

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

N306063797

FACILITY: SIMONDS INTERNATIONAL		SRN / ID: N3060
LOCATION: 120 E PERE MARQUETTE ST, BIG RAPIDS		DISTRICT: Grand Rapids
CITY: BIG RAPIDS		COUNTY: MECOSTA
CONTACT: Doug Shantz , Manager		ACTIVITY DATE: 07/07/2022
STAFF: Scott Evans	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: On-Site inspection to assess compliance with air quality rules and regulations.		
RESOLVED COMPLAINTS:		

Introduction

On July 7, 2022 State of Michigan Department of Environment, Great Lakes, and Energy Air Quality Division (AQD) staff member Scott Evans (SE) conducted an on-site inspection of the Simonds International facility located at 120 E Pere Marquette St. in Big Rapids, Michigan, to assess compliance with the requirements of Permit to Install (PTI) No. 182-17 and all other applicable air quality rules and regulations. Simonds is a manufacturer of cutting implements for lumber and paper industries. Knives and blades are manufactured from raw steel materials to produce completed products. It is a minor source of HAPs and has one active PTI (PTI No. 182-17).

Upon arrival, SE conducted a quick inspection of the facility exterior. No odors or visible emissions were observed during this part of the inspection. After entering the facility, a discussion with Manager Doug Shantz was had to discuss the purpose of the visit. An inspection of the facility was then conducted in which heat treatment areas, quenching areas, machining floors, and the roof were visited.

PTI No. 182-17

This permit includes two Emission Units (EUs) and one Flexible Group (FG): EULDS, EULATHEKNIFE, and FGHEATTREAT.

FGHEATTREAT

This flexible group includes the equipment included in EULDS and EULATHEKNIFE. EULDS consists of the Large Diameter Saw manufacturing equipment including the hardening ovens, quenching station, water wash station, and electrostatic precipitator. EULATHEKNIFE consists of the Lathe Knife manufacturing equipment including the hardening furnaces, quench station, and fabric filter.

Visual inspection of all equipment demonstrated proper function of all equipment. The EULDS quench station and associated electrostatic precipitator could be seen in operation where vapor and particulate could be seen entering the hood without any particulate or visible emissions leaving the exhaust. The Lathe Knife quench station and associated fabric filter were not in use at the time of inspection, but discussions confirmed that the facility is using the devices properly and that the filters are replaced, as necessary. Discussion confirmed that the preventative maintenance plan is used as required at the facility.

This flexible group has one emission limit requirement, which limits the facility to 513 lbs. of Volatile Organic Compounds (VOCs) emitted for each 12-month rolling annual period. Compliance with this limit is demonstrated by recordkeeping requirements, which are discussed later in this report.

This flexible group has two material limit requirements:

- 750 gallons of quench oil used in FGHEATTREAT per 12-month rolling annual period.
- 150 gallons of quench oil used in EULATHEKNIFE per 12-month rolling annual period.

Compliance with these limits is demonstrated by recordkeeping requirements, which are discussed later in this report.

This flexible group has the following recordkeeping requirements:

- Quench oil composition information must be kept on site.
- The following monthly records must be kept for FGHEATTREAT:
 - Quench oil usage for each EU.
 - Monthly VOC emissions.
 - 12-month rolling annual VOC emissions.
 - Total quench oil usage.
 - 12-month rolling annual quench oil usage.
- The following monthly records must be kept for EULATHEKNIFE:
 - Quench oil usage rate to replenish lost oil.
 - Total monthly quench oil usage.
 - Total 12-month rolling annual quench oil usage.

Records were briefly reviewed on site to assess record retention and copies were provided to the AQD for detailed review at a later date. The facility was using Appendix A of PTI No. 182-17 to estimate the emissions as required. The following compliance analyses were determined during the detailed review:

- Quench oil MSDSs were reviewed on site and contained appropriate information.
- FGHEATTREAT Monthly records analyses:
 - EULDS quench oil usage was highest during April of 2022 at 40 gallons.
 - EULATHEKNIFE quench oil usage was highest during multiple months at 20 gallons.
 - VOC emissions were highest during April 2021 at 327.45 lbs.
 - VOC 12-month emissions were highest from January 2021 to December 2021 at 2428.25 lbs.
 - Total quench oil usage was highest during multiple months at 40 gallons used.
 - Total quench oil 12-month usage was highest from January 2021 to December 2021 at 350 gallons.
- EULATHEKNIFE monthly records analyses:
 - Quench oil usage rate to replenish lost oil was highest during multiple months at 20 gallons.
 - Total quench oil usage was highest during multiple months at 20 gallons.
 - Total quench oil 12-month emissions were highest during from January 2021 to December 2021 at 70 gallons.

As demonstrated above with the provided records, facility oil usage and VOC emissions were within permitted limits.

The facility has two stack/vent restrictions:

- One stack with a maximum diameter of 16 inches and a minimum height of 24.5 feet above ground level.
- All quench process emissions shall exhaust to the internal facility environment.

During the inspection one stack could be observed. The stack was not directly measured during the inspection for safety reasons, but the stack appeared to meet permitted restrictions. All quench operations were venting to the facility interior environment.

Other Items

The facility had multiple equipment stations for shaping, forming, and machining metal such as cutters, stampers, and grinders. This equipment was all exempt from air permitting requirements by Rule 285(2)(l)(vi)(B).

Conclusion

At the conclusion of the inspection the facility appeared to be compliant with all requirements of PTI No.182-17 and all other applicable air quality rules and regulations.

NAME Scott Evans

DATE 7/27/2022

SUPERVISOR  _____