DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

N383430134		
FACILITY: Laur Silicone Rubber Compounding Inc		SRN / ID: N3834
LOCATION: 4930 South M-18, BEAVERTON		DISTRICT: Saginaw Bay
CITY: BEAVERTON		COUNTY: GLADWIN
CONTACT: Daniel Laur , President		ACTIVITY DATE: 06/29/2015
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: scheduled inspection	of minor source. sgl	
RESOLVED COMPLAINTS:		

On Monday, June 29, 2015, a scheduled site inspection was conducted at the Laur Silicone, Inc. (LS) (formerly Laur Silicone Rubber Compounding, Inc.) Facility (SRN N3834) located at 4930 South M-18, Beaverton, Gladwin County, Michigan.

One Permit to Install (PTI) 792-92 is associated with the facility, and was approved on August 3, 1993. The referenced permit is for a silicone rubber manufacturing operation located at the address.

Site inspection activities were conducted with the intent of confirming the operational status and compliance under the referenced permit. Mr. Daniel Laur provided a tour of the facility.

FACILITY DESCRIPTION

LS was founded in 1977, and provides custom formulation and mixing of silicone rubber. Per discussions the majority of the business is the production of formulated silicone rubber for production of equipment components, such as rollers on photocopiers. The company also reports some sales of liquid product. Activities/processes onsite have not changed since the time of the permit application.

The subject site is located south of Beaverton, Michigan, on M-18, approximately 600 feet north of the intersection of M-18 and Guernsey Road. The Facility is bounded by a mix of residential, industrial/commercial and undeveloped forest lands. Bear Creek is located along the southern property boundary.

The facility consists of one building, which appears to have been added on in multiple phases. A new warehouse being located in the northern most section of the building. Production varies as it is based directly on orders.

Activities onsite consist primarily of blending of the formulations, extrusion, and milling activities. No mixing activities were ongoing at the time of the inspection. The PTI associated with the site was most likely the result of formulation mixing activities onsite, the work area of which was constructed at approximately the same time as the permit application. Two mixers and five vents/stacks were identified in the mixing area.

In addition to process equipment, and any associated pollution control equipment the facility also has; one quality assurance lab, a boiler, natural gas fired heaters and an air conditioning unit associated with the building. The boiler, space heaters and air conditioning unit appear to be exempt from permitting under Rules 336.1282(b) (fuel burning equipment used for space heating, or service water heating) and R. 336.1280(b) (comfort air conditioning or comfort ventilating systems not designed or used to remove air contaminants generated by, or released from specific units of equipment. Equipment in the QA lab would appear to be exempt from permitting under R. 336.1283(b) which exempts laboratory equipment.

Two hepa-vacs for collection of powdered catalyst were located onsite. Catalyst is added prior to extruding the final product. Silica is also reported to be added to create a higher consistency rubber. These units appear to be exempt under R. 336.285(f), installation of air pollution control equipment that does not generate significant amount of criteria pollutants, or a meaningful quantity of toxic air contaminants.

Three (3) baghouses were identified onsite, and are associated with product milling activities. Located outside the building two baghouses are located on the south end of the building, and the third baghouse/dust collector is located on the west end of the building and is associated with the addition of silicon to the product. Silica collected during the milling activities is collected in a drum associated with the baghouse and disposed of at an appropriate land fill. Like the previously referenced hepa vacs, it appears that the baghouses would be exempt under R. 336.285(f), and that the replacement of the baghouse would be exempt under R. 336.1285(d) as a replacement of equivalent or more effective pollution control equipment.

COMPLIANCE HISTORY

No complaints or Notices of Violation are of record for the referenced facility, and as a minor source annual emission reporting is not required.

COMPLIANCE EVALUATION

Due to the date of issuance of the PTI for the facility, only a limited number of special conditions exist for the facility

Operational Status – During the facility tour the facility was in operation with most phases of process activities ongoing. However, the permitted product blending activities were not ongoing.

<u>Material Usage Rates</u> –With the exception of Special Condition 20, which requires the discontinuation of the use of 111-trichloroethane, in the process on or before September 1. 1993, no material usage restrictions are associated with the present active PTI for the site. Mr. Laur confirmed that the use of 111-trichloroethane was discontinued at about the same time of the permit application.

<u>Emission Points/Limits</u> - Emission points associated with the facility include the product mixing room (five vents/stacks), milling equipment (via baghouse), extrusion equipment (with associated hepa-vacs) and heater stacks. In general, it appears that the remainder of any emissions associated with the general work and warehouse areas were released into the general work environment. No visible emissions were noted from equipment operating or stacks associated with the facility.

Special Condition 16 limits visible emissions from the process. As previously indicated the "process" in question appears to be the liquid product mixing conducted in the southwest corner/room of the facility. The referenced process was not in operation at the time of the inspection, so visible emissions could not be verified.

Special Condition 15 limits VOC emission rates from the silicone manufacturing operation to a not to exceed neither 15 lbs per hour nor 0.9 tons per year. Mr. Lenk reported that no change in the formulation or process had occurred with respect to air emissions. Based on this limited information as well as the production records, it would not appear that a compliance issue exists for this special condition.

Special Condition 19 requires that the exhaust gases from the process be discharged unobstructed vertically upwards to the ambient air at an exit point or exit point(s) net less than 21 feet above ground level. The five vent stacks from the product mixing room all appeared to be in compliance with the referenced special condition.

Operational Parameters – No operation parameters are associated with the PTI for the facility.

<u>Equipment Maintenance</u> – No equipment maintenance conditions are presented in the PTI for the facility.

<u>Monitoring and Testing</u> – Special Condition 17 allows for the verification of VOC emission rates by testing at the owner's expense. However, no formal requests for completion of testing are of record.

Record Keeping and Reporting - Special Condition 18, limits the applicant to a production of no more than 400 drums of product per calendar year. Records and discussions with facility staff indicated that two products (L-102 and L-202) are produced onsite. Production records were maintained onsite, Conversion to drums of product indicated production levels well below the permit limits.

Summary -

Based on the information collected during the Monday, June 29, 2015, a scheduled site inspection, it appears that the facility is being operated in compliance with its PTI. A review of potential federal regulations indicated that the facility did not appear to be subject to any federal standards due to size, process or materials reported, sgl