DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

ACTIVITY REPORT: Self Initiated Inspection

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FACILITY: SRS Fiberglass Produc	ts	SRN / ID: A4298
LOCATION: 331 W LAKETON AV	E, MUSKEGON	DISTRICT: Grand Rapids
CITY: MUSKEGON		COUNTY: MUSKEGON
CONTACT: Steve Bradish , President		ACTIVITY DATE: 05/02/2019
STAFF: Chris Robinson	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: FY'19 on-site inspection regulations.	n to determine the facility's compliance status with re	spect to applicable air quality rules and
RESOLVED COMPLAINTS:		

An onsite self-initiated unannounced inspection of SRS Fiberglass Products (SRS) was conducted by AQD staff Chris Robinson (CR) on May 2, 2019. The facility's plant is located at 331 West Laketon Avenue, in Muskegon, Michigan. CR met with Mr. Russ Kwiatkowski, VP Engineering, and Steve Bradish, President, announcing intent to conduct an inspection of the facility in order to determine SRS's current compliance status with respect to applicable air quality rules and regulations. A tour and discussion of the facility were provided. There are currently no permits associated with this facility. A copy of the Permit to Install (PTI) Exemption Handbook was provided and discussed.

Weather conditions were cloudy with light rain, approximately 49°F with winds coming out of the east-northeast at approximately 7mph (www.weatherunderground.com). CR surveyed the perimeter of the facility upon arrival for odors and visible emissions, none were observed.

SRS manufactures acoustical and thermal fiberglass products primarily for the HVAC industry, originally located at 2724 Riordan Street but recently purchased and relocated to the former Federal Mogul building. MACES has been updated to reflect a change in business name and NAICS. SRS is now assigned Federal Modul's SRN of A4298. Although the buildings are connected, the plant is located at 331 West Laketon Avenue while the offices are located at 1839 6th Street.

Rolls of black and amber fiberglass are purchased pre-impregnated with resin, either uncured or cured. The uncured resin allows the fiberglass to be molded into various shapes prior to being cured, while the uncured fiberglass is manufactured into high impact board for such things as ceiling tiles. The facility is split into three (3) general areas, the Acoustical Area, which uses the uncured amber fiberglass; the Plenum Area which uses the uncured black fiberglass; and the third area which is where the cured amber fiberglass is manufactured into high impact board. The application of adhesive and paint is also conducted in this area.

Acoustical Area:

The Acoustical Area consists of three stations which apply a thin plastic sheet to the fiberglass. The product is then sent through an electric resistance oven which adheres the plastic to the fiberglass and cures the resin. Each station has its own oven, two are identical and the third is much smaller. These panels are then cut to size on the waterjet.

Based on Safety Data Sheet (SDS) for this product, it's unclear of what type and quantity of emissions are being released from this process. The SDS for the cured amber fiberglass (Attached) includes both the fiberglass and the resin with a resin content of less than 13%. Other than the resin being a thermo set, inert polymer bonding agent derived from plant starch, the SDS does not provide sufficient composition information for just the resin. It does however provide the following, indicating that emissions are being generated.

- Section 2 (Hazards Identification) of the SDS:
- "When heated to a temperature above 400°F for the first time, release of binder components and binder decomposition products can occur which, in high concentrations, may irritate eyes and the respiratory system".
- Section 9 (Physical and Chemical Properties) of the SDS indicates that the decomposition temperature is not relevant while section 10 (Stability and Reactivity) indicates that temperatures over 400°F should be avoided.

Plenum Area:

The Plenum Area consists of one (1) machine for both applying a self-adhering foil to the roll of black cured fiberglass and cutting it to an approximate length. The product is then placed in one of eight (8) electrically operated mold presses, which compresses and heats the fiberglass to 450°F squishing the fiberglass to the proper thickness and curing the resin. The product is then cut to proper size and shape utilizing one of two (2) trim presses. Scraps are collected and landfilled. All eight (8) ovens are ducted to one stack that vents directly through the roof with no emission controls. The SDS for this product, which is attached, includes both the fiberglass and the resin with a resin content of less than 30% and a formaldehyde content of less than 1%. As with the uncured amber fiberglass, composition data includes the fiberglass and the resin. Except for the less than 1% formaldehyde found in the total product (Resin & fiberglass), composition of the resin is unknown. Therefore, it's unclear of what type and quantity of emissions are being released from this process.

Emissions generated from the cutting/trimming in this area is conducted with a shear which appears to be exempt from Rule 201 permitting requirements per Rule 285(2)(I)(vi)(B). Emissions are vented to the in-plant environment.

Third Area:

This area consists of two hot melt adhesive systems used to apply a thin layer of adhesive to the pre-purchased cured high-density impact board for either adding additional layers of board or for adding a matting. Equipment used in the application of the hot melt appears exempt from Rule 201 permitting requirements per Rule 287(2) (i). The final product is either hand trimmed, cut on the Beam saw or the waterjet. A small silkscreen is used to apply lines to the finished product which appears exempt from Rule 201 permitting requirements per Rule 287(2) (e).

Conclusion

Per discussions with Mr. Kwiatkowski and Mr. Bradish, the facility has not determined, nor do they track emissions being released from any of the equipment. Based on observations, discussions and a review of the SDS's, SRS fiberglass does not appear to be in compliance with ALL applicable air quality rules and regulations. Specifically, the eight (8) mold presses located in the Plenum Area and the three (3) ovens located in the Acoustical Area, which are being operated without a PTI or a Rule 201 exemption. Therefore, A Rule 201 violation notice will be issued.

SUPERVISOR