

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

M484767406

FACILITY: Kenwal Pickling, LLC		SRN / ID: M4847
LOCATION: 8223 W Warren Ave, DEARBORN		DISTRICT: Detroit
CITY: DEARBORN		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 05/15/2023
STAFF: Katherine Koster	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY23 Targeted Inspection		
RESOLVED COMPLAINTS:		

REASON FOR INSPECTION: Targeted Inspection**INSPECTED BY: Katie Koster, AQD****PERSONNEL PRESENT: Mr. Wes Steffey, Plant Manager, wes_steffey@kenwal.com**

FACILITY BACKGROUND

Kenwal Steel's headquarters are in Dearborn, Michigan. It is a flat rolled steel service center. The entire site is approximately 260,000 square feet. There are three 72 inch slitters and a pickling line. The company operates four other locations; two in the U.S. and two in Canada. The Dearborn location typically operates about 5 to 6 days per week, 24 hours a day, although currently they are operating 7 days per week. Production occurs on the first shift; other shifts are for maintenance and shipping. Some of Kenwal's customers include Cleveland Cliffs and USS. Kenwal also buys and cleans/pickles steel coils and then sells the coils to various customers. The company has been in business more than 60 years. The pickle line has been operating for 20+ years.

COMPLIANCE HISTORY/COMPLAINT

Facility was previously inspected in 2018. Compliance was chosen as the compliance status.

OUTSTANDING CONSENT ORDERS

None

OUTSTANDING LOVS

None

INSPECTION NARRATIVE

On May 15, 2023, AQD inspector, Katie Koster arrived at Kenwal Steel. I met with Mr. Wes Steffey, Plant Manager, and he accompanied me about the site. We discussed the facility operations. He explained that Kenwal is actually two companies, Kenwal Steel Corp. and Kenwal Pickling LLC. I listed the equipment that is in the permit to install. Mr. Steffey confirmed that all of that equipment is still in use, no replacements or additions have occurred. All tanks in the pickle line and acid storage tanks are controlled by the scrubber. HCl is purchased at 36% concentration. Coils are either shipping out of the door after pickling or go to the steel side for slitting.

We walked to the HCl pickling line. The line is a push/pull system as opposed to a continuous pickling line. This allows the company to have more control over the pickling process which results in a higher quality product. The coil is welded together and enters a tension leveler. After pickling, the steel is electrostatically sprayed with an oil that acts as a rust inhibitor and lubricant. This process is enclosed. Any overspray is collected and reused in the process.

The area around of the pickling line was clean, and I did not detect any acid odors. At the beginning of the line, the coil enters the tension leveler. There is baghouse for the tension leveler as scale breaks off during this step. There are four heated hydrochloric acid tanks; concentrations ranges are 1-3%,

5%, 8%, and 14% with rinse tanks throughout the line. Tanks are heated but do not want to exceed 195 F or they will start boiling off HCl. There are five rinse tanks. Facility uses seven to nine thousand gallons per day. The tanks are granite lined and have fiberglass covers. We viewed the scrubber. It is a plate type scrubber and contains six trays. I viewed the water piping leading to the top of the scrubber. There is a main flow meter and a backup redundant meter. I recorded a flow rate of 2.7 on the main meter and 2.9 gpm on the redundant meter. This is above the required minimum of 2 gpm. A pressure drop gauge is also in place. There is a mist eliminator in the stack. We walked outside and viewed the stack. I did not observe any smoke.

Inside, there is also a steam generator that we viewed. It is a Clayton 600 hP, installed in 2001. It is in the MAERS report. There is also a back up pump for the scrubber in this area.

Facility also has an emergency generator. It is natural gas fired and 150 kW. Size information is attached. Runs for 20 minutes every Monday. An email is generated and sent to Mr. Steffey when it runs.

On the steel side, machines all exhaust to the general in plant environment.

Mr. Steffey and I returned to his office and discussed the records required by the permit. I informed him that I would follow up with a records request.

APPLICABLE RULES/PERMIT CONDITIONS

The company is operating under PTI 196-00C. This is an opt out permit. There is an hourly HCl limit as well as an individual and aggregate HAPs limit. The original version of this permit, 196-00, also contained HAP limits and was issued when the line was installed. As such, facility is not subject to the Steel Pickling MACT (Subpart CCC).

EUPICKLINGLINE

1.1a IN COMPLIANCE. HCl limited to 0.8 pph. Test was conducted in November 2002. Emissions of HCl were 0.23 pph at a scrubber water flow rate of 2 gpm and 3 gpm. According to the facility, a test was also conducted in 2007 and emissions were 0.01 pph at a flow rate of 2 gpm. A mist eliminator was installed before the 2007 test. It was approved through PTI196-00C.

1.2 IN COMPLIANCE. Shall use fresh water for any make up water and shall supply this water to the top of the plate scrubber. Company stated that city water is used in the scrubber. This meets the criteria for fresh water. I observed the water piping leading to the top of the plate scrubber

1.3 IN COMPLIANCE. Shall maintain a minimum scrubber liquid flow rate of two gallons per minute or the flow rate documented during the most recent acceptable test. The 2002 stack test indicated compliance with the HCl limit at 2 gpm flow rate. The 2007 test was also performed above 2 gpm. The flow rate was above 2 gpm during the inspection as shown on the flow meters. Also, records reviewed on site indicate that the flow rate is maintained above 2 gpm. According to the attached records, flow rate is recorded at least six times per production shift.

1.4 IN COMPLIANCE. Shall determine pressure drop across the packed bed scrubber once a week. If it varies by more than +/- 3 in w.g. from the value during the performance test, it shall be documented and any corrective action shall be documented. Note, this is a plate scrubber, not a packed bed. Records of the pressure drop were presented. It is recorded several times per day. See attached email from Mr. Steffey explaining the values.

1.5 IN COMPLIANCE. Shall operate in accordance with an approved O&M plan and SSM plan. Plans are attached. Plans were provided during the prior inspection and are in the facility file.

1.6 IN COMPLIANCE. Fresh HCl storage tanks shall be equipped with a closed vent system. Loading and unloading shall be conducted through enclosed lines. While no loading/unloading was occurring, I viewed the enclosed lines and the tanks.

1.7 IN COMPLIANCE. Shall not operate EUPICKLINGLINE unless scrubber is installed, maintained, and operated properly. Based on my visual observation and the records presented during the inspection, the scrubber appears to be maintained and operated properly.

1.8 IN COMPLIANCE. Shall install, calibrate, maintain, and operate a device to monitor the pressure drop on a continuous basis. Device is installed and was observed in use during the inspection.

1.9 IN COMPLIANCE. Shall install, calibrate, maintain, and operate a device to monitor the liquid flow on a continuous basis. Device is installed and was observed in use during the inspection. Facility has two flow meters and uses those to cross check the readings for accuracy.

1.10 IN COMPLIANCE. Shall keep records of the liquid flow rate once per shift when EUPICKLING is operating. Records were presented during the inspection and appear to meet the required frequency. Flow rate is recorded once every couple of hours. See attached records.

1.11 IN COMPLIANCE. Shall keep records of the pressure drop once per week when EUPICKLING is operating. Records were presented during the inspection and appear to meet the required frequency. Pressure drop is recorded once every couple of hours. See attached records.

1.12 IN COMPLIANCE. Stack dimensions shall be a maximum of 30 inches in diameter and a minimum of 60 feet above ground level. Shall be discharged unobstructed vertically upward. I viewed the stack. Gases are released unobstructed vertically upwards. Stack appeared to meet the minimum height based on the building height.

2.1 a. and b. IN COMPLIANCE. HAPs limited to less than 9 tpy for an individual HAP and less than 22.5 tpy for an aggregate HAP. Highest 12 month rolling HCl emissions for the prior two year period were 0.0438 tons. At this time, I am not aware of any other HAPs' that need to be quantified.

2.2 IN COMPLIANCE. Shall maintain records on a monthly and 12 month rolling basis of the HAP emissions calculations. See attached records.

EXEMPT EQUIPMENT

Steel slitting equipment – Rule 285(2)(l)(vi)(B)

Did not fully evaluate generator at this time. Appears to be exempt from AQD permitting per Rule 285 (2)(g).

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS

At this time, the facility does not have a fugitive dust control plan. I did not observe any fugitive dust issues.

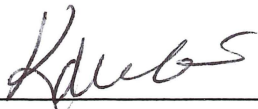
MAERS REPORT REVIEW

Facility has been reporting MAERS since I added them to the list after my prior inspection. They are subject to MAERS based on having an opt out permit for HAPs.

FINAL COMPLIANCE DETERMINATION

At the time of the inspection, this facility appears to be in compliance with state and federal regulations.

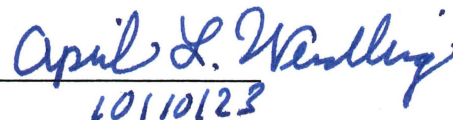
NAME



DATE

9/29/23

SUPERVISOR


10/10/23