

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

B729430130

FACILITY: Lear Corporation, Farwell Plant		SRN / ID: B7294
LOCATION: 505 HOOVER ST, FARWELL		DISTRICT: Saginaw Bay
CITY: FARWELL		COUNTY: CLARE
CONTACT:		ACTIVITY DATE: 06/29/2015
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: scheduled inspection of major source. sgl		
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-B7294-2013A. The ROP was revised to incorporate PTI 91-06D on January 20, 2015. The referenced ROP expires on July 2, 2018.

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 the facility was down for the week to conduct general and specific maintenance activities. Mr. Paul Fielding 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 March 22, 2013.

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 three Emission Units (EUs) (Poly-OI blending tanks and two production lines) were associated with the facility. The production line EUs included:

- EUSEATINGLINE#4
- EUCANNONLINE (formerly referred to as the racetrack line, Cannon, EU11).

Other Equipment previously associated with the site include: 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.

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

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.

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

- General maintenance equipment (Rule 285(l)(vi)),
- NG Fired space heaters (Rule 282(b)(i)),
- Material storage tanks, and material blending tanks (Rule 284(i)) as well as a
- Hood and stack associated with the facilities QA Lab (Rule 283(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.

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 and 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.

The release agent as well as components blended for the poly-ol have 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.

COMPLIANCE HISTORY

Compliance inspections for the facility were conducted by District Staff on May 10, 2007, July 27, 2010, March 24, 2011 and March 22, 2013. 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 2014 emissions. No excess emissions were reported as part of the 2014 MAERS emissions. Annual and Semi Annual Certification forms have been received in a timely basis.

COMPLIANCE EVALUATION

Operational Status – During the inspection the facility was in not in production.

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.

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.

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.1for all 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.1for all production lines)

As previously noted at the time of the inspection the facility was not in operation, so confirmation of the proper handling and closed containers during operation could not be confirmed.

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. Emissions from the stacks could not be evaluated because the facility was not in operation.

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 has occurred.

Monitoring and Testing – S.C.V.1 for the two production lines requires determination of VOC content, water content and density of any mold release agent(s) used via Federal Reference Test Method 24. As part of the inspection discussions and records review it was noted that the facility had changed the mold release wax used for their process. Initial VOC documentation from the manufacturer suggested a range of VOC concentrations in the product used. RSLLC had been reporting emissions based on the high end of the range.

To better determine actual VOC emissions, the facility had product samples collected for analysis. The analysis method utilized was a modified Method 24 analysis to more closely reflect process conditions. Use of this modified method was evaluated by AQD District and TPU Staff for compliance and was

determined to be appropriate based on the process. VOC content of the mold release by lab analysis was well below the material limits in the ROP and in compliance with the permit.

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 15th of the calendar month for the previous month. (S.C. VI.1).

In addition, S.C. VI.3 for the 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.

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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Based on information obtained as part of site investigative activities conducted June 29, 2015, and subsequent information provided by the company, with respect to the RRSLLC Facility, it appears that the facility is in general compliance with the ROP for the facility.

Recent discussions with the facility have indicated that the facility may be making some future modifications to the ROP to address changes in process equipment and/or material usage onsite.

NAME



DATE



SUPERVISOR

