

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

N757825974

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: 06/20/2014
STAFF: Usama Amer	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MAJOR
SUBJECT: Inspection of a Major Source		
RESOLVED COMPLAINTS:		

On June 20, 2014, I conducted a scheduled inspection at Eagle Industries, Inc. (Eagle), located at 30926 Century Drive, Wixom, Oakland County. The purpose of the inspection was to determine the compliance status of Eagle with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; the MDEQ-AQD administrative rules; and the conditions of ROP No. MI-ROP-N7578-2012. Mr. Tom Robertson, Safety Coordinator, represented Eagle during the inspection.

PROCESS DESCRIPTION & BACKGROUND:

- Eagle is a manufacturer of sound/energy absorbing polyurethane foams used by the automotive industry. The operating process is a reaction injection molding (RIM). Three different release agents: Pura 16148, Pura 12005, and Pura 16214 are sprayed in the RIM molds before the foam is applied. These release agents comprise major VOC emissions from the source. A total of 9 RIM process lines are installed. The release agents have a VOC content of 97.95% by weight. MSDS for mold release agent PU-16214 is provided as Attachment A. There are no HAPs present in the release agents. An in-mold paint process, using water based paint, adds to the VOC emissions from the mold release agents used in EUCELL1 and EUCELL10.

- Eagle has replaced mold release Pura 16201 by Pura 16214. The latter mold release (Pura 16214) has the same VOC content as the former mold release (Pura 16201); however, it contains different raw material. A copy of the MSDS of Pura 16214 is available in Eagle's file.

- Cells in Operation: EUCELL1, EUCELL2, EUCELL3, EUCELL5, EUCELL6, EUCELL8 & EUCELL10

- Eagle will not install EUCELL11.

COMPLIANCE STATUS

Conditions of ROP No. MI-ROP-N7578-2012

FGPOLYFOAM

Description: A polyurethane foam molding process consisting of nine (9) reaction injection molding processing cells.

Emission Unit IDs: EUCELL1, EUCELL2, EUCELL3, EUCELL5, EUCELL6, EUCELL8, EUCELL9, EUCELL10, EUCELL11

POLLUTION CONTROL EQUIPMENT: Dry fabric filters

* Condition #1.1 - stipulates that the VOC emission rate from FGPOLYFOAM not to exceed 142.1 tpy, based on 12-month rolling time period as determined at the end of the calendar month.

- The highest annual VOC emission rates of 114.76 tpy and 114.93 tpy were reported for 12/13 and 2/14, respectively. Attachment A

* Condition #1.2 - stipulates that the VOC emission rate from EUCELL1, EUCELL3, EUCELL6, EUCELL9, EUCELL10, and EUCELL11 not to exceed 36.4 tpy, based on 12-month rolling time period as determined at the end of the calendar month.

- EUCELL11 will not be installed.

- 2013 data: The highest annual VOC emission rate of 26.07 ton was reported for EUCELL9 during 6/13. Attachment A.4

- 2014 data: The highest annual VOC emission rate of 26.09 ton was reported for EUCELL9 during 3/14. Attachment A.4

* Condition # I.3 - stipulates that the VOC emission rate from EUCELL2, EUCELL5, and EUCELL8 not to exceed 46.2 tpy, based on 12-month rolling time period as determined at the end of the calendar month.

- 2013 data: The highest annual VOC emission rate of 45.93 ton was reported for EUCELL5 during 12/13. Attachment B.2

- 2014 data: The highest annual VOC emission rate of 44.58 ton was reported for EUCELL5 during 1/14. Attachment B.2

* Condition #I.4 - stipulates that the Hydrocarbon Naphtha (HAP) emission rate from FGPLYFOAM rate not to exceed 49,020 lb/yr, based on 12-month rolling time period as determined at the end of the calendar month.

- 2013 data: The highest annual Hydrocarbon Naphtha emission rate of 55,044 lb was reported for 12/13. Attachment C

- 2014 data: The highest annual Hydrocarbon Naphtha emission rate of 125,842 lb was reported for 4/14. Attachment C

**** The above 2 rates are in noncompliance with stipulated limit of 49,020 lb/yr.**

* Condition #I.5 - stipulates that the Naphthalene (HAP) emission rate from FGPLYFOAM rate not to exceed 178.1 lb/yr, based on 12-month rolling time period as determined at the end of the calendar month.

- 2013 data: The highest annual *Naphthalene* emission rate of 78.22 lb was reported for 12/13. Attachment D

- 2014 data: The highest annual Naphthalene emission rate of 177.6 lb was reported for 4/14. Attachment D

* Conditions #II.1 & II.2 - stipulate that the instantaneous VOC contents in the Paint Coating and Mold Releases not to exceed 0.50 lb/gal (minus water) and 6.7 lb/gal (minus water), respectively.

- VOC content in the Paint Coating is reported, to Eagle, by Red Spot Paint & Varnish Co., Inc., on Certificate of Analyses data sheets. A copy of this certificate is available in Eagle's file.

- VOC content in the Mold Releases of 6.24 lb/gal is reported, to Eagle, by Chem Trend, on a Certificate of Analyses data sheet. Attachment E

* Condition #III.1 - stipulates that all wastes shall be captured, stored and dispose of in an acceptable manner in compliance with all applicable state air quality rules and federal air quality regulations.

- Liquid waste material resulting from washing paint and mold release guns are captured stored and properly, and manifested prior to disposal. On the other hand, the RIM molds are cleaned by applying pressurized dry ice with special spray guns.

* Condition #III.2 - stipulates that spent filters shall be dispose of in a manner which minimizes the introduction of air contaminants to the outer air.

- Used dry filters are disposed of into landfills without manifests.

- A copy of the "Weekly Maintenance & Process Filter Change Log". A copy of this certificate is available in Eagle's file.

* Condition #V. stipulates that determination of VOC content, water content and density of any coating, as applied and as received, shall be made using federal Reference Test Method 24.

- A sample of the newly applied mold release Pura 16214 shall be collected for analyses.

* Conditions #VI.1 – 5 - stipulate the monitoring & recordkeeping requirements

- Attachments A – E show compliance with these requirements.

* Conditions #IX. – stipulates that within 180 days of issuance of PTI No. 4-06B, Eagle shall remove stack caps and increase the stack height to the heights specified in SC VIII.1 through 11.

- Eagle has complied with this condition in August, 2012.

CONCLUSION:

Eagle appears to operate in compliance with the above regulations and the conditions of ROP No. MI-ROP-N7578-2012, except for the stipulated annual emission rate of Hydrocarbon Naphtha. A VN shall be issued to Eagle to address this noncompliance.

NAME Sam Amer DATE 7/16/14 SUPERVISOR CTE

