

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

N757860059

FACILITY: EAGLE INDUSTRIES INC		SRN / ID: N7578
LOCATION: 30926 CENTURY DR, WIXOM		DISTRICT: Warren
CITY: WIXOM		COUNTY: OAKLAND
CONTACT:		ACTIVITY DATE: 07/28/2021
STAFF: Joe Forth	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: On-site Inspection		
RESOLVED COMPLAINTS:		

On July 28, 2021, I, Joseph Forth, Michigan Department of Environment, Great Lakes, and Energy (EGLE-AQD) Staff, conducted an scheduled inspection of Eagle Industries Inc. (N7578), located at 30926 Century Drive, Wixom, MI. The purpose of the inspection was to determine the facility's compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended, EGLE-AQD Air Pollution Rules, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) Subparts A, ZZZZ (Stationary Reciprocating Internal Combustion Engines), and OOOO (Flexible Polyurethane Foam Production and Fabrication); New Source Performance Standards (NSPS) Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines), and Renewable Operating Permit MI-ROP-N7578-2017a and PTI No. 30-20.

I arrived at the facility and was met by Mike O'Brien (Process Manager), David Selby (Plant Manager), Joe Sladek (Quality Manager), and Rob Doty (HR Manager).

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 runs two 10-hour shifts.

To make foam products, resins are mixed together 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-16241, PU-16259, and PU-16224, and PU-14211. The facility is a true minor for hazardous air pollutants (HAPs). According to Mr. O'Brien, there are no cold cleaners on site.

Mr. O'Brien then gave me a tour of the facility. He showed me all the cells and showed that the filters were properly installed. I was shown the emergency engine (FG- NSPS Subpart JJJJ) the hours meter was not functioning at the time of inspection, the run times are also logged digitally.

Compliance

All referenced documents and records were provided electronically and can be located in: S:\Air Quality Division\STAFF\Joe Forth\N7578 Eagle Industries FY21 Inspection

Source-Wide Conditions

VII.1-3 The facility was not submitting annual and semi-annual ongoing compliance certification reports. This is a violation of the requirements of this ROP.

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.

I.1 A VOC emission limit of 43.0 tons per year. Upon reviewing the VOC records for the facility, there was some discrepancy between the amount of mold release drawn from the storage container and the amount used in the cells. Even if using the amount drawn, the facility will meet the emission limit. The highest 12-month total was the period that ended in December 2019 at 28.0 tons. Therefore, I'm requesting the facility use the amount drawn in place of the amount applied in the cell, in order to account for all mold released drawn from storage.

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).

III.1 The permittee captures all waste in closed containers and has Resource Restoration pick-up the waste for disposal.

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

III.3 The permittee appears to be handling VOC containing materials properly to minimize fugitive emissions. Containers are sealed when not in use.

IV.1 The permittee appears to properly install filters in EUCCELL12 based on what I viewed during the inspection.

IV.2 EUCCELL12 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 EUCCELL12 and had SDSs on site.

VI.1 The permittee completes all calculations for the previous month by the end of the current month. Eagle continuously updates their VOC data.

VI.2 The permittee keeps all SDS's for current materials on-site. The facility also performs Method 24 testing for all used materials in EUCCELL12.

VI.3 The permittee provided all required records for EUCCELL12

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

VII.1-3 The facility was not submitting annual and semi-annual ongoing compliance certification reports. This is a violation of the requirements of this ROP.

VIII.1 The exhaust stack for EUCCELL12 discharges vertically unobstructed, stack parameters not confirmed during this inspection.

EUCCELL14

A reaction injection mold processing cell with manual spray application of mold release agents and automatic spray application of paint coatings onto finished foam pieces. Overspray is controlled by dry fabric filters.

I.1 A VOC emission of 36.4 tons per 12-month rolling period. Upon reviewing the VOC records for the facility, there was some discrepancy between the amount of mold release drawn from the storage container and the amount used in the cells. Even if using the amount drawn, the facility will meet the emission limit. The highest 12-month total was the one ending in March 2020 at 10.28 tons of VOCs. Therefore, I'm requesting the facility use the amount drawn in place of the amount applied in the cell, in order to account for all mold released drawn from storage.

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).

III.1 The permittee captures all waste and has Resource Restoration pick-up the waste for disposal.

III.2 The permittee properly disposes of filters in closed containers.

III.3 The permittee appears to be handling VOC containing materials properly to minimize fugitive emissions. Containers are sealed when not in use.

IV.1 The permittee appears to properly install filters in EUCELL14 based on what I viewed during the inspection.

IV.2 EUCELL14 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 EUCELL14 and had SDSs on site.

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 SDS's for current materials on-site. The facility also performs Method 24 testing for all used materials in EUCELL14.

VI.3-5 The facility is keeping all required VOC records.

VI.6 The permittee keeps a log of all maintenance, including filter replacement.

VII.1-3 The facility was not submitting annual and semi-annual ongoing compliance certification reports. This is a violation of the requirements of this ROP.

VIII.1-2 The exhaust stacks 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.

Emission Units: EUCELL1, EUCELL2, EUCELL3, EUCELL5, EUCELL6, EUCELL8, EUCELL9, EUCELL10

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 was 56.82 tons of VOCs between August 2020 and July 2021.

I.2 An emission limit for EUCELLS 1, 3, 6, 9, 10 of 36.4 tons of VOCs 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 of those reviewed was September 2018-August 2019 at 9.56 tons.

I.3 An emission limit for EUCELLS 2 and 8 of 46.2 tons of VOCs per year. The permittee has not exceeded this limit for any of the specified cells. The highest 12-month period was in EUCELL2 at 9.34 tons between April 2018 and March 2019.

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 was November 2018 through October 2019 at 20.47 tons.

I.5 A 12-month hydrocarbon naphtha emission limit of 53,679 pounds per year, the permittee has exceeded this limit. The highest recorded 12-month total was 91880.32 pounds of hydrocarbon naphtha for August 2020 through July 2021.

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 was 75.18 pounds of naphtha from May 2014 through April 2015.

II.1 A paint coating VOC content limit of 0.50 lb/gal. The VOC content of the coating used is 0.456 lbs VOC/gal. The facility provided the SDS during the 2019 inspection and it is located in the facility file.

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.

III.1 The permittee captures all waste and has Resource Restoration pick-up the waste for disposal.

III.2 The permittee properly disposes of filters in a manner which reduces contaminants to the outer air.

III.3 The permittee appears to be handling VOC containing materials properly to minimize fugitive emissions. Containers are sealed when not in use.

IV.1 The permittee appears to properly install filters in FGPOLYFOAM based on what I viewed during the inspection.

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.

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 hydrocarbon naphtha and naphthalene were provided.

VI.6 The permittee keeps a log of all maintenance, including filter replacement.

VII.1-3 The facility was not submitting annual and semi-annual ongoing compliance certification reports. This is a violation of the requirements of this ROP.

VIII.1-10 The exhaust stacks for FGPOLYFOAM 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 only read 109.1 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 109.1 hours at the time of inspection. At the July 10, 2017 inspection the non-resettable hours meter read 32.2 hours. So over the course of 4 years, the engine has only added 76.9 hours of operation. It appears the permittee is in compliance with this condition. I have instructed the facility to keep records of the operation hours moving forward, denoting testing hours and actual emergency usage.

III.4 The permittee only makes adjustments to the engine according to manufacturer instructions.

III.5 Permittee's compliance with 40 CFR Part 1068 Subparts A and D was not evaluated during this inspection.

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 was not able to produce these records. Because the operating hours appear to be within the limits. I will not issue a violation for this condition but have requested the facility begin keeping track of both emergency and non-emergency hours of operation.

VII.1-3 The facility was not submitting annual and semi-annual ongoing compliance certification reports. This is a violation of the requirements of this ROP.

VII.4-6 A performance test is currently not required, if in the future the permittee fails to satisfy the emissions requirements for the engine then performance testing will be requested.

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 and automatic spray application of paint coatings onto finished foam pieces. Overspray is controlled by dry fabric filters.

I.1 A VOC emission limit of 36.4 tons per 12-month rolling period. Upon reviewing the VOC records for the facility, there was some discrepancy between the amount of mold release drawn from the storage container and the amount used in the cells. Even if using the amount drawn, the facility will meet the emission limit. The facility has only been operating since November 2020. The current total through July 2021 is 2.90 tons of VOCs. Therefore, I'm requesting the facility use the amount drawn in place of the amount applied in the cell, in order to account for all mold released drawn from storage.

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).

III.1 The permittee captures all waste and has Resource Restoration pick-up the waste for disposal.

III.2 The permittee properly disposes of filters in closed containers.

III.3 The permittee appears to be handling VOC containing materials properly to minimize fugitive emissions. Containers are sealed when not in use.

IV.1 The permittee appears to properly install filters in EUCCELL15 based on what I viewed during the inspection.

IV.2 EUCCELL15 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 EUCCELL15 and had SDSs on site.

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 SDS's for current materials on-site. The facility also performs Method 24 testing for all used materials in EUCCELL15.

VI.3-5 The facility is keeping all required VOC records.

VI.6 The permittee keeps a log of all maintenance, including filter replacement.

VII.1-3 The facility was not submitting annual and semi-annual ongoing compliance certification reports. This is a violation of the requirements of this ROP.

VIII.1-2 The exhaust stacks for EUCELL15 discharges vertically unobstructed, stack parameters not confirmed during this inspection.

The facility appears to not be operating in compliance with PTI No. 30-20 and MI-ROP-N7578-2017a. The facility was not submitting annual and semi-annual ongoing compliance certification reports. This is a violation of the requirements of this ROP. A violation notice will be issued.

NAME Joseph M. Furt

DATE 9/30/21

SUPERVISOR K. Kelly