

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N697666476

FACILITY: HUNTINGTON FOAM LLC		SRN / ID: N6976
LOCATION: 1323 MOORE DRIVE, GREENVILLE		DISTRICT: Grand Rapids
CITY: GREENVILLE		COUNTY: MONTCALM
CONTACT: Thomas Winks , Plant Manager		ACTIVITY DATE: 01/10/2023
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: On site inspection to assess compliance with air quality rules and requirements.		
RESOLVED COMPLAINTS:		

Introduction

On January 10, 2023, State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division (AQD) staff member Scott Evans (SE) conducted an on-site inspection of the Huntington Foam facility located 1323 Moore Dr. in Greenville, Michigan, to assess compliance with air quality rules and regulations. Huntington Foam utilizes steam to expand polystyrene beads into consumer products such as packing material and insulation containers for food products. They also mold pre-expanded polyethylene and polypropylene resin. This facility has one Permit to Install (PTI): PTI No. 156-01C. This permit was issued on March 4, 2015.

Upon arrival at the facility, SE conducted a perimeter inspection to assess any visible emissions (VE) or odors at the facility exterior. There were no observed VEs or odors around the facility exterior. After these initial observations were completed, SE entered the facility and was greeted by facility staff Thomas Winks. After a brief discussion was held to discuss the purpose of the visit, an inspection of the facility interior was conducted. During this inspection all process and storage areas within the large warehouse facility were visited to assess compliance with permitted conditions and all other applicable air quality rules and regulations.

PTI No. 156-01C

This permit is an Opt-Out permit as the facility is a synthetic minor facility for Volatile Organic Compounds (VOCs). This permit includes requirements for one emission unit: EU02000.

EU02000

This emission unit (EU) consists of an expandable polystyrene foam molding line with two pre-expanders, multiple mold machines, and storage for raw materials, intermediate product, and final product. These units are also used to expand other bead types such as polyethylene and polypropylene. During the permit modification conducted in 2015 a toxics analysis was reviewed, and it was determined that the use of these additional components was acceptable and that VOC or HAP potential emissions were not in exceedance of allowable emissions rates. Pentane was the largest toxic air contaminant identified and it was determined that potential emissions were less than 50% of the allowable emission rate.

This EU has two applied emission limits within the PTI. Below is a chart showing the applied limits and compliance determinations with these limits during the inspection. Records relevant to the determination of this compliance are discussed in greater detail further below.

Pollutant	Limit	Time Period / Operating Scenario	Recorded Maximum	Compliant?
VOC	85 tpy		38.82 tpy	Yes

Pollutant	Limit	Time Period / Operating Scenario	Recorded Maximum	Compliant?
		12-month rolling time period as determined at the end of each calendar month		
VOC	490 ppd	Daily	See discussion below.	Yes

This EU has one applied material limit. This limit states that annual polystyrene throughput shall not exceed an amount that results in VOC emissions exceeding 170,000 lbs. as determined by the formula specified within the PTI. Provided records demonstrated that during the calendar year of 2022, only 73,446.70 lbs. of VOCs were emitted from the expanded polystyrene beads. Daily VOC emissions are monitored as well and can be seen in provided records. The facility utilizes a flagging system to highlight when daily VOC emissions are nearing the 490 ppd limit. This was discussed and facility representatives explained that production is stopped and adjusted accordingly when daily emissions approach the permitted limit. Within the provided records of 2022, multiple instances of the facility nearing the limit are seen, but all records demonstrate halting of production before any exceedance is reached, demonstrating attentive compliance to limits. A copy of these records is included with this report.

This EU has a testing parameter that states the facility may use methods outlined in the PTI Appendix A to determine VOC content of materials in exchange of the default assumption of 15%. At this time the facility does not wish to utilize these testing methods to re-determine VOC content. This is acceptable.

This EU has the following recordkeeping requirements, all of which are stipulated within the PTI Appendix A:

- VOC content of each used lot of polystyrene resin.
- Pounds of each polystyrene lot used.
- Daily VOC emissions and relevant calculations.
- 12-month-rolling annual VOC emissions and relevant calculations.

These records were reviewed briefly on site to confirm that they were ready and available in appropriate formats as required by the PTI. Copies of these records were provided by the facility remotely for a detailed review. During this detailed review it was determined that records were being kept in an appropriate manner and compliance with emission and material limits was confirmed. Copies of these records are included with this report. The facility also retains SDS and Lot Batch information of all used materials to verify VOC and other relevant information, which were reviewed on site.

This EU has two stacks as required by the PTI. Though these stacks were not directly measured for safety reasons, observation of the stacks confirmed that they appeared to comply with permitted height and diameter requirements.

Boilers

This facility operates two ~16 MMBtu, natural gas fired boilers that are subject to New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart Dc. As per the requirements of this rule the

facility is required to provide monthly gas usage records for these boilers. This is done through the Michigan Air Emissions Reporting System (MAERS). The most recent MAERS report was submitted on March 4, 2022 and was determined to be complete upon review. A copy of the MAERS report is included with this report. This facility is an area source for Hazardous Air Pollutants and so is not subject to National Emissions Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63 Subpart JJJJJ. These boilers are exempt from permitting requirements per Rule 282(2)(b)(i).

Conclusion

At the conclusion of this inspection the facility appeared to be compliant with the requirements of PTI No. 156-01C and all other applicable air quality rules and regulations.

NAME Scott Evans DATE 3/1/2023 SUPERVISOR HH