

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

P096952095

FACILITY: Admiral Metals		SRN / ID: P0969
LOCATION: 41200 Mound Road, STERLING HTS		DISTRICT: Southeast Michigan
CITY: STERLING HTS		COUNTY: MACOMB
CONTACT: Michael Foon , General Manager		ACTIVITY DATE: 11/21/2019
STAFF: Adam Bognar	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

On Thursday, November 21, 2019, Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division (EGLE-AQD) staff, I, Adam Bognar conducted a targeted inspection of Admiral Metals (the "facility"), located at 41200 Mound Road, Sterling Heights, MI 48314. The purpose of this inspection was to determine the facility's compliance status with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; and Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (EGLE-AQD) rules.

I arrived at the facility at around 11 am.

I met with Mr. Mike Foon, General Manager. I identified myself, provided credentials, and stated the purpose of the inspection. Mr. Foon gave me a tour of the facility.

Admiral Metals is a metal scrap yard. The facility receives scrap metals from various sources, separates the scrap based on the type of metal, and cuts the scrap into portions that can be easily shipped, melted, and recycled. The sorted metals are sold to customers who will melt down and recycle the metal.

Admiral Metals was targeted for inspection in FY2020 due to a violation notice issued to Admiral Metals on September 26, 2018. In that violation notice, the EGLE-AQD noted that Admiral Metals had installed and commenced operation of unpermitted torch cutting equipment at the facility. Torch cutting equipment at metal scrap yards can only be exempt from the requirement to obtain a permit to install if the torch cutting emissions are released only into the general in-plant environment and/or have externally vented emissions equipped with an appropriately designed and operated enclosure and fabric filter (EGLE-AQD Rule 285 (2)(j)(ii)). Torch cutting emissions at Admiral Metals were exhausted outdoors uncontrolled.

In response to the violation, Admiral Metals built an enclosure and fabric filter in an attempt capture and filter emissions during torch cutting. The enclosure Admiral Metals constructed did not adequately capture torch cutting emissions in all cases. Instead of improving or constructing a new enclosure/filter, Admiral Metals chose to buy an industrial shear to cut metal going forward. Mr. Foon informed me before this inspection that the shear recently became operational. The torch cutting enclosure/fabric filter is still on-site but will no longer be used.

The new shear has been able to completely replace torch cutting. As of November 2019, Admiral Metals is no longer torch cutting metals. The shear is a SHEARCORE brand FORTRESS 45-R. The shear is actuated by a mobile hydraulic excavator. The excavator operator can move the shear around 360 degrees, forward and backward, and up and down to cut pieces of metal pieces down to a size that can be melted/recycled. The excavator and shear together cost Admiral Metals approximately \$250,000.

Mr. Foon estimates that the new shear has improved the speed in which the facility can cut metal by approximately 20% compared to torch cutting the metal. He believes that he will save money by not having to purchase fuel and nozzles for the torch cutting equipment anymore. Additionally, he was able to lay off one employee who was previously torch cutting full time.

The cutting blades on the shear must be maintained to retain their cutting ability. The cutting blades are sharpened daily and greased twice per day. The blades are double sided. Approximately every two months, the blades are flipped over to reveal the unused cutting edge. Approximately every four months, the blades must be replaced. Replacing the blades costs several thousand dollars.

The shear appears to have zero emissions. I observed the shear cut through various metal pieces during my inspection. I did not notice any smoke, sparks, dust, or smells coming from the shearing process. Nonetheless, it is conceivable that the shear "may" emit an air contaminant, thus the shear may be subject to Rule 201

requirements (the requirement to obtain a permit to install).

The shear appears to be exempt from Rule 201 requirements pursuant to Rule 291 (2)(a,b,c,d,e,f). I discussed the decision to consider this emission unit exempt under Rule 291 with AQD district supervisor Ms. Joyce Zhu. Ms. Zhu agreed that requiring Admiral Metals to demonstrate compliance with all provisions of Rule 291 would be unnecessarily burdensome at this time since the shear will have almost zero emissions.


Based on my observations, the AQD believes that the toxic air contaminant requirements of Rule 291 are met. Emission of asbestos or subtilisin proteolytic enzymes is not expected because only metal is cut with the shear. Essentially, the emission unit is a large pair of heavy-duty scissors actuated by a hydraulic excavator. The potential emissions are metal particulate arising from both the workpiece being cut and from the shear blades themselves.

Based on my observations during this inspection, the violation notice issued on September 28, 2018 can be resolved.

After observing the shearing operation, I inspected the rest of the facility. There are two warehouses on-site. Both are used to store/process metals. One warehouse is dedicated to processing non-ferrous metals. There are several table-top sized cutters/saws in these warehouses. These table-top sized cutters/saws are exhausted into the general in-plant environment and are used on an as needed basis. The tabletop cutters/saws appear to be exempt from Rule 201 requirements pursuant to Rule 285 (2)(l)(vi). I left the facility at around 12 pm.

Compliance Determination

Admiral Metals appears to be operating in compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control of Natural Resources and Environmental Protection Act, 1994 Public Act 451; and Michigan Department of Environment, Great Lakes, and Energy, Air Quality Division (EGLE-AQD) rules.

NAME  DATE 1/13/2020 SUPERVISOR SK