

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

B729438775

FACILITY: Lear Corporation, Farwell Plant		SRN / ID: B7294
LOCATION: 505 HOOVER ST, FARWELL		DISTRICT: Saginaw Bay
CITY: FARWELL		COUNTY: CLARE
CONTACT:		ACTIVITY DATE: 03/03/2017
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Conducted a scheduled site inspection for the 2017 fiscal year.		
RESOLVED COMPLAINTS:		

On Monday, June 29, 2015, AQD District Staff conducted a scheduled site inspection of the Lear Corporation Eeds & Interiors - Renosol Seating LLC (RSLCC) Facility (SRN B7294) located at 505 Hoover Street, Farwell, Clare County, Michigan.

The facility is permitted as a major source under MI-ROP-B7294-2013b. The ROP was revised to incorporate PTI 91-06D and PTI 232-15 on January 20, 2015 and April 29, 2016, respectively. The referenced ROP expires on July 2, 2018. In addition, PTI 91-06E was issued on December 29, 2016, for a prototype line. Because the line represents a new Emission Unit (EU) it will be incorporated at the time of the next ROP renewal.

Site inspection activities were conducted with the intent of confirming the operational status of the permitted equipment and that monitoring/reporting activities were being conducted per the referenced permit and applicable exemptions.

At the time of the site inspection Nadum, Jwad, the Environmental contact for the facility provided the inspector with a tour and answered questions regarding the facility. Supplemental records and information were requested of the company in order to complete monitoring and recordkeeping requirements outlined in the referenced ROP.

The facility was previously inspected on June 29, 2015.

#### FACILITY DESCRIPTION

RSLCC is part of Lear Corporation Eeds & Interiors, a subsidiary of Lear Corp. an international company specializing in automotive components. The subject site is part of the Global Seating Group. The facility manufactures molded polyurethane automotive seating components. The facility had operated under Renosol Corporation prior to 2005.

The subject site is bounded to the east by Corning Street and a limited number of residences, to the south and west by the railroad lines and predominantly undeveloped properties and to the north by West Maple Grove Road.

The facility consists of one main building which houses the main manufacturing area, QA lab, maintenance, mold storage, packaging, day tanks and offices. In addition, one smaller independent building exists onsite for storage of used and unused pallets, storage totes, hazardous and non-hazardous waste materials for disposal by a licensed disposal company.

#### REGULATORY

The facility is a relatively new major source, prior to issuance of the above referenced ROP (July 2, 2013). The initial permit application for the facility was received in February 1994. Until 2006 (Permit to Install 91-06C) EUs were permitted independently under opt-out permits. Over the permit history of the site different EU names/identifiers have been used.

PTI 91-06B and the previous versions were issued as VOC Title V Opt-Out Permit for four foam seat molding lines (EU01 through EU03 and EU11) and Poly-ol blending tanks (EU12). In addition to the referenced active PTI, nine (9) voided PTIs and four (4) voided applications are of record for the facility. Voided PTIs 355-88A, 560-90, 294-88 and 415-97, were incorporated to create the 2006 permit.

The facility has been determined to be subject to the NESHAP/MACT Standards for flexible polyurethane foam production and fabrication area sources promulgated in 40 CFR Part 63, Subparts A and OOOOOO.

**EQUIPMENT**

At the time of the inspection four Emission Units (EUs) (Poly-OI blending tanks, two production lines and one prototype line) were associated with the facility. The production line EUs included:

1. EUSEATINGLINE#4 (commenced trial operation on December 9, 2014)
2. EUCANNONLINE (formerly referred to as the racetrack line, Cannon, EU11)
3. EUPROTOTYPELINE#1.

Other Equipment previously associated with the site include:

1. EUSEATINGLINE#1 and #2 (formerly known as Admiral-1, EU02 and Admiral-2, EU03).

These EUs were discontinued before April 30, 2015, in compliance with ROP conditions. At the time of the June 29, 2015, site inspection the final components of the two disassembled lines were reported to have been transported offsite.

2. Headrest line (EU01) was taken out of service and reported dismantled on August 25, 2011.

Also of record for the site are the following exempt pieces of equipment:

Emission Unit	Description	Rule 201 exemption	Claimed Pre-December 2016
EUHEATER	NG fired space heater located in main building, <50 MMbtu/hr	282(b)(i)	Yes
EUHEATERPOLEBARN	NG fired space heaters in pole barn, <50 MMbtu/hr	282(b)(i)	Yes
EUSTORAGETANKADM	Storage tanks west of admiral lines with true vapor pressure of <1.5psia	284(i)	Yes
EUSTORAGETANKOUT	Storage tanks in outdoor tank farm, west of main building, <40,000 gallons with true vapor pressure of <1.5 psia	284(i)	Yes
EUHEATERQC	NG fired space heater for conditioning rooms used for production QC Labs, <50 MMbtu/hr	282(b)(i)	Yes
General Equipment	Maintenance	285(l)(vi)	Yes

	<b>Located in maintenance area- non production</b>		
<b>Hood and Stack associated with QA Lab</b>	<b>Located in North end of building.</b>	<b>283(b)</b>	<b>Yes</b>

**PROCESS**

Materials used for production of the foam seating components consist of an approximately 96% naptha mold release agent, and the foaming components which consist of one-part TDI (toluene diisocyanate) mixed with Poly-ol (proprietary blend). TAC emissions identified during the permitting of PTI 91-06C included Naptha, methylene diphenyl diisocyanate and toluene diisocyanate (TDI). The facility is equipped with TDI monitors at appropriate locations for worker safety.

Prior to application of the foam, the molds (aka carriers) are coated with a waxy release agent applied by airless, high volume low pressure (HVLP) equivalent spray guns. Following the application of the release agent, the steel inserts are inserted and the molds mechanically filled with the “poly-ol” polyurethane foam. For the remainder of the circuit, the foam in each mold is cured prior to opening the mold, the finished foam product removed, and the molds cleaned and the process started again. Foam products are cleaned, inspected and put on a plant-wide conveyor system to the packaging and shipping departments.

HVLP equivalent sprayers for each line are tested for calibration daily. Except for spillage no waste material is generated with respect to the mold release agent. The same release agent is reported to be used for all lines, and has not changed since the June 29, 2015, site inspection.

The release agent as well as components blended for the poly-ol has historically been shipped by both truck and rail to the facility and stored in tanks. Day tanks are located in the building for materials that days use. In addition to blending components for their own manufacturing lines, they also blend poly liquids to be shipped to clients. Truck loadouts being located on the east side of the building.

**COMPLIANCE HISTORY**

The most recent compliance inspection for the facility was conducted by District Staff on June 29, 2015. Since the July 27, 2010, site visit the Facility has been reported to be in compliance with applicable requirements.

Annual MAERS submittals appear to be submitted in a timely manner with the most recent being submitted for 2015 emissions. Reported VOC emissions for the facility.

Calendar Year	Total VOC Emissions in Tons/year
2016	120.07
2015	49
2014	82.5
2013	100.3
2012	96.9

Annual and Semi Annual Certification forms have been received in a timely basis.

**COMPLIANCE EVALUATION**

**Operational Status** – During the inspection the facility was in operation.

EUSEATINGLINE#4 commenced trial operation on December 9, 2014. Notification of startup for EUSEATINGLINE#4 was received on January 5, 2015, in compliance with the ROP.

EUPROTOTYPELINE#1 commenced operations on December 29, 2015.

**Material Usage Rates** –Material limits associated with the PTI were limited to instantaneous VOC emissions associated with the mold release agent (S.C. II.1 for production lines).

Staff has reported that volumes are collected daily from each of the respective tanks, and that total volumes are cross checked based on material purchase records and in-stock volumes. Records are a combination of paper and electronic spreadsheets. Documentation of totals are provided to the corporate office on a monthly basis.

Instantaneous VOC emission limits were based on the properties of the mold release agent used by the facility at the time of permitting. The VOC content of which is 6.149 lbs/gallon, (October 6, 2006) which is in compliance with permit limits. Facility representatives report no change in materials used. PRC-7141 and PU-11335 have already been shown to meet the VOC limit

In addition, EUCANNONLINE has a material limit of Toluene diisocyanate of 11,110 lb/day (S.C. II.2). Based on material use records provided by the facility, RSLLC is in compliance with the referenced condition.

**Operational Parameters** –Operational limits in the ROP include the capture, storage and disposal of waste mold release agents in an appropriate manner. (S.C. III.1 for the prototype and production lines) At the time of the site inspection, material storage and waste storage areas were noted in various locations in the facility. Materials all appeared to be properly marked and stored. Facility staff reported that a licensed waste disposal contractor picks up the materials for disposal.

In addition, the permittee is required to handle all VOC and/or HAP containing materials in a manner that minimizes the generation of fugitive emissions, and to keep the containers at all times except when operator access is required. (S.C. III.2 for all production lines). No leakage, spills or unopen containers were noted at the time of the inspection.

Requirements require that each EU shall be equipped with a HVLP spray gun or comparable technology with equivalent transfer efficiency (S.C. IV.1). The requirements also require that the permittee also keep test caps available for pressure testing. As previously indicated, the facility uses calibrated HVLP spray guns to apply the mold release agent. The facility uses an airless system, and information obtained from the internet indicated that test caps were not applicable for airless systems.

**Emission Limits** -- Emission sources for the facility were limited to fugitives associated with blending tanks, as well as application points for the mold release agent and foam components on the lines. Stack dimensions were reported to be consistent with the dimensions in the permit. No visible emissions were noted for any of the stacks onsite at the time of the site inspection.

Emission Unit	Associated Stack(s)	Constructed Consistent with ROP and PTI	Lines Previously associated with stack
EUCANNONLINE	SV-CAN-A	Yes	Na
(identified by facility as SL3)	SV-CAN-B	Yes	Na
	SV-CAN-C		

		Yes	Na
<b>EUSEATINGLINE#4 (identified by facility as SL4)</b>	<b>SV-A4-A (Mold Release)</b>	Yes	Na
	<b>SV-A4-B (Robotic Mold Injection)</b>	Yes	Na
	<b>SV-A4-C (Robotic Mold Injection)</b>	Yes	<b>None, installed to increase capture with the two existing molds at that time. Determined that no significant change in emissions occurred since 100% emissions is already assumed.</b>
	<b>SL-4 VAC</b>	<b>Exempt from Permitting</b>	<b>Associated with cushion crusher activities. Determined that no significant change in emissions occurred since 100% emissions is already assumed.</b>
<b>EUPROTOTYPELINE#1</b>	<b>SV-A1-A</b>	Yes	<b>Reported to be formerly associated with EUSEATINGLINE#1</b>
<b>EUSEATINGLINE#1 (Admiral Line #1 )</b>	<b>SV-A1-A</b>	Yes	<b>Line removed in 2015</b>
	<b>SV-A1-B</b>	Yes	
<b>EUSEATINGLINE#2 (Admiral Line #2 )</b>	<b>SV-A2-A</b>	Yes	<b>Line Removed in 2015</b>
	<b>SV-A2-B</b>	Yes	
<b>EUHEADRESTFOAM</b>	<b>SV-HR-A</b>	Yes	<b>Dismantled in 2011</b>
	<b>SV-HR-B</b>	Yes	
<b>EUPOLYOLBLENDING</b>	<b>SV-BLEND</b>	<b>NA</b>	<b>Na</b>

Total VOC emissions for the facility are summarized in the records and reporting section later in this report. A review of the data indicates that no exceedances of permit limits with respect to VOCs have occurred.

**Monitoring and Testing** – S.C.V.1 for the prototype and production lines requires determination of VOC content, water content and density of any mold release agent(s) used via Federal Reference Test Method 24. The facility reports no change in materials used, and these materials have previously been tested and are compliant with the permit conditions.

**Record Keeping and Reporting** – Special conditions under the ROP include completion of all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 15<sup>th</sup> of the calendar month for the previous month. (S.C.VI.1).

In addition, S.C. VI.3 for the prototype and production lines required monthly records of:

- Gallons (with water) of each mold release agent used,
- VOC content (minus and with water) of each mold release agent applied,
- VOC mass emission calculations determining monthly rate in tons per calendar month, and
- VOC mass emission calculations determining the annual emission rate in tons per the 12-month rolling time period as determined at the end of each calendar month.

Emission Unit	VOC Limit (12-month rolling total) (tons)	Reported 12-month rolling total emissions (tons)
EUSEATINGLINE#4	94.5	78
EUCANNONLINE	60	41.5
EUPROTOTYPE#1	2.5	0.08

Records reviewed as part of the site inspection as well as supplemental data provided by the facility, indicated that the facility monitors and maintains the appropriate records as part of their business activities. Records were available electronically. Databases were maintained reflecting the monthly and twelve month rolling totals of emissions for the facility. Data provided confirmed emissions within permit emission limits. Availability of records for a minimum of 5-years was also confirmed as part of the inspection.

#### SUMMARY

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Site inspection activities were conducted with the intent of confirming the operational status of the permitted equipment and that monitoring/reporting activities were being conducted per the referenced permit and applicable exemptions. Records and Reporting were reviewed, and the facility was found to be in general compliance with ROP requirements. sgl

NAME Sharon LaBlanc

DATE 3/14/17

SUPERVISOR C. Place