

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

P056973078

FACILITY: PADNOS GRANDVILLE RECYCLING		SRN / ID: P0569
LOCATION: 3485 VIADUCT STREET SW, GRANDVILLE		DISTRICT: Grand Rapids
CITY: GRANDVILLE		COUNTY: KENT
CONTACT: Todd Jousma , Environmental Manager		ACTIVITY DATE: 07/23/2024
STAFF: April Lazzaro	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, scheduled inspection.		
RESOLVED COMPLAINTS:		

Air Quality Division (AQD) staff, April Lazzaro arrived at the facility to conduct an unannounced, scheduled inspection and met with Kory Ryskamp, Mike Mellon, Todd Jousma and Chad Ignatoski. The Eddy Current Plant operates pursuant to Permit to Install (PTI) No. 200-14A. The Wire Chop Plant operates pursuant to PTI No. 201-14. The two facilities are considered one stationary source. Prior to my arrival on-site, I conducted off-site odor and visible emissions observations. A mild metallic processing odor was observed in adjacent parking lots located to the east of the facility. No visible emissions were noted, and I observed that the dust boss mist suppression system was off.

We held an opening conference where I explained the purpose of the inspection, being routine and based on the fact that the last inspection was in 2016. There have been no complaints received by the AQD since 2016.

FACILITY DESCRIPTION

The Padnos Grandville recycling facility processes non-ferrous automotive shredder residue (ASR) also referred to as Zorba, from the Holland, Howell and Grand Rapids facilities in an eddy current system per PTI 200-14A to separate and sort into various recyclable material streams. This is done through size, air and material separation techniques. The ASR is piled outside, and a front-end loader scoops up material and puts it into the hopper located outside. The front-end loader bucket is equipped with a scale, and the weight of the material processed each day is tabulated using this data. After being placed in the hopper, which is equipped with water sprays, the material travels up the creep feed and into the building where the sorting by size occurs and the material is separated into three streams. Approximately six people are working in the eddy current plant. There have been some changes to this process since the last inspection which is further discussed below.

Next door, the facility operates a wire chopping system per PTI 201-14. Large amounts of wire are chopped up in the chopper and sent into a separate building for further processing. Like at the eddy current process, the weight is measured using the scale in the front-end loader bucket.

COMPLIANCE EVALUATION

PTI No. 200-14A

The eddy current process consists of a separation system for recovering ferrous and nonferrous metals from ASR through a series of screening and separation steps. The permitted equipment includes a material feed system, trammel system, sifters, screening systems, material storage and associated conveyors. The sorting system consists of a creep feed hopper, a conveyor, reject chute and an indoor separation that uses x-ray technology. We observed the entire eddy current process, both on the outside of the building and the inside. I noted a new piece of equipment outside that had not yet been installed. Mr. Jousma informed me that it is a metal polishing drum, and that Padnos had prepared an exemption determination that was available for review. Additional discussion on the metal polishing drum can be found below.

We observed the feed hopper on the eddy current system and discussed the presence of spray nozzles. This hopper is where the system is fed via front-loader with ASR which is separated into different product streams using the equipment listed above. In order to address dust generated from vehicle traffic, the facility has installed a perimeter sprinkler system, which is currently non-operational, and repairs are in progress. All areas of the property are paved, for easier cleaning and fugitive dust reduction. The facility has made improvements on the environmental tracking checklist

that is conducted on a biweekly basis and plans to modify the current fugitive dust plan to account for the fact that all areas are now paved, and as such brine applications are no longer necessary at the site. It is noted that the dust boss was observed operating during our perimeter inspection, where it was off prior to my arrival.

We also observed the 48,000 CFM baghouse on the east side of the facility. The air flow from the unit is recirculated back into the plant at all times, regardless of ambient temperatures. The unit appeared in good condition at the time of the inspection.

Material throughput at the eddy current is limited to 481,000 tons of ASR per 12-month rolling time period. Reported throughput for the time period of July 2023-June 2024 was 142,233 tons of material processed. The facility is also required to perform a monthly non-certified visual opacity observation during operation. These records were requested and received timely. The environmental checklist has a line item where the Padnos staff identifies whether or not visible emissions exceeding 20% were observed. Examples of the completed forms were reviewed and found acceptable.

PTI 201-14

This permit includes a feed hopper, material shredder, screening system, granulators internally vented cyclones and baghouse, material storage and associated conveyors. The wire chop shredder was not in operation at the time of the inspection; however the granulator was processing copper wire. We observed the internally vented baghouse, and the material collection system. I observed that the access hatch for cleanout had an open topped bin below. The material in the bin was large and did not appear able to become an air contaminant. We observed the roll off collectors, and there was debris on the ground in the area, likely from when the roll offs are disconnected and changed out. We observed the magnehelic gauge on the baghouse, which was reading slightly above zero. We learned that a work order had already been initiated. By the end of the day, Padnos had emailed pictures showing that the bin had been emptied and the area by the roll offs had been cleaned of all debris. I also requested an update on the status of the magnehelic gauge and learned that the gauge was broken at the time of the inspection and a new one has been ordered. The gauge was installed on August 8, 2024, and the pressure drop reading was 3.0" H₂O. The environmental checklist has a line item where the Padnos staff identifies whether or not visible emissions exceeding 20% were observed. Examples of the completed forms were reviewed and found acceptable.

Metal Polishing System

The emission unit exemption documentation for the metal polishing system was received and indicates that the emission unit will be equipped with a 10,500 cubic feet per minute (CFM) dust collector with a cyclone pre-cleaner and is exempt from permitting pursuant to Rule 285(2)(l)(vi)(C). A review of that documentation indicates the Rule 285 exemption may not be the correct choice for this process because metal polishing and material screening is not one of the listed processes in the exemption. The AQD recommends a reevaluation of the exemptions as they apply to this process. If no other exemption applies, a PTI would be needed.

Wire Chop 2.0

The new wire chop system, referred to as wire chop 2.0, has been installed and is operating on the south end of the eddy current building. As we observed the process from inside the facility, I noted that the air was filled with debris that was also landing and accumulating on my notepad. We quickly exited the area to observe the outdoor collection system that consists of cyclones that deposit solids into one of five roll off bins and return the air back into the building. The area showed material accumulation, and one of the corrugated flex tube connectors used to put solids into a roll off was damaged, with materials escaping into the ambient air. We discussed how the debris, and the damaged corrugated tube were not acceptable. By the end of the day, Padnos had emailed pictures showing that the corrugated tube had been replaced and the area by the roll offs had been cleaned of all debris. The emission unit exemption documentation for the wire chop 2.0 was received and indicates that the process is exempt from permitting pursuant to Rule 285(2)(l)(vi)(B).

At this time, I discussed the indoor air and particulate observed with Chad Ignatoski from an employee safety perspective. I noted that the dust in the air and the amount that landed on my notepad seemed excessive. Padnos noted that they have been working to improve the collection system for the process. During a follow up discussion with Todd Jousma, AQD learned that at the

time of the inspection, the system was being operated in an unapproved manner and was shut down immediately, and employees were retrained on proper operation.

CONCLUSION

Padnos Grandville Recycling appeared to be in compliance at the time of the inspection.

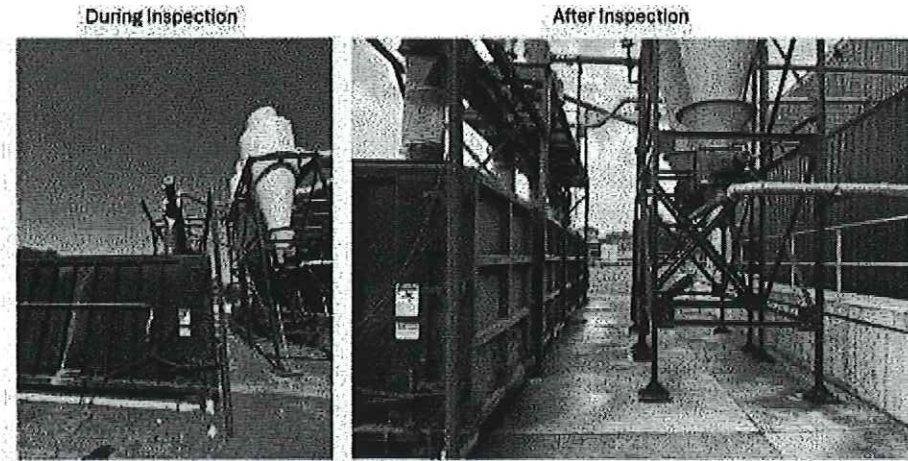


Image 1(Before and after) : Photo during inspection taken by AQD, photo after provided by Padnos.

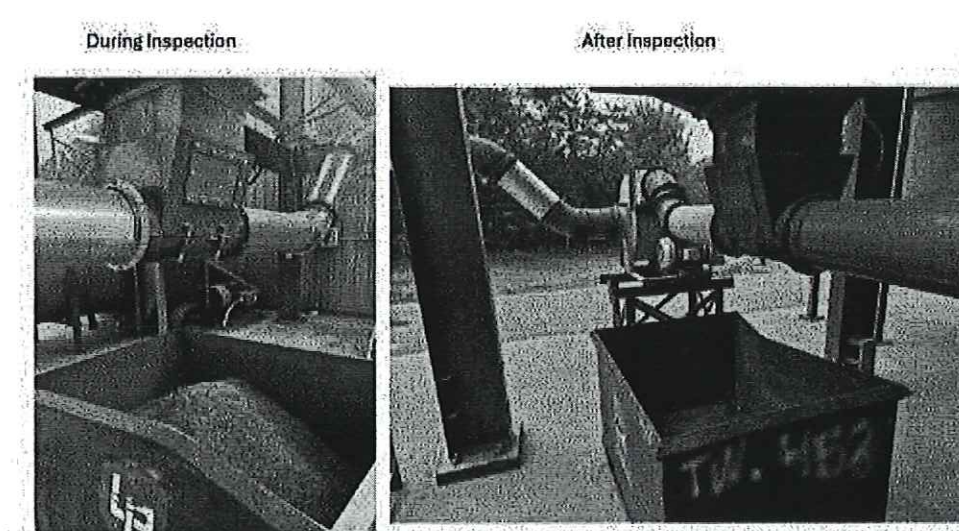


Image 2(Before and after) : Photo during inspection taken by AQD, photo after provided by Padnos.

NAME April Lazzaro

DATE 08/13/2024

SUPERVISOR 