

NAME POLICE Joftis

DATE 9/16/16

SUPERVISOR