

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

N137368531

FACILITY: KALAMAZOO METAL RECYCLERS		SRN / ID: N1373
LOCATION: 1525 KING HIGHWAY, KALAMAZOO		DISTRICT: Kalamazoo
CITY: KALAMAZOO		COUNTY: KALAMAZOO
CONTACT: Pat Farrell Jr. , Owner		ACTIVITY DATE: 08/03/2023
STAFF: Michael Cox	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: Self-Initiated Unannounced Inspection in response to complaints		
RESOLVED COMPLAINTS: C-23-01738, C-23-01739, C-23-01740		

Air Quality Division (AQD) staff Michael Cox (MTC) completed a self-initiated inspection of Kalamazoo Metal Recyclers (KMR) at 1:00 pm on August 3, 2023, in response to a complaint of odor coming from the facility.

Facility Description

KMR is a metal scrapyard company. The facility receives scrap metals including aluminum, iron, stainless steel, brass, and copper from various locations. The metal is shredded or cut down to acceptable sizes and shipped to foundries where the materials are reused. KMR is in operation with Permit to Install (PTI) No. 364-78. KMR operates one (1) shift, six (6) days a week, and employes approximately ninety (90) people.

Compliance Evaluation

Upon entering the facility, AQD staff MTC met with Mr. Pat Farrell, Owner, and explained the visit was in response to an odor complaint in the area. Mr. Farrell stated that the permitted shredder on site had been down since July 28, 2023. MTC stated that the odor was likely due to the torch cutting process of scrap metal. Mr. Farrell provided a walk-through of the facility and answered site specific questions. Requested records were provided by Mr. Farrell on site and additional records were provided by Kendall VanSickle following the inspection.

PTI No. 364-78:

Shredder:

The shredder was not in operation during the site visit. Mr. Farrell stated that the shredder was down to rework the rotary drums and rewire the electrical system serving the shredder. The shredder was incapable of running during the site visit. The shredder was originally permitted with three (3) cyclones and a wet venturi scrubber for emissions control. It was noted that two (2) of the cyclones had been removed and modification of the control equipment serving the shredder now included one cyclone and the venturi scrubber. Mr. Farrell stated that the modification was now a closed loop system. Due to the shredder being in operable, this could not be verified. A stack was noted on the modified emissions control system, which Mr. Farrell stated was for excess air in the system. Mr. Farrell also stated that the air evacuation system had been totally rebuilt/replaced in 2019. It was also noted that the shredder no longer uses diesel fuel and is now totally powered by electricity. Due to the modifications and reconstruction of the shredder along with

the emissions control devices, KMR appears to be in violation of Rule 201 permitting. Emissions from the shredder listed in PTI No. 364-78 can only be verified through testing and testing has not been required at this time.

Most of the ferrous metal from the shredder goes to a stockpile. The majority of the non-metal material is conveyed to a 3-sided bin and then transferred to another pile. This material is landfilled. The conveyor is supposed to be covered and have a chute at the discharge point. Another conveyor has a product that is 50% various metals. This drops to a 3-sided bin and is then transferred to another stockpile. This material is sold as is. There is a hydrant and hose near the piles of non-metal, but Mr. Farrell said they do not water it unless there is a problem (windy, dusty, gets hot). They pay by weight so excess water costs them more.

Various employees including the unloader and the crane operator are charged with looking for vehicles with gas tanks. The vehicles are loaded upside down so the crane operator can see. Mr. Farrell said they have not had any explosions this year. He said if they did it would be logged on their daily sheet. Any refrigeration units that come in have to have an open line.

Mr. Farrell stated that the scrubber no longer has a pressure drop gauge (magnehelic) but was stated that they know right away when the nozzles start plugging. This appears to be a violation of Special Condition (SC) 20(a). Mr. Farrell stated that they had replaced the ripple boxes with Z boxes in the venturi scrubber, due to the Z boxes being more effective at separating the material. The venturi scrubber and cyclone are being cleaned at the end of every day or when a problem occurs, which is recorded in the facility's daily log sheets. Daily log sheets were reviewed on site for the month of April 2023. Additional log sheets were provided following the inspection and were reviewed for the time period of January through June 2023. The daily log sheets indicate that proper maintenance and cleaning is being conducted. No issues were noted during the review.

No open burning has taken place or was noted during the facility walkthrough. As stated previously, there is a hydrant and hose near the piles of non-metal but is not used unless there is a problem (windy, dusty, gets hot).

Additional Observations

Torch Cutting:

One torch cutting station was noted on site. Mr. Farrell stated that torch cutting is necessary to dismantle large pieces of metal that cannot be fed into the shredder or cut using the shear. The torch cutting process has historically been an exempt process per Rule 285(2)(j), however, the exemption changed in 2017, which Rule 285 (2)(j) now requires the torch cutting process of scrap metal recycling and/or demolition activities to have emissions that are released only into the general in-plant environment and/or that have externally vented emissions equipped with an appropriately designed and operated enclosure and fabric filter. A letter dated March 15, 2017, was sent to KMR notifying the facility of the exemption change. The torch cutting process at KMR was noted to be in the open ambient environment and did not meet the requirements of the exemption. This is a violation of Rule 201 permitting.

Cold Cleaners:

Two (2) cold cleaners were noted on site. Both cold cleaners were noted to be open and not in use. MTC advised Mr. Farrell to keep the cold cleaners closed when not in use and provided Mr. Farrell with EGLE Cold Cleaner Operating Instruction stickers to apply to both of the units since neither unit had posted operating instructions. The cold cleaners are serviced by Vesco. The cold cleaners are exempt from permitting per Rule 281(2)(h).

Fuel Tanks:

Six (6) on-road diesel fuel tanks and one (1) non-road diesel fuel tank was noted on site. These seven (7) tanks are exempt from Rule 201 permitting per Rule 284(2)(d).

Conclusion

Based on the observations made during the facility walkthrough, and the records received, it was concluded that Kalamazoo Metal Recyclers appears to be out of compliance with applicable air quality rules. A Violation Notice was sent to the facility regarding the referenced violations above.

NAME Michael T. Cox

DATE 8/10/2023

SUPERVISOR Amanda Cross for Monica Brothers