

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

M484745749

FACILITY: Kenwal Steel Corporation		SRN / ID: M4847
LOCATION: 8223 W Warren Ave, DEARBORN		DISTRICT: Detroit
CITY: DEARBORN		COUNTY: WAYNE
CONTACT: John DuBrock , VP Operations		ACTIVITY DATE: 08/23/2018
STAFF: Katherine Koster	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: FY18 Targeted Inspection		
RESOLVED COMPLAINTS:		

**REASON FOR INSPECTION: Targeted Inspection**  
**INSPECTED BY: Katie Koster, AQD**  
**PERSONNEL PRESENT: Mr. John DuBrock, VP Operations**  
**FACILITY PHONE NUMBER: 313-739-1017**  
**FACILITY FAX NUMBER: 313-739-2317**

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**FACILITY BACKGROUND**

Kenwal Steel's headquarters are in Dearborn, Michigan. The building is approximately 150,000 square feet. There are three 72 inch slitters and a pickling line with a 75,000 ton per month capacity. The company operates four other locations; two in the U.S. and two in Canada. The Dearborn location operates about 4.5 days per week; Monday through Friday. There are about 40 employees for the pickling line. Some of Kenwal's customers include AK Steel 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 17 years. Last year, about 720,000 tons of steel were pickled, and they are currently pickling about 60,000 tons per month.

**COMPLIANCE HISTORY/COMPLAINT**

Facility was previously inspected in 2013. Compliance was chosen as the compliance status.

**OUTSTANDING CONSENT ORDERS**

None

**OUTSTANDING LOVs**

None

**INSPECTION NARRATIVE**

On August 23, 2018, AQD inspector, Katie Koster arrived at Kenwal Steel. I met with Mr. John DuBrock, VP Operations, and he accompanied me about the site. He explained that Kenwal is actually two companies, Kenwal Steel Corp. and Kenwal Pickling LLC. 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 preventer and lubricant. This process is enclosed. Any overspray is collected and reused in the process.

The area of the pickling line was very clean, and I did not detect any acid odors. At the beginning of the line, the coil enters the tension leveler. There is a baghouse for the tension leveler as scale breaks off during this step. It is equipped with a pressure drop gauge and serviced as needed. The normal pressure drop range is between 0 and 2 in. w.c. The gauge was showing 0.7. There are four heated hydrochloric acid tanks; concentrations are 1%, 5%, 8%, and 14% with rinse tanks throughout the line. 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. I recorded a flow rate of 2.9 gpm. There is a main flow meter and a back up redundant meter. 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 emissions.

I met Mr. Adam Lusk, Assistant Plant Manager, for Kenwal Pickling. We went to his office where he presented the daily operating records for the scrubber as well as the inspection and maintenance records. Scrubber parameters appeared to be maintained in the normal ranges. Vibration analysis on the scrubber fan has been performed. Other scrubber inspections occur on a scheduled, periodic basis.

Finally, we walked through the steel coil storage area with overhead cranes, and we viewed the various slitting machines. These machines all exhaust to the general in plant environment.

Mr. DuBrock 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.

**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. I did not see any variations requiring corrective action. Based on the records sheet, the pressure drop value from the performance test was 10.00. Copies of the June through August 2018 values are attached. The pressure drop was between 7.1 and 8.6 in. w.c.

**1.5 IN COMPLIANCE.** Shall operate in accordance with an approved O&M plan and SSM plan. Plans are attached.

**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.

**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. However, calibration records were not available. Facility will begin regular calibrations. Initial calibrations were performed after my site visit and are attached. As a plan is in place, discretion is applied at this time. If calibrations have not occurred during the next inspection, a violation notice will be issued.

**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. However, calibration records were not available. Facility will begin regular calibrations. Initial calibrations were performed after my site visit and are attached. As a plan is in place, discretion is applied at this time. If calibrations have not occurred during the next inspection, a violation notice will be issued.

**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.

**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.

**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 a individual HAP and less than 22.5 tpy for an aggregate HAP. Highest 12 month rolling HCl emissions from September 2017-September 2018 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)

#### **APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS**

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

#### **MAERS REPORT REVIEW**

Since the facility is an opt out source, it should be reporting MAERS. I have contacted MAERS staff in Lansing to add the company to the list.

#### **FINAL COMPLIANCE DETERMINATION**

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

NAME Kate Kucin

DATE 10/2/18

SUPERVISOR W.M.