

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

N134052126

FACILITY: Portland Iron & Metal Inc		SRN / ID: N1340
LOCATION: 3130 Knoll Rd PO Box 454, PORTLAND		DISTRICT: Grand Rapids
CITY: PORTLAND		COUNTY: IONIA
CONTACT: Jaime Fox, GM		ACTIVITY DATE: 01/14/2020
STAFF: Eric Grinstern	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced Inspection		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

Portland Iron and Metal is a metal recycling facility located in a rural area of Ionia County, southwest of the city of Portland. The facility recycles both ferrous and non-ferrous metals. The facility has two scrap metal processors (shredders) on-site, a primary shredder that shreds white goods, car parts, etc. and a second shredder that is used to further process aluminum scrap from the primary shredder. The facility does not shred whole automobiles.

REGULATORY OVERVIEW

The facility is categorized as a minor source that currently holds two permits, PTI No. 381-98 for the primary metal shredder, and PTI No. 2-15 for the aluminum shredder. The facility is currently not subject to any federal NSPS or NESHAP standards. No other processes at the facility appear to require air use permits.

COMPLIANCE EVALUATION

Prior to entering the facility no opacity or odors were noted while observing the facility from the public roadway. At the facility EG met with Jaime Fox, General Manager. The shredders are operated at a reduced capacity and were not in operation at the time of the inspection.

Below is an evaluation of the facilities compliance requirements.

Permit to Install No. 381-98Scrap Shredder

The shredder has the following process flow: shredder > Z-Box > magnet > (ferrous is separated out) non-ferrous > trammel > eddy current > shaker > crossbelt.

The shredder has an emission limit of 0.08 pound per 1,000 pounds of exhaust gases. Verification of the emission limit would require emissions testing, which has not been requested. Compliance is assumed based upon proper operation of the shredder and control equipment. The shredder itself has water spray control and the Z-Box is controlled by a cyclone.

The permit requires the "Scrap Metal Processor" to have a cyclone collector installed and operating properly. As observed during previous inspections, the cyclone collector controls emissions from the Z-box. Particulate emissions at the shredder itself are controlled with water spray. Review of the permit engineer's notes for PTI No. 381-98 do not provide any details regarding control of the actual shredder. Discussion of the cyclone collector is associated with the Z-Box. Based on the above details, staff has always believed that only the Z-Box is required to be control by the cyclone. Water spray controlling emissions from the shredder itself is carried out by the facility, but not addressed in the permit. During this inspection, staff observed a duct extending from the shredder towards the cyclone. Further review of the permit application shows drawings with a duct from the shredder to the cyclone. The permit application does not discuss or provide detail regarding the duct. Subsequent discussion with the facility determined that the duct was installed and subsequently taken out of service because it was plugging up.

Although the permit is not clear regarding control of the shredder itself, the drawings provided by the facility in the application contain the duct from the shredder to the cyclone. A VN will be issued to the facility for failure to properly maintain the duct from the shredder to the cyclone.

Additionally, in regards to operation of the cyclone, the permit states that the scrap metal processor shall not operate unless the cyclone is installed and operating properly. This potentially contradicts the fact that the facility does not operate the cyclone when they are processing clean scrap that the facility's application states is free of contaminants able to be removed by the cyclone. The permit engineer documented that the cyclone system is not run all the time when chrome and black clip steel are processed, since they are free of fluff. It is possible that operating properly was interpreted as not operating the cyclone when certain scrap was being processed. If the permit is modified in the future, alternative operating scenarios should be defined.

The facility is prohibited from processing asbestos tailing or asbestos containing waste material in the shredder. Mr. Fox stated that they do not process such material.

The facility is require to implement and maintain a fugitive dust plan, which has previously been reviewed. Mr. Fox stated that they have the county road brined, at which time they have the roads in the yard brined.

The facility is required to have an exhaust stack with maximum diameter of 36 inches and a minimum exit point of 58 feet above ground level. AQD staff appear to have previously incorrectly identified the stack listed in the permit as possibly the shredder itself. The stack listed in the permit and permit application was associated with the cyclone associated with the Z-box. Prior to installation, the cyclone specifications had a stack. As installed and operated, the cyclone is a closed loop system without an exhaust point. Since the system does not appear to have an exhaust point, failure to have a stack meeting the permit specifications would not appear to be an issue. If the permit is modified in the future, the stack requirements should be removed.

Permit to Install No. 2-15

Aluminum Shredder - EUGRUNDLER

The aluminum shredder has an emission limit of 0.1 pound per 1,000 pounds of exhaust gases. Verification of the emission limit would require emissions testing, which has not been requested. Compliance is assumed based upon proper operation of the shredder and control equipment. During the inspection the cyclone and baghouse were observed to be installed.

The shredder is limited to 24,400,000 pounds of material produced per 12-month time period. Review of the facility's records for the past couple of years showed that they were well below the throughput limit. Annual throughput was under 5 million pounds.

The facility is also prohibited from processing asbestos tailing or asbestos containing waste material in the shredder. Mr. Fox stated that they do not process such material.

The facility is require to implement and maintain a fugitive dust plan, which has previously been reviewed. Mr. Fox stated that they have the county road brined, at which time they have the roads in the yard brined.

Miscellaneous

Staff returned to the facility on February 3, 2020 to observed the operation of the shredders. Staff met the Jaime Fox, how informed staff that none of the shredders were operating. The main shredder was under repair due to a gear box issue.

Conclusion

Based on the information and observations made during this inspection, the facility is in compliance with applicable air quality rules and regulations, with the exception of the duct form the shredder to the cyclone. A VN will be issued for failing to maintain the duct, as shown in the permit application.

NAME



DATE

2/18/20

SUPERVISOR

