

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

N333757348

FACILITY: WILKIE BROTHERS CONVEYORS, INC.		SRN / ID: N3337
LOCATION: 1765 MICHIGAN AVENUE, MARYSVILLE		DISTRICT: Warren
CITY: MARYSVILLE		COUNTY: SAINT CLAIR
CONTACT: Paul Kania , Operations		ACTIVITY DATE: 03/08/2021
STAFF: Kaitlyn Leffert	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: FY2021 Scheduled Inspection		
RESOLVED COMPLAINTS:		

On March 8, 2021, Michigan Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff, Kaitlyn Leffert, conducted an inspection of Wilkie Brothers Conveyors (SRN: N3337), located at 1765 Michigan Ave, Marysville, MI. The purpose of the purpose of the inspection was to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; and Permit to Install (PTI) Number 156-14.

Wilkie Brothers Conveyors remanufactures conveyor chains and the associated parts, primarily for use in automotive manufacturing. The facility is permitted to operate four batch type natural gas fired burn-off ovens, which remove grease from the conveyor parts. The four ovens are denoted by oven numbers 4710, 4730, 4740, and 4750.

On March 3rd, I spoke with Paul Kania, Operations, Wilkie Brothers Conveyors, regarding the purpose of my inspection and the typical process for on-site inspections. The previous facility contact was currently furloughed and as a result Mr. Kania had taken over many of his responsibilities. While air quality inspections are typically unannounced, the inspection was scheduled ahead of time due to ongoing concerns related to COVID-19.

I arrived at the facility on March 8th around 9:00 am and was greeted by Mr. Kania. We first went to the office area to go over some of the required records and discuss what I would like to see during my inspection. During this initial discussion, Mr. Kania indicated that only two of the four permitted ovens were currently operable. Burn-off oven No. 4740 had been removed from the site many years ago. Burn-off oven No. 4750 was still on-site but was in need of repair and therefore has not been operating. Therefore, Oven No. 4710 and 4730 were the only ones that were operable at the time of the inspection. Mr. Kania also mentioned that operations at the facility had decreased due to the ongoing COVID-19 pandemic and that 25% of staff remained furloughed at that time.

Facility Walk-Through

Following our initial discussion in the office, Mr. Kania gave me a tour of the facility. The facility houses two companies, Wilkie Brothers Conveyors and Blue Water Manufacturing. Both companies are owned and operated by the same management. Wilkie Bros. remanufactures and distributes conveyors, while Blue Water Manufacturing primarily assembles new conveyors. The two companies operate in separate sections of the building, but largely function as one overall company. The burn-off ovens and associated remanufacturing processes are in the Wilkie Bros. section of the facility.

I inspected the area where the burn-off ovens are located. The ovens were not operating at the time of my inspection. I noted that there were three ovens, labeled Oven No. 4710, Oven No. 4730, and Oven No. 4750. There was a noticeable gap where Oven No. 4740 had previously

been located. The doors of Oven No. 4750 were closed and secured with zip ties. As previously noted, this oven is not currently operable and needs to be repaired before it could operate again. The facility does not have any immediate plans to repair the oven, since there has not been a need for it.

Near the ovens is a trailer, which is used to oversee operations and where operations and production data can be monitored. Mr. Kania gave me an overview of the system used to record and review temperature monitor records. Temperatures in the secondary chambers of each oven is recorded every 10 minutes and saved on an SD card in the oven temperature monitoring system. When staff need to review or download temperature data, the SD card is removed and inserted into a computer located in the operations trailer. Data is downloaded from the SD card and saved onto the computer, where it can be accessed as needed. The temperature records shown during the inspection indicated that the secondary chamber temperature in the ovens was being maintained above 1,400°F, as required by PTI No. 156-14 Special Conditions (S.C.) EU-BURNOFF4710 IV.1 and FG-BURNOFF IV.1

Adjacent to the burn-off ovens are two shot blasters and a small acid cleaning process. Following processing in the burn-off ovens, the shot blasters may be used to polish the parts. The shot blasters share a baghouse control that vents to ambient air. The shot blasters are exempt per Rule 281(2)(d). The acid cleaning process is used as an additional process for removing grease from the used conveyors parts. The parts are first cleaned with hydrochloric acid and then rinsed with sodium hydroxide and water. The process vents to the general plant environment and exempt from the requirement to obtain a PTI according to Rule 285(2)(r).

I also observed the main assembly area, where following cleaning by the burn-off ovens and acid cleaning, conveyor parts are reassembled. During my inspection, there were two people working in this area. Reassembly is either done with the use of mechanical presses or by hand, depending on the parts being assembled.

A significant portion of the facility consists of inventory and storage areas, where conveyors parts are stored upon receipt, during the reassembly process, and following assembly. In one of the main storage areas, I observed two more shot blasters that were also used to clean and polish the conveyor parts. These shot blasters are equipped with individual baghouse control and vent to the ambient air and are also exempt according to Rule 281(2)(d).

The facility has a small area dedicated to welding operations, which is used on an as needed basis in the manufacturing or reassembly of conveyor parts. Mr. Kania informed me that the person who typically runs these operations is currently furloughed, so they have been instead shipping out their welding jobs. The welding processes are exempt per Rule 285(2)(i).

Wilkie Bros. also has a paint booth, which is used as needed depending on the requests of the customer and the part being manufactured. The paint booth is typically operated by the same person who manages the welding area. However, while that person is furloughed, the facility does continue to do some coating on-site. I noted that the filters appeared to be properly installed in the paint booth. Following the inspection, Mr. Kania sent records of paint purchases for the paint booth. These records indicate that the current inventory of paint as of March 2021 is 9 gallons and that there were not any paint purchases in 2020. Historical records indicate that a total of 109 gallons of paint was used in the booth from 2015 to 2019. The paint booth is considered exempt from the requirement to obtain a PTI according to Rule 287(2)(c).

During the previous inspection, there were also two parts washers observed on-site. Mr. Kania informed me that these had been removed from the facility. I did not observe any other parts washers or cold cleaners during my inspection.

Following our walk through of the Wilkie Bros. portion of the facility, we entered the Blue Water Manufacturing side, which primarily consists of more inventory, as well as conveyor assembly processes.

Records Review

The permit requires the facility to maintain records of the temperature of the secondary chamber or afterburner for each oven. The provided temperature charts indicated that burn-off oven No. 4730 had most recently operated on March 1st and that oven No. 4710 had most recently operated on March 5th. Based on the temperature charts, secondary chamber temperatures in both ovens were maintained above 1,400°F during operation, as is required by PTI No.156-14 EU-BURNOFF4710 S.C. IV.1 and FG-BURNOFF S.C. IV.1.

Wilkie Bros. is required to maintain records of all maintenance activities and any malfunctions of the burn-off ovens. While on-site, I reviewed the available records, which are maintained and organized on-site by Mr. Kania. The most recent maintenance activity performed on the ovens was in January 2021 for some routine parts maintenance on the oven equipment. Based on the maintenance records and information provided by Mr. Kania, there have not been any recent malfunctions of the ovens.

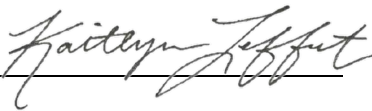
I was also provided a copy of the calibration data from the most recent thermocouple calibration, which took place on March 4, 2021. Oven Nos. 4730 and 4750 are required to calibrate the thermocouples at least once per year (FG-BURNOFF, S.C. VI.3). The records maintained by the facility indicate that calibration of all three ovens, including No. 4710, is being done annually. The most recent calibration results show the thermocouple to be within the accepted tolerance range for all three ovens.

The facility is also required to maintain records of the chemical composition of the materials processed in the ovens (EU-BURNOFF4710, S.C. VI.3; FG-BURNOFF, S.C. VI.6). The permit only allows for cured paints, oil, or grease to be processed in the ovens (FG-BURNOFF S.C.II.2). The burn-off are used to remove grease from conveyor parts and therefore, grease is the only material processed by the oven. I was provided copies of the safety data sheets for the two grease materials that are most commonly removed from the conveyor parts. The SDS' indicate that both materials are primarily made of mineral oil, with some additives.

Conclusion

Based on my on-site facility walk-through and review of the required records, Wilkie Brothers Conveyors (SRN: N3337) appears to be in compliance with all applicable air quality rules and regulations, as well as the conditions of Permit to Install (PTI) No. 156-14.

NAME



DATE

3/21/21

SUPERVISOR

