

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

B298143363

FACILITY: Original Footwear		SRN / ID: B2981
LOCATION: 1005 Baldwin, BIG RAPIDS		DISTRICT: Grand Rapids
CITY: BIG RAPIDS		COUNTY: MECOSTA
CONTACT: Gail Taylor, Director of Operations		ACTIVITY DATE: 02/06/2018
STAFF: Chris Robinson	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY '18 on-site inspection to determine the facility's compliance status with Permit To Install 160-08 and other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

On February 6, 2018 and February 21, 2018 AQD staff Chris Robinson (CR) conducted a scheduled unannounced on-site inspection of Original Footwear (Former Wolverine World Wide Inc. – Factory 24B) (SRN B2981) to determine the facility's compliance status with Permit to Install (PTI) no. 160-08 and any other applicable air quality rules and regulations.

Original Footwear is located at 1005 Baldwin Street, in Big Rapids, Michigan. AQD staff CR arrived at this location at approximately 12:45 pm on and met with Ms. Gail Taylor, Director of Operations and Mr. Ed Sipka. CR provided Ms. Taylor with proper AQD credentials and informed her of AQD's intent to perform an inspection of the facility. Ms. Taylor generously provided a tour of the facility as well as pertinent information. No visible emissions or odors were observed.

Weather conditions on February 6, 2018 were approximately 15°F cloudy with light snow and calm winds.

Facility Description

Ownership of the facility was transferred on September 29, 2017, from Wolverine World Wide to Original Footwear Manufacturing BR Inc. The AQD received a Transfer of Ownership letter from Ms. Taylor on February 12, 2018. Per discussion with Ms. Taylor, Original Footwear retained Wolverines Military contracts which included military and uniform shoes and boots. The facility manufactures the whole unit, with the minor exception of some soles that are purchased for a few products. Gore-Tex material and tanned leather arrives at the plant in large sheets and is cut and assembled into the "upper" portion of the footwear. The soles of the footwear are molded directly to the "upper" portion using one of three plastic injection mold machines and trimmed as necessary. Numerous processes use adhesives and/or stitching to connect materials. A variety of spray booths are used to apply topcoat (paint) and/or lacquer. These processes require the use of multiple indoor dust collector systems and a cyclone dust/particulate collector which are installed and in use. Leather tanning and/or waterproofing is not conducted at this facility and Per Ms. Taylor, the facility does not use any PFA's containing materials or compounds.

PTI No. 160-08 Compliance Evaluation

EUDCPARTICULATE

Several operations, which include cutting, grinding and sanding are vented to a Rotoclone (cyclone). No testing for this collector has been requested by AQD to date. Many "stations" require removal of excess rubber, leather, etc. by buffing, grinding, cutting, and various other means. The dust is first collected at the individual stations and then ducted to a cyclone for particulate control. A rooftop inspection was conducted by CR on February 21, 2018. No material deposition attributed to cyclone was observed.

The cyclone is subject to the Preventative Maintenance Plan weekly, monthly and quarterly requirements of Appendix A of the PTI. These requirements appeared to be addressed by the daily inspection rounds. These records are maintained and include records of repairs. Mr. Sipka provided an example of these records, which is included in **Attachment A**. Based on observations made during the on-site inspection and discussions with Mr. Sipka, EUDCPARTICULATE does not operate unless the cyclone is operating.

EUDCPARTICULATE is subject to the following emission limits for particulate matter (PM), which are based on Rule 331, which states that *"It is unlawful for a person to cause or allow the emission of particulate matter from any process or process equipment in excess of 0.1 lbs. per 1000 lbs. of gas"*.

These emission limits assume proper operation and maintenance of the cyclone, which appeared to be the case. Stack measurements were not explicitly measured but appeared to meet the requirements specified in the permit.

Pollutant	Limit	Time Period
PM	0.1 lbs/1000 lbs of exhaust gases calculated on a dry basis	At all times
PM	2.48 lbs	Per hour averaged over a 24-hour period
PM	7.1 tons	12-month rolling time period

EUWCPARTICULATE

Per discussions with Mr. Sipka, the Rotoclone wet dust collector was dismantled and removed from service approximately five (5) years ago. CR informed Ms. Taylor that, with the removal of this control device, Original Footwear may submit a modification to remove Emission Unit EUWCPARTICULATE from the PTI. Machine-specific dry dust collectors have been installed which vent to the internally to the in-plant environment. These changes appear to be exempt from permitting requirements per Rule 285(2)(l)(vi)(B) for internally exhausted collectors.

FGFACILITY

This consists of emissions from paints, cleaners, mold releases etc. The permit establishes the following emission limits:

Pollutant	Limit	Time Period
Each Individual HAP	<10	Annually based on a 13-period rolling time frame, as determined at the end of each 4-week period.
Aggregate HAPs	<25	
VOCs	<100	

Compliance with these limits is based on documented shoe/boot production rates; records of materials used, and quantities used; documented VOC contents of these materials; and timely maintenance of these records. There are no VOC controls at the facility. All VOCs in materials used are assumed to be emitted based on manufacturers information. Special Conditions FGFACILITY 3.7 requires the use of manufacturers formulation data when calculating HAP content, which is used. The facility submitted a request to use manufacturers formulation data to also calculate VOC content as approved in Special Condition FGFACILITY 3.7 10/22/2012. An AQD approval letter was issued on October 25, 2012.

The facility provided records for February 1, 2017 through January 31, 2018 which are included in **Attachment B** and summarized in the table below:

- Gallons or pounds of each VOC and HAP containing material used.
- Where applicable, gallons or pounds of each VOC and HAP containing material reclaimed.
- HAP content, in pounds per gallon or pounds per pound, of each VOC and HAP containing material used.
- VOC and Individual and aggregate HAP emission calculations determining the total emission rate of each in tons per 4-week period.
- VOC and Individual and aggregate HAP emission calculations determining the annual emission rate in tons per 13-period rolling time frame as determined at the end of 4-week period.
- The total number of pairs of shoes and boots produced per 4-week period.
- The total number of pairs of shoes and boots produced per 13-period rolling time frame as determined at the end of 4-week period.

	Limit	Calculated Amount
Shoe Production	2,900,000 pairs	789,211
VOC Emissions	100.0 tons	35.0
Highest HAP (Toluene)	10.0 tons	3.55
Aggregate HAPs	25.0 tons	7.36

Records were complete and are reconciled against production records (each pair of footwear has a "formula" of materials to be used), internal chemical "stores" records (access to materials is restricted and documented), and waste records. The facility had previously received AQD approval to use formulation data for records, and Ms. Taylor provided Safety Data Sheets for products containing Toluene as documentation. These Data sheets are included in **Attachment C**. As a material supplied to the military, this material is tightly defined; and the 30.2% content by weight of toluene was confirmed within the spreadsheets for use in calculating emissions.

Consultant Mr. Mike Winchester was teleconferenced during the February 21, 2017 on-site visit. Records were discussed as well as the 13-month rolling HAP and VOC limits required by FGFACILITY Special Conditions 3.1a through 3.1c. Per discussions with Ms. Taylor, the 13-month period was requested by Wolverine to coincide with their operating cycles. Original Footwear uses a 12-month period. CR informed Mr. Winchester and Ms. Taylor that 12-month rolling records may be sufficient to demonstrate compliance with the emission limit but will not comply with the record keeping requirements specified in FGFACILITY special conditions 3.10e and 3.11e. The facility will continue to use the 13-month period but may consider a permit mod in the future to switch to a 12-month period.

MISCELLANEOUS

The facility has one cold cleaner that contains methyl ethyl ketone (MEK). During the last inspection, concerns were noted by AQD that MEK may need to be tracked along with Facility-wide HAP emissions. MEK was deleted from the EPA's list of chemicals subject to reporting requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and Section 6607 of the Pollution Prevention Act (PPA), therefore, no longer consider a HAP and not required

to be tracked by the facility. The cold cleaner appeared to be exempt per Rule 281(2)(h) and was observed to be closed while not in use.

AQD staff observed filter placement on several stations and discussed disposal practices. No issues were noted from the production stations. Disposal of the filters is conducted in a manner to minimize the introduction of air contaminants to the outdoor air as required in Special Condition FGFACILITY 3.3 of the PTI. Spray applicators are all HVLP or equivalent and are not operated unless it's respective exhaust filter is installed and maintained.

The facility operates one boiler with a nameplate date of 1952. The capacity could not be confirmed but Mr. Sipka did indicate that it was natural gas-fired only. The boiler is grandfathered/exempt from NSR permitting requirements. Moreover, as an area source of HAPs, there are no Boiler MACT requirements for this boiler as 40 CFR 63 Subpart JJJJJJ contains no requirements for natural gas boilers.

The 2016 MAERS data was submitted and reviewed on March 15, 2017. No changes were made. A 2016 MAERS report is included in **Attachment D**.

Conclusion

Based on observations made during this inspection and a records review, Original Footwear appears to be in compliance with PTI no. 160-08 and any other applicable air rules and regulations.

Attachments

- A - Preventative Records/Daily Checklist
- B - VOC and HAP Emissions Records (CD)
- C - Safety Data Sheets
- D - 2016 MAERS Report

NAME



DATE

3/21/2018

SUPERVISOR

