

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

B198241537

FACILITY: Padnos Manufacturing		SRN / ID: B1982
LOCATION: 185 W 8TH ST, HOLLAND		DISTRICT: Grand Rapids
CITY: HOLLAND		COUNTY: OTTAWA
CONTACT: Robert McCormick , Environmental Manger		ACTIVITY DATE: 09/13/2017
STAFF: Kaitlyn DeVries	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to determine compliance with PTI NOs 182-80C, 365-98A and other applicable air quality rules and regulations. In addition to the inspection, AQD had received a complaint regarding overspray of green paint coming from Padnos.		
RESOLVED COMPLAINTS: C-17-01897		

On Wednesday September 13, 2017 Air Quality Division (AQD) staff Kaitlyn DeVries (KD) conducted an unannounced, scheduled inspection of Padnos Manufacturing located at 185 West 8<sup>th</sup> Street, Holland Michigan. The purpose of this inspection was to determine compliance with PTI NOs 182-80C, 365-98A and other applicable air quality rules and regulations. In addition to the inspection, AQD had received a complaint regarding overspray of green paint coming from Padnos.

Prior to entering the facility, KD surveyed the perimeter for any excess opacity or odors; none were noted. Once on site, KD met with Mr. Robert McCormick, Environmental Manager, who accompanied KD on the tour of the facility.

### Facility Description

Padnos Manufacturing (Padnos) is a scrap metal recycling facility that collects and recycles various metals including miscellaneous scrap, cast iron, steel, and aluminum etc. Per Mr. McCormick the only new piece of equipment that as installed since the 2013 inspection was a new dust boss, for dust suppression.

### Regulatory Analysis

Padnos is currently operating under two (2) permits; one (1) permit is for the shredder and the other, an Opt-Out permit, is for all permitted equipment at the facility. There are also some various exempt pieces of equipment located on site.

Historically, Padnos had an administrative consent order, but the consent order was terminated in 2014.

### Compliance Evaluation

#### PTI No. 182-80C

#### *EUROTARYDRYER*

This emission unit is for the Rotary de-oiling furnace that has one (1) 8.15 MMBTU natural gas/oil-fired burner. Per Mr. McCormick, Padnos does not use any oil, and has none on site. This unit has a production capacity of 18 tons per hour. This emission unit has several pieces of control equipment including a cyclone, an afterburner, a cooling tower, dry sorbent injection (DSI), and a shaker baghouse. While this unit wasn't operating at the time of the inspection, KD was able to observe the control panels in the control tower for the operations.

The DSI (Trona) is received in 2,000-pound sack totes and is fed into a hopper where it dispenses the Trona into the air stream. No Trona was being dispensed at the time of the inspection, since the system was not operating. The DSI injection rate is being tracked by Padnos, and has an approximate feed rate of 21.25 lbs per hour.

Particulate Matter (PM) emissions from this emission unit are limited to 0.06 lbs per 1,000 lbs of gas, based on test protocol. Additionally, PM<sub>10</sub> and PM<sub>2.5</sub> are each individually limited to 5.4 pounds per hour (pph), also based on test protocol. Hydrogen Chloride (HCl), and Sulfuric Acid emissions are also limited from this emission unit to 0.49 pph and 1.05 pph, respectively. Both are based on test protocol. Testing was done in 2012 to verify compliance with the emission rates. Daily pressure drop readings for the baghouse were reviewed on site and showed readings in the range of 2 – 5" Water Column (WC).

Stormwater usage is limited to 28,800 gallons per day (gpd), and per the attached records, the most used in one day was 28,501 gallons, used on January 11, 2017 and again on January 12, 2017. Over the course of a 12-month rolling period, stormwater usage is limited to 5,000,000 gallons. Records indicate the 12-month rolling stormwater usage at 2,688,852 gallons.

In the control tower, Padnos has a circular disc chart that records the afterburner temperature. Padnos staff and KD discussed the temperature recording device, as Padnos was interested in potentially digitizing the unit. KD stated that if Padnos wished to do so, they could as the permit specifies that they must have a device to monitor and records the temperature, but doesn't specify how to do so. Afterburner temperatures were reviewed on site and were complete.

Padnos has implemented and maintained a Malfunction Abatement Plan (MAP) for this unit and appears to be abiding the provisions. Stack dimensions, while not explicitly measured, appeared to be correct.

#### *EUCORECODRYER*

The CORECO dryer, is a 8 MMBTU natural gas dryer that has a production capacity of 7 tons per hour. The emissions from this emission unit are controlled by a cyclone with an afterburner, a heat exchanger and a baghouse. This dryer was not operating at the time of the inspection, but KD was able to observe the control tower where operating parameters are monitored and recorded.

The dryer is only allowed to operate a maximum of 8,200 hours per 12-month rolling time period, and per the attached records the 12-month rolling operational hours were 4,303 hours with October 2016 having the maximum operating at 553.25 hours that month.

Padnos is currently using circular disc charts to record the afterburner temperature, which is required to operate at a minimum temperature of 1450°F. KD reviewed the temperature records on site, and records indicated that the afterburner is consistently operating around 1500°F. There were some dips noted in the recordings, but the records documented what was occurring when the dips occurred. Some of the dips were due to start up and shutdowns, as well as malfunctions that would immediately stop production.

Pressure drop readings for the baghouse were also reviewed on site; records indicated a pressure drop of 2-3" WC.

Particulate emissions are limited to 0.05 lbs per 1000 lbs of gas, based on test protocol. PM<sub>10</sub> and PM<sub>2.5</sub> are each individually limited to 2.7 pounds per hour (pph), based on test protocol, and each to 8.9 tons per year (tpy), based on a 12-month rolling time period. Records show the 12-month rolling PM<sub>10</sub> and PM<sub>2.5</sub> emissions of 0.07 tpy. Hydrogen Chloride (HCl), and Sulfuric Acid emissions are also limited from this emission unit to 0.059 pph and 0.21 pph, respectively, based on test protocol.

#### *EUBRIQUETTER*

The briquetter system was not in use at the time of the inspection, but staff still accessed the control tower to observe the available monitoring. Several screens were available in the control tower including temperature of the system, pressure reading of the baghouse, and several other parameters for the briquetter and the dryers. A pulse jet baghouse is used to control PM emissions from the briquetter.

PM emissions are limited to 0.08 lbs per 1000 lbs of gas, based on test protocol. PM<sub>10</sub> emissions are limited to 3.4 pph, also based on test protocol. Padnos is properly recording the daily pressure drop reading; records, which were reviewed on site, showed the briquetter operates at a range of 1 – 3" WC. Padnos staff indicated that if they start to see the pressure drift up, they will do a more thorough inspection of the bags, as outlined in their MAP.

The briquetter is limited to 8,200 operating hours per 12-month rolling time period. Per the attached records, the maximum number of hours ran in a month, over the past 12 months, was 659.25 hours in July 2017, and the 12-month rolling operating hours is 4,724.

#### *EUTURNINGCRUSHER*

This emission unit is for the Turnings Crusher, which was also not running at the time of the inspection. The two (2) Dust Bosses, which shoot water, are located near the crusher, but can be pointed in various directions in order to suppress dust.

A pulse jet fabric filter baghouse is used to control particulate emissions. PM is limited to 0.10 lbs per 1,000 lbs of gas, based on test protocol. PM<sub>10</sub> is limited to 0.15 pph, also based on test protocol. A pressure drop indicator is installed on the baghouse, and Padnos staff are recording the daily pressure drop reading. Pressure drop readings were reviewed on site for this unit, and were indicative of proper operation, in conjunction with the successfully implemented and maintained MAP.

The stack dimensions were not verified during this inspection, however the stacks appeared to be of proper dimensions.

#### *FGFACILITY*

This flexible group covers all process equipment source-wide including equipment covered by other permits, grandfathered, and exempt equipment. PM emissions for the source must be less than 90 tpy, based on a 12-month rolling time period. Based on the records, the 12-month rolling emissions are 11.47 tons.

#### PTI No. 365-98A

#### *EUSHREDDER*

This is the only emission unit covered under this permit and is for the scrap metal shredder, ferrous separating system with a magnetic drum separator and associated ferrous wind cyclone, non-ferrous cyclone separation process and associated system conveyors. The shredder was operating at the time of the inspection. KD was able to see the feed conveyors operating as well as the water spray system. KD discussed the cyclone with Mr. McCormick, and it appeared to be properly operating.

No asbestos, or asbestos contacting materials is processed through the shredder. Additionally, Mr. McCormick noted that all refrigerants are also drained from refrigerators prior to entering the shredder.

KD noted the grounds were wet, and Mr. McCormick noted that they have been operating their water truck in accordance with the fugitive dust plan.

#### *Exempt Equipment*

Padnos maintains a few cold cleaners on site. KD noted that they were closed and labeled with the proper AQD cold cleaner signs. They are exempt from Rule 201 permitting under Rule 281(2)(h).

In addition to the main facility area, there is also a maintenance area, the IXL machine shop, and the paint booth area. KD noticed fairly recent green paint outlining the freshly painted boxes. The paint shop has a booth that is large enough to fit the boxes, and has fabric filters installed. Padnos should utilize the booth area for all painting, and avoid painting outside. The painting of the boxes outside was likely the cause of the green overspray that was reported to AQD in the recent complaint. KD again mentioned this complaint and reminded Mr. McCormick that Padnos should paint in the booth and should keep proper Rule 287(2)(c) records for painting, or any other pertinent records to prove compliance.

The facility also has one (1) Generac 130 Kw (0.44 MMBTU) natural gas fired emergency generator. This generator is exempt from Rule 201 permitting under Rule 282(2)(b)(i). This unit is, however, subject to the Maximum Achievable Control Technology (MACT) Standards of 40 CFR Part 63 Subpart ZZZZ for stationary reciprocating internal combustion engines and to 40 CFR Part 60 Subpart JJJJ the new source performance standards (NSPS) for stationary spark ignition internal combustion engines. While AQD does not have delegation for this area source MACT, the unit is compliant with Subpart ZZZZ by complying with the NSPS, for which AQD has delegation. Mr. McCormick was unfamiliar with this regulation, so KD provided relevant information to him via e-mail on a later date. Padnos should ensure the unit is equipped with a non-resettable hour meter, be tracking the hours of operation, and maintain documentation EPA certification for the emissions, as specified in the regulation.

Finally, per Mr. McCormick, Padnos does not have any boilers.

**Compliance Determination**

Based on the observations made during the inspection and a subsequent review of the records, it appears as if Padnos is compliant with PTI Nos 182-80C and 365-98A. KD also considers the complaint resolved, as Padnos should not be painting outside.

NAME Kandyn Dine

DATE 9/22/2017 SUPERVISOR [Signature]