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

N757873597

FACILITY: EAGLE INDUSTRIES INC		SRN / ID: N7578
LOCATION: 30926 CENTURY DR, WIXOM		DISTRICT: Warren
CITY: WIXOM		COUNTY: OAKLAND
CONTACT: David Selby , Plant Manager		ACTIVITY DATE: 08/23/2024
STAFF: Mark Dziadosz	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: FY 2024 Inspection		
RESOLVED COMPLAINTS:		

On Friday, August 23, 2024, I, Michigan Department of Environment Great Lakes and Energy-Air Quality Division staff Mark Dziadosz, conducted an announced scheduled inspection of Eagle Industries, Inc. (N7578), located at 30926 Century Drive, Wixom, Michigan. The purpose of this inspection was to determine the facility's compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subparts ZZZZ (Stationary Reciprocating Internal Combustion Engines, and OOOOOO (Flexible Polyurethane Foam Production and Fabrication); New Source Performance Standards (NSPS) Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines), and Renewable Operating Permit (ROP) MI-ROP-N7578-2024.

The facility received a violation notice on September 30, 2021, for non-submittal of the annual and semi-annual compliance certification reports associated with MI-ROP-N7578-2017a. The 2022 & 2023 reports were submitted. On April 3, 2024, the facility received another VN for non-submittal of the annual and semi-annual compliance certification reports associated MI-ROP-N7578-2024. The AQD received a response on April 23, 2024. The facility ensured timely delivery of compliance reports moving forward. The move to online reporting in MiEnviro in late 2024 should help the facility manage the reporting requirements of MI-ROP-N7578-2024.

The facility received a violation notice on September 8, 2022, for exceeding the permitted mold release 5.85 lb/gal VOC content limit in EUCELL14 and exceeding the 4.7 Ton Per Year (TPY) 12-month rolling time period limit in EUCELL15 in PTI #30-20. The facility submitted a permit application (APP-2023-0102) to increase the VOC content of the mold release in EUCELL14 and EUCELL15 and the TPY VOC limit in EUCELL15. The draft PTI was accepted by the facility on August 23, 2023, and PTI #30-20A was rolled into MI-ROP-N7578-2024.

I arrived at Eagle Industries, Inc. at 1:30 PM and met with Michael O'Brien-Process Manager, David Selby-Plant Manager, and Jonathon DuFresne. Prior to the inspection, records were requested electronically and reviewed.

Upon arrival, Michael, David, Jonathon and I discussed the records and operations. I was then taken on a tour of the facility.

Eagle Industries is a Tier I automotive supplier of foam products such as head rests, engine covers, and foam pillows. Parts go through a reaction injection molding process. Production is run Monday through Thursday, Friday is reserved for overflows of production, and maintenance is run Saturdays and Sundays. The facility has approximately 205 employees and runs two 10-hour shifts.

To make foam products, resins are mixed with a chemical base and heated to approximately 130°F and compressed into shape in reaction injection molding (RIM) machines. A mold release is sprayed into these machines before the resin is injected. The facility is a Title V major source for volatile organic compounds (VOCs) due to the mold release product associated with these reaction injection molding machines. The mold releases used are PU-16259, and PU-16224, and PU-14211. The facility is a true minor for hazardous air pollutants (HAPs). According to Michael O'Brien, there are no cold cleaners on site.

Eagle Industries provided an excel spreadsheet of all calculations. The document can be found in: S:\Air Quality Division\Staff\Mark Dziadosz\N7578 Eagle Industries FY24 Inspection or the facility plant file.

MI-ROP-N7578-2024

EUCELL12

A reaction injection mold processing cell with manual spray application of mold release agents. Overspray is controlled by dry fabric filters.

SC I.1 A VOC emission limit of 43.0 tons per year. The highest 12-month total of VOC emissions for EUCELL12 23.16 tons of VOCs between March 2023 and February 2024.

SC II.1 The facility provided formulation data for the 14211 mold release. The VOC content of the mold release material is within the permitted 6.04 lbs VOC/gal (minus water).

SC III.1 The permittee captures all waste in closed containers and has Oil Chem pick-up the waste for disposal.

SC III.2 The permittee properly disposes of filters in a manner which reduces contaminants to the outer air. Michael O'Brien showed me that they store the spent filters in closed receptacles until they are removed by a waste disposal company.

- SC III.3 The permittee appears to be handling VOC and HAP containing materials properly to minimize fugitive emissions. Containers are sealed when not in use.
- SC IV.1 The filters appear to be properly installed, maintained, and operated in a satisfactory manner. Filters are replaced according to the weekly maintenance and process filter log. EUCELL12 changes filters three times per week.
- SC IV.2 EUCELL12 is equipped with HVLP applicators. Test caps are available if pressure testing is requested.
- SC V.1 The permittee provided Method 24 testing results for the materials used in EUCELL12 and SDS were on site. The VOC content of the mold release material is within the permitted 6.04 lbs VOC/gal (minus water).
- SC VI.1 The permittee completes all calculations for the previous month by the end of the current month. Eagle continuously updates their VOC data.
- SC VI.2 The permittee keeps all SDS for current materials on-site. The facility also performs Method 24 testing for all used materials in EUCELL12.
- SC VI.3 The permittee provided all required records for EUCELL12
- SC VI.4 The permittee keeps a log of all maintenance, including filter replacement.
- SC VII.1-3 The facility submitted the 2023 ongoing compliance certification reports late and a VN was issued on 4/23/24.
- SC VIII.1 The exhaust stack for EUCELL12 discharges vertically unobstructed, stack parameters not confirmed during this inspection.

EUCELL14

- SC I.1 A VOC emission limit of 36.4 tons per year. The highest 12-month total of VOC emissions for EUCELL14 was 11.1 tons of VOCs between July 2022 and August 2023.
- SC II.1 The facility provided formulation data for the 16259 and 14211 mold release. The VOC content of the mold release material is within the permitted 6.04 lbs VOC/gal (minus water).

The facility received a violation notice on September 8, 2022, for exceeding the permitted mold release 5.85 lb/gal VOC content limit in EUCELL14 in MI-ROP-N7578-2017a between May and July 2022. The facility submitted a permit application (APP-2023-0102) to increase the VOC content of the mold release in EUCELL14 to 6.04. The draft PTI was accepted by the facility on August 23, 2023, and PTI #30-20A was rolled into MI-ROP-N7578-2024.

- SC III.1 The permittee captures all waste in closed containers and has Oil Chem pick-up the waste for disposal.
- SC III.2 The permittee properly disposes of filters in a manner which reduces contaminants to the outer air. Michael O'Brien showed me that they store the spent filters in closed receptacles until they are removed by a waste disposal company.
- SC III.3 The permittee appears to be handling VOC containing materials properly to minimize fugitive emissions. Containers are sealed when not in use.
- SC IV.1 The filters appear to be properly installed, maintained, and operated in a satisfactory manner. Filters are replaced according to the weekly maintenance and process filter log. EUCELL14 changes filters two times per week.
- SC IV.2 EUCELL14 is equipped with HVLP applicators. Test caps are available if pressure testing is requested.
- SC V.1 The permittee provided Method 24 testing results for the materials used in EUCELL14 and SDS were on site. The VOC content of the mold release material is within the permitted 6.04 lbs VOC/gal (minus water).
- SC VI.1 The permittee completes all calculations for the previous month by the end of the current month. Eagle continuously updates their VOC data.
- SC VI.2 The permittee keeps all SDS for current materials on-site. The facility also performs Method 24 testing for all used materials in EUCELL14.
- SC VI.3-5 The permittee provided all required records for EUCELL14.
- SC VI.6 The permittee keeps a log of all maintenance, including filter replacement.
- SC VII.1-3 The facility submitted the 2023 ongoing compliance certification reports late and a VN was issued on 4/23/24.
- SC VIII.1 The exhaust stack for EUCELL14 discharges vertically unobstructed, stack parameters not confirmed during this inspection.

EUCELL15

A reaction injection mold processing cell with manual spray application of mold release agents. Overspray is controlled by dry fabric filters.

The facility received a violation notice on September 8, 2022, for exceeding the 4.7 Ton Per Year (TPY) 12-month rolling time period limit in EUCELL15 in PTI #30-20. The facility submitted a permit application (APP-2023-0102) to increase the TPY VOC limit to 18.0 TPY in EUCELL15. The draft PTI was

- accepted by the facility on August 23, 2023 and PTI #30-20A was rolled into MI-ROP-N7578-2024.
- SC I.1 A VOC emission limit of 18 tons per year. The highest 12-month total of VOC emissions for EUCELL15 was 7.76 tons of VOCs between September 2022 and August 2023.
- SC II.1 The facility provided formulation data for the 16259 mold release. The VOC content of the mold release material is within the permitted 6.04 lbs VOC/gal (minus water).
- SC III.1 The permittee captures all waste in closed containers and has Oil Chem pick-up the waste for disposal.
- SC III.2 The permittee properly disposes of filters in a manner which reduces contaminants to the outer air. Michael O'Brien showed me that they store the spent filters in closed receptacles until they are removed by a waste disposal company.
- SC III.3 The permittee appears to be handling VOC containing materials properly to minimize fugitive emissions. Containers are sealed when not in use.
- SC IV.1 The filters appear to be properly installed, maintained, and operated in a satisfactory manner. Filters are replaced according to the weekly maintenance and process filter log. EUCELL15 changes filters three times per week.
- SC IV.2 EUCELL15 is equipped with HVLP applicators. Test caps are available if pressure testing is requested.
- SC V.1 The permittee provided Method 24 testing results for the materials used in EUCELL15 and SDS were on site. The VOC content of the mold release material is within the permitted 6.04 lbs VOC/gal (minus water).
- SC VI.1 The permittee completes all calculations for the previous month by the end of the current month. Eagle continuously updates their VOC data.
- SC VI.2 The permittee keeps all SDS for current materials on-site. The facility also performs Method 24 testing for all used materials in EUCELL15.
- SC VI.3 The permittee provided all required records for EUCELL15.
- SC VI.4 The permittee keeps a log of all maintenance, including filter replacement.
- SC VII.1-3 The facility submitted the 2023 ongoing compliance certification reports late and a VN was issued on 4/23/24.

SC VIII.1 The exhaust stack for EUCELL15 discharges vertically unobstructed, stack parameters not confirmed during this inspection.

FGPOLYFOAM

A polyurethane foam molding process consisting of eight (8) reaction injection mold processing cells.

- SC I.1 The permittee has not exceeded the 142.1 tons of VOC/year limit for FGPOLYFOAM. The highest 12-month total of VOC emissions for FGPOLYFOAM in the time period reviewed was 37.99 tons of VOCs between September 2022 and August 2023.
- SC I.2 An emission limit for EUCELLS 1, 3, 6, 9, 10 of 36.4 tons of VOCs for each cell per year. The permittee has not exceeded this limit for any of the specified cells for any of the 12-month rolling time periods. The highest 12-month period in the time period reviewed was 12.19 tons in EUCELL9 between September 2022 and August 2023.
- SC I.3 An emission limit for EUCELLS 2 and 8 of 46.2 tons of VOCs for each cell per year. The permittee has not exceeded this limit for any of the specified cells. The highest 12-month period reviewed was in EUCELL2 at 1.03 tons between September 2022 and August 2023.
- SC I.4 An emission limit for EUCELL5 of 56.0 tons of VOCs per year. The permittee has not exceeded this limit for EUCELL5. The highest 12-month period reviewed was September 2022 and August 2023 at 12.61 tons.
- SC I.5 A 12-month hydrocarbon naphtha emission limit of 53,679 pounds per year, the permittee has not exceeded this limit. The highest recorded 12 -month total reviewed was 39,159 pounds from September 2022 and August 2023.
- SC I.6 A 12-month naphthalene emission limit of 178.1 pounds per year, the permittee has not exceeded this limit. The highest recorded 12-month total reviewed was 8.33 pounds of naphthalene from September 2022 and August 2023.
- SC II.1 A paint coating VOC content limit of 0.50 lb/gal. The VOC content of the coating used is 0.4491 lbs VOC/gal. The facility provided the SDS during the inspection and it is located in the facility file.
- SC II.2 The facility provided formulation data for the mold release agents. None of the permittee's mold release agents used in FGPOLYFOAM exceed 6.7 lbs VOC/gal.
- SC III.1 The permittee captures all waste and has Oil Chem pick-up the waste for disposal.

- SC III.2 The permittee properly disposes of filters in a manner which reduces contaminants to the outer air.
- SC III.3 The permittee appears to be handling VOC containing materials properly to minimize fugitive emissions. Containers are sealed when not in use.
- SC IV.1 The filters appear to be properly installed, maintained, and operated in a satisfactory manner. Filters are replaced according to the weekly maintenance and process filter log.
- SC IV.2 FGPOLYFOAM is equipped with HVLP applicators. Test caps are available if pressure testing is requested.
- V.1 The permittee provided Method 24 testing results for the materials used in FGPOLYFOAM and had SDS's on site. The VOC content of the mold release material is within the permitted 6.7 lbs VOC/gal (minus water).
- VI.1 The permittee completes all calculations for the previous month by the end of the current month. Eagle Industries continuously updates their VOC data.
- VI.2 The permittee keeps all SDSs for current materials on-site. The facility also performs Method 24 testing for all materials used in FGPOLYFOAM.
- VI.3-4 All required records for each paint coating, mold release, hydrocarbon naphtha, and naphthalene were provided.
- VI.5 The permittee keeps a log of all maintenance, including filter replacement.
- SC VII.1-3 The facility submitted the 2023 ongoing compliance certification reports late and a VN was issued on 4/23/24.
- SC VIII.1-10 The exhaust stack for FGPOLYFOAM discharges vertically unobstructed, stack parameters not confirmed during this inspection.

FG-NESHAP-SUBPARTOOOOO

- SC III.1-3 The facility does not use any material that contains methylene chloride including as an equipment cleaner, mold release, or adhesive.
- SC VI. 1(a-b) The permittee has the required certification statements on file.
- SC VI. 2 The facility uses SDS to demonstrate compliance with SC III. 1-3.
- SC VI.3 The facility is maintaining the records.
- SC VII.1-3 The facility submitted the 2023 ongoing compliance certification reports late and a VN was issued on 4/23/24.

IX.1 The permittee appears to be in compliance with the applicable requirements of 40 CFR 63 Subparts A and OOOOOO (Flexible Polyurethane Foam Production and Fabrication).

FGNSPS-SUBPARTJJJJ

40 CFR 60, Subpart JJJJ requirements for Emergency Spark Ignition Internal Combustion Engines greater than 25 horsepower and less than 100 horsepower that commenced construction (ordered) after June 12, 2006 and were manufactured on or after January 1, 2009

Emission Unit: EUGEN1

The permitted engine is a Chinese Kohler Model No. CH1000EP and was built on 07/18/2013.

- I.1, The permittee appears to be in compliance with the emissions standards of JJJJ demonstrated by purchasing a certified engine. The permittee provided proof of EPA certification for the engine. The family number of the engine is EKHXB.9992DA.
- III.1 limits operations to 100 hours for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The engine operated 19 hours in total from 8/1/23-8/12/24 for testing, maintenance, and one 3-minute power outage.
- III.2 Each engine in FGNSPS-SUBPARTJJJJ may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as described in SC III.1. The engine operated 19 hours in total from 8/1/23-8/12/24.
- III.3 The permittee purchased a certified engine and maintains and operates it according to the manufacturer's instructions and settings.
- III.4 The permittee purchased a certified engine and maintains and operates it according to the manufacturer's instructions and settings.
- IV.1 A non-resettable hours meter is installed on the engine.
- VI.1 The permittee only adjusts the engine according to manufacturer instructions and keeps records of maintenance.
- VI.2 The permittee only adjusts the engine and control device according to manufacturer instructions and keeps records of maintenance.

VI.3(a-d) The permittee is keeping the required records.

VI.4 A non-resettable hours meter is installed on the engine and the records indicate whether hours run are emergency or non-emergency.

VII.1-3 The facility submitted the 2023 ongoing compliance certification reports late and a VN was issued on 4/23/24.

VII. 4 FGNSPS-SUBPARTJJJJ is operated as a certified engine.

IX.1-2 The permittee appears to be in compliance with the applicable requirements of 40 CFR 60 Subparts A and JJJJ and 40 CFR 63 Subpart ZZZZ.

The facility submitted the 2023 MIEnviro Sleis report on time. Based on the information gathered during the inspection, Eagle Industries Inc. appears to be in compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, MI-ROP-N7578-2024.

NAME _____

DATE 09-17-2024 SUPERVISOR JOYCE