DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N757850411

FACILITY: EAGLE INDUSTRIES INC		**SRN / ID:** N7578
LOCATION: 30926 CENTURY DR, WIXOM		**DISTRICT:** Southeast Michigan
CITY: WIXOM		**COUNTY:** OAKLAND
CONTACT: Tom Robertson , EHS Coordinator		**ACTIVITY DATE:** 08/20/2019
STAFF: Joe Forth	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: On-site Inspection		
RESOLVED COMPLAINTS:		

On August 20, 2019, I, Joseph Forth, Michigan Department of Environment, Great Lakes, and Energy (EGLE-AQD) Staff, conducted an unannounced 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 OOOOO (Flexible Polyurethane Foam Production and Fabricatio); New Source Performance Standards (NSPS) Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines), and Renewable Operating Permit MI-ROP-N7578-2017a.

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. Robertson, there are no cold cleaners on site.

I arrived at the facility at 12:00 pm.

While at Eagle Industries, Inc., I spoke with Donna Yelinek (Human Resources Manager), Tom Robertson (Engineering Design), and Jim McLaughlin (Plant Manager). I stated the purpose of the inspection and presented my credentials.

I reviewed the permit and collected the required records with the Eagle Industries representatives. Mr. Robertson 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 current run time on the engine display was 6.9 hours.

I left the facility at 2:00 pm.

Compliance

Source-Wide Conditions

VII.1-2 No deviations were reported.

VII.3 Annual certificate of compliance received each year since the last inspection.

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).

EUCELL12

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

I.1 The highest 12-month total for tons of VOCs for EUCELL12 was 30.99 tons (limit of 43.0 tons) between

June 2018 through May 2019. (See Attachment A)

II.1 The VOC content of the mold release material is within the permitted 6.04 lbs VOC/gal (minus water). (See Attachment B)

III.1 The permittee captures all waste and has Resource Restoration pick-up the waste for disposal. (See Attachment C)

III.2 The permittee properly disposes of filters in a manner which reduces contaminants to the outer air. (See Attachments C and D)

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 does not operate EUCELL12 unless the filters are installed properly, based on the inspection they appear to be.

IV.2 EUCELL12 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 EUCELL12 (See Attachment B) 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 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 EUCELL12. (See Attachment B)

VI.3 VOC information for EUCELL12:

a. **Gallons (with water) of mold release used. (See Attachment A)**
b. **VOC content (minus and with water) of each mold release agent used. (See Attachment B)**
c. **Monthly VOC emission rates for EUCELL12. (See Attachment A)**
d. **12-month rolling total VOC emissions never exceeded the 43.0 tons/year limit. (See Attachment A)**

VI.4 The permittee keeps a log of all maintenance, including filter replacement. (See Attachment D)

VII.1-2 No deviations were reported.

VII.3 Annual certificate of compliance received each year since the last inspection.

VIII.1 The exhaust stack for EUCELL12 discharges vertically unobstructed, stack parameters not confirmed during this inspection.

EUCELL14

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 The highest 12-month total for tons of VOCs for EUCELL14 was 5.29 tons (limit of 36.4 tons) between August 2018 through July 2019. (See Attachment E)

II.1 The VOC content of the mold release material is within the permitted 5.85 lbs VOC/gal (minus water). (See Attachment F)

III.1 The permittee captures all waste and has Resource Restoration pick-up the waste for disposal. (See Attachment C)

III.2 The permittee properly disposes of filters in a manner which reduces contaminants to the outer air. (See Attachments C and D)

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 does not operate EUCELL14 unless the filters are installed properly, based on the inspection they appear to be.

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 (See Attachment F) 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 Industies 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. (See Attachment E)

VI.3 Mold Release VOC information for EUCELL14:

a. **Gallons (with water) of mold release used. (See Attachment E)**
b. **VOC content (minus and with water) of each mold release agent used. (See Attachment F)**
c. **Monthly VOC emission rates for EUCELL14. (See Attachment E)**
d. **12-month rolling total VOC emissions never exceeded the 36.4 tons/year limit. (See Attachment E)**

VI.4 Paint Booth VOC information for EUCELL14:

a. **Gallons (with water) of each coating used. (See Attachment O)**
b. **VOC content (minus and with water) of each coating used is stated in the SDS's kept on-site.**
c. **Monthly VOC emission rates for EUCELL14. (See Attachment E)**
d. **12-month rolling total VOC emissions never exceeded the 36.4 tons/year limit. (See Attachment E)**

VI.5 The permittee calculates the VOC emissions for EUCELL14 both monthly and on a 12-month rolling time basis. (See Attachment E)

VI.6 The permittee keeps a log of all maintenance, including filter replacement. (See Attachment D)

VII.1-2 No deviations were reported.

VII.3 Annual certificate of compliance received each year since the last inspection.

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 117.24 tons of VOCs between December 2016 and November 2017. (See Attachment G)

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. (See Attachment H)

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. (See Attachment I)

I.4 An emission limit for EUCELL5 of 56.0 tons of VOCs per year. The permittee has not exceeded this limit for EUCELL5. (See Attachment J)

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 was 2,985 pounds of naphtha between October 2015 and September 2016. Current 12-month total through August 2019 is 1412 pounds of naphtha. (See

Attachment L)

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 2.3 pounds of naphtha from July 2016 through June 2017. (See Attachment M)

II.1 A paint coating VOC content limit of 0.50 lb/gal. The VOC content of the coating used is 0.45 lbs VOC/gal. (See Attachment O)

II.2 None of the permittee's mold release agents used in FGPOLYFOAM exceed 6.7 lbs VOC/gal. (See Attachment B, F, and K)

III.1 The permittee captures all waste and has Resource Restoration pick-up the waste for disposal. (See Attachment C)

III.2 The permittee properly disposes of filters in a manner which reduces contaminants to the outer air. (See Attachments C and D)

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 does not operate EUCELL14 unless the filters are installed properly, based on the inspection they appear to be.

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 FGPOLYFOAM (See Attachment F) 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 Industies 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. (See Attachment B, F, K)

VI.3 Mold Release VOC information for FGPOLYFOAM:

a. **Gallons (with water) of mold release used. (See Attachment H)**
b. **VOC content (minus and with water) of each mold release agent used. (See Attachment B, F, and K)**
c. **Monthly VOC emission rates for FGPOLYFOAM. (See Attachments G and H)**
d. **12-month rolling total VOC emissions never exceeded the individual or total VOC tons/year limit. (See Attachments G and H)**

VI.4 Hydrocarbon naphtha and naphthalene information for FGPOLYFOAM:

a. **Gallons (with water) of hydrocarbon naphtha and naphthalene. (See Attachments L and M)**
b. **Hydrocarbon naphtha and naphthalene content of each material used is stated in the SDS's kept on-site and calculated in the Method 24 testing provided. (See Attachment B, F, and K)**
c. **Monthly hydrocarbon naphtha and naphthalene emission rates for FGPOLYFOAM. (See Attachments L and M)**
d. **12-month rolling total hydrocarbon naphtha and naphthalene emissions never exceeded their individual tons/year limit. (See Attachments L and M)**

VI.6 The permittee keeps a log of all maintenance, including filter replacement. (See Attachment D)

VII.1-2 No deviations were reported.

VII.3 Annual certificate of compliance received each year since the last inspection.

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

I.1 The permittee appears to be meeting the emissions standards of 40 CFR 63 Subpart JJJJ. The non-resettable hours meter on the engine only read 6.9 hours at the time of inspection.

III.1 The engine appears to be demonstrating compliance by being installed and configured according to manufacturer's specifications. Eagle provided automatic email correspondence from the manufacturer. These emails show when the engine turns on and off (as needed). (See Attachment N)

III.2 The non-resettable hours meter on the engine only read 6.9 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. he non-resettable hours meter on the engine only read 6.9 hours at the time of inspection.

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

III.5 The permittee appears to be in compliance with the applicable requirements of 40 CFR Part 1068 Subparts A through D.

III.6 The permittee appears to be operating the engine according to the manufacturer's emission-related instructions.

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

V.1 The facility appears to be operating the engine in compliance with applicable requirements, so at this time testing is not required.

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

VI.2 The permittee keeps records of maintenance conducted on the engine. (See Attachment N)

VI.3 The permittee showed me the manufacturer certification documentation on-site.

VI.4 The engine is certified per manufacturer specifications and is therefore compliant with emissions standards.

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. (See Attachment N)

VII.1-2 No deviations were reported.

VII.3 Annual certificate of compliance received each year since the last inspection.

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 in compliance 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 by complying with the requirements of the conditions in this flexible group.

The facility appears to be operating in 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), New Source Performance Standards (NSPS), and Renewable Operating Permit MI-ROP-N7578-2017a.

NAME Jack M Kuhl DATE 9-27-19 SUPERVISOR SK