

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

N757869150

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| 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: 08/23/2023 |
| STAFF: Mark Dziadosz | COMPLIANCE STATUS: Non Compliance | SOURCE CLASS: MAJOR |
| SUBJECT: FY 2023 Inspection | | |
| RESOLVED COMPLAINTS: | | |

On Wednesday, August 23, 2023, 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-N7578-2017a and Permit to install (PTI) No. 30-20.

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.

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.

I arrived at Eagle Industries, Inc. at 1:00 PM and met with Michael O'Brien, Process Manager and David Selby, Plant Manager. Prior to the inspection, records were requested electronically and reviewed. Upon arrival, Michael, David 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 220 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 FY23 Inspection or the facility plant file.

MI-ROP-N7578-2017a

Source-Wide Conditions

VII.1-3 The facility has submitted the 2022 annual and semi-annual ongoing compliance certification reports.

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).

EUCCELL12

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 EUCCELL12 19.66 tons of VOCs between August 2022 and July 2023.

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 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 is submitting the ongoing compliance certification reports.

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 11.43 tons of VOCs between August 2022 and July 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 5.85 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.

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 5.85 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 is submitting the ongoing compliance certification reports.

SC VIII.1 The exhaust stack for EUCELL14 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 41.88 tons of VOCs between October 2021 and September 2022.

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 12.26 tons in EUCELL9 between January 2022 and December 2022.

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 5.02 tons between March 2021 and February 2022.

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 October 2021 through September 2022 at 14.32 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 43,546 pounds from April 2021 to March 2022.

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 9.19 pounds of naphthalene from April 2021 through May 2022.

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 FGPLYFOAM 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 FGPLYFOAM 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 FGPLYFOAM 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 FGPLYFOAM.

VI.3-4 All required records for 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 is submitting the ongoing compliance certification reports.

SC VIII.1-10 The exhaust stack for FGPLYFOAM discharges vertically unobstructed, stack parameters not confirmed during this inspection.

FG-NSPS 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, EU-NSPS SUBPARTJJJJ

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

I.1, III.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.2 The non-resettable hours meter on the engine read 237.1 hours at the time of inspection, below the 500 hours per year operating limit.

III.3 The engine has not exceeded the 50 hours of non-emergency use, nor the 100 hours of allowed maintenance checks and readiness testing. The non-resettable hours meter on the engine read 237.1 hours at the time of inspection. During the September 1, 2022, inspection the non-resettable hours meter read 189.1 hours. On July 28, 2021, the non-resettable hours meter read 109.1 hours

III.4 The engines run on natural gas and the permittee only adjusts the engine according to manufacturer instructions.

III.5 The engines run on natural gas and the permittee only adjusts the engine according to manufacturer instructions.

III.6 The engine maintains compliance with manufacturer emissions standards via hour operation limits, which according to EPA documentation says is 500 hours per year.

IV.1 The engine is equipped with a non-resettable hour meter.

V.1 The AQD does not request emissions testing at this time.

VI.1 The permittee keeps records of all the notifications of compliance.

VI.2 The permittee keeps records of maintenance conducted on the engine.

VI.3 The permittee produced engine certification evidence.

VI.4 Compliance with emissions standards are guaranteed via being within the operating time limitations, which the engine appears to be.

VI.5-6 The permittee has the engine equipped with a non-resettable hour meter, the engine is connected to a system that notifies Eagle Industries, via email, when the engine begins operating for emergency and non-emergency situations. The facility is monitoring and recording the hours of operation of the engine.

SC VII.1-3 The facility is submitting the ongoing compliance certification reports.

IX.1 The permittee appears to be complying with the applicable requirements of 40 CFR 60.4233 by complying with the requirements of the conditions in this flexible group.

IX.2-3 The permittee appears to be in compliance with the applicable requirements of 40 CFR 63 Subparts A, JJJJ, and ZZZZ.

PTI No. 30-20

EUCCELL15

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 4.7 tons per year. The highest 12-month total of VOC emissions for EUCCELL15 was 10.87 tons of VOCs between December 2022 and January 2023 and the limit has been exceeded since

November 2021. This is a violation of SC I.1. A violation notice will not be issued.

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.

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 5.85 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 5.85 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.

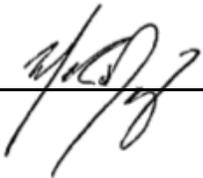
SC VI.3 The permittee provided all required records for EUCELL15.

SC VI.4 The permittee keeps a log of all maintenance, including filter replacement.

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

The facility submitted the 2022 MAERS report on time. Based on the information gathered during the inspection, Eagle Industries Inc. appears to be out of 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-N7578-2017a, and PTI #30-20. Specifically, the facility used a mold release in May through July 2022 that exceeded the VOC lb/gal limit of EUCELL14, and the facility is currently exceeding the VOC TPY limit on EUCELL15.

However, the facility submitted a permit application on April 4, 2023, and accepted draft permit conditions on August 23, 2023, that will increase the VOC content limit in EUCELL14 and the TPY limit in EUCELL15.

NAME 

DATE September 25, 2023 SUPERVISOR 