



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

April 26, 2012

RE: ESAB WELDING & CUTTING PRODUCTS
OHIO EPA PERMIT 3IC00071
ASHTABULA TWP., ASHTABULA COUNTY
COMPLIANCE EVALUATION INSPECTION

Mr. David Johnson, Plant Manager
The ESAB Group, Inc.
ESAB Welding and Cutting Products
3325 Middle Road
Ashtabula, OH 44004

NOTICE OF VIOLATION

Dear Mr. Johnson:

On April 26, 2012, a site inspection was conducted at the above referenced facility at 3325 Middle Road, Ashtabula Township, Ashtabula County. The inspection was conducted by John Schmidt of this office. Dale Piccirillo represented The ESAB Group, Inc. / ESAB Welding and Cutting Products (ESAB) during the inspection. The purpose of the inspection was to evaluate the facility's compliance status with respect to the terms and conditions of the facility's National Pollutant Discharge Elimination System (NPDES) permit. The last compliance inspection was conducted on March 22, 2011.

Industrial Waste Water treatment

Ohio EPA notes that the system consists of a treatment system for wire drawing and metal finishing, specifically carbon steel and alloy steel welding wires. Wastewater from various production lines and floor drains discharge to a series of sumps throughout the plant. Some sumps are pumped while others are manually collected in plastic totes.

Waste pickle liquor is pumped to 10,000-gallon tank, with a 100,000-gallon equalization tank used for excess volumes, The 10,000-gallon waste pickle liquor tank discharges to a 47,000-gallon wet well (90 pit) for further treatment. Copper-containing wastes are collected portable totes from the sumps and manually discharged to a 2,500-gallon holding/equalization tank, then flows to a wet well (90 pit). Contact cooling water, boiler blow-down lines, and filtrate lines from the sludge pressing operations also discharge to a 47,000-gallon wet well (90 pit).

Wastes collected in the wet well (90 pit) flow to a three stage chemical mixing operation to adjust the pH. Each tank in the process is 7,000 gallons. Each stage can be bypassed as needed for operations and maintenance. Stage one tank receives influent from the 90 pit, sludge from the clarifier, and sludge from the sludge holding tank, and is mechanically mixed. Caustic soda and air is added. Stage two tank receives influent from Stage one tank via gravity and adds caustic soda, air, and sodium dimethyldiocarbamate are mechanically mixed to aid in settling of inorganic compounds (metals), specifically copper and raises the pH to approximately 3.0. Stage three tank receives influent from Stage two tank via gravity and adds caustic soda until a slurry is created and raises the pH to approximately 5.5. Stage three then flows into one of two rapid-mix flocculator tanks. Polymer is added to these tanks and mechanically mixed. The slurry then flows to the Lamella (plate) clarifiers. Treated effluent flows from the clarifiers to a discharge line to a manhole where flow is

monitored and samples collected with an ISCO sampler as Outfall 602. The manhole discharges to a receiving ditch.

Sludge is pumped from the clarifiers to a 10,000-gallon sludge holding tank. Sludge is then pumped through a plate and frame filter press. Filtrate flows by gravity back to the 90 pit at the treatment headworks. Pressed sludge drops into a sealed roll-off dumpster for characterization and off-site disposal. Nonhazardous sludge is taken to a solid waste disposal facility, and materials determined hazardous are taken to a hazardous waste treatment, storage, and disposal facility. Nonhazardous sludge is taken to the Geneva Landfill, a licensed solid waste disposal facility, and materials unable to be disposed of as a solid waste are hauled to a licensed hazardous waste treatment, storage and disposal facility.

ESAB is in the process of winding down operations at this facility. The facility currently has 70 employees. ESAB anticipates ceasing production operations at this location sometime in 2012.

Storm Water Management

Storm water management includes water from building footer drains and runoff from paved areas of the facility, as well as storm water runoff from the adjacent ASTHA Chemical plant and Millennium Chemical Plant, located east and south of the ESAB facility respectively. Storm water is collected and discharged to ditches around the perimeter of the facility and is collected in a storm water pond located northwest of the manufacturing building. Materials are all managed under roof except for sealed roll-off boxes. When boxes are emptied, collected storm water within the boxes is collected and drained to the wastewater collection system.

Plant Sanitary Waste Water Treatment

Plant sanitary wastes are conveyed to EMC Metals (former Elkem Metals) sanitary wastewater plant located north of the ESAB facility for treatment and are not a part of this NPDES permit.

Observations

The following observations were made during the inspection:

1. No changes were noted to the treatment processes since the last compliance inspection conducted in March 2011, other than a reduction in average plant flow.
2. The general operation and maintenance of the wastewater treatment system appeared to be satisfactory.
3. The effluent samplers at Station No. 3IC00071002 and 3IC00071602 collect composite samples on a time-proportional basis and not a flow-proportional basis. The flow proportional samplers replaced the time proportional samplers in April 2011.
4. The design flow of the chemical wastewater treatment plant is 98,200 gpd and peak flow remains is 150,000 gpd. The actual flow the plant is currently about 26,000 gpd, down from the 40,000 gpd noted in the 2011 inspection
5. A copper recycling system utilizes two 500-gallon tanks that have a backflow to additional tanks that could overflow into floor drains.

6. A log book of repairs and observations is maintained at the WWTP and in Mr. Piccirillo's office electronically. Mr. Piccirillo performs routine operations at the WWTP, monitors the facility, and performs the sampling. Mr. Piccirillo also prepares the electronic discharge monitoring report (eDMR) and you submit of the eDMR through Ohio EPA's Web-based application.
7. pH meters are calibrated weekly.
8. Clarifiers were observed in good working order, with a small amount of scum. Weirs and baffles are cleaned daily. The skimmer and return sludge lines were observed in operational condition. Sludge is removed from the system quarterly.
9. The wastewater plant discharge (Station 602) was found to be submerged, with a reddish floc located at the sampling station. Mr. Piccirillo stated that the floc is likely due to operator error in startup of the clarifier. The floating floc must be removed immediately, and photographic documentation of the cleanup provided to Ohio EPA. The final discharge to the ditch (Station 002) was found to be discharging clear.
10. The storm water pollution prevention plan (SWPPP) was updated on January 12, 2012. The annual site certification inspection was also completed on January 12, 2012. Employee training is conducted throughout the year, with the latest training conducted in January 2012.
11. No evidence of discharges was noted from the roll-off box storage area.

NPDES Permit Compliance Review

A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period March 1, 2011 through March 1, 2012 indicates apparent noncompliance of the terms and conditions of your NPDES permit as identified below:

Limit Violations

The following limit violations were noted for the period reviewed:

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
002	50092	Mercury, Total (Low Level)	30D Conc	1.3	37.1	3/1/2011
002	61427	Acute Toxicity, Pimephales	1D Conc	1.0	4.32	3/15/2011
002	50092	Mercury, Total (Low Level)	30D Conc	1.3	27.9	4/1/2011
002	50092	Mercury, Total (Low Level)	30D Conc	1.3	29.5	5/1/2011
002	50092	Mercury, Total (Low Level)	30D Conc	1.3	43.1	6/1/2011
002	50092	Mercury, Total (Low Level)	30D Conc	1.3	34.	7/1/2011
002	50092	Mercury, Total (Low Level)	30D Conc	1.3	22.8	8/1/2011
002	50092	Mercury, Total (Low Level)	30D Conc	30.3	34.4	9/1/2011
002	50092	Mercury, Total (Low Level)	30D Conc	30.3	32.1	10/1/2011
002	50092	Mercury, Total (Low Level)	30D Conc	30.3	41.8	12/1/2011

Written explanations as to why mercury violations occurred were provided to Ohio EPA via correspondence dated April 22, 2011, May 19, 2011, July 29, 2011, September 23, 2011, October 20, 2011, November 15, 2011, and January 17, 2012. Ohio EPA notes that ESAB modified its NPDES permit to change the mercury limits pursuant to a mercury variance request which became effective September 1, 2011. No additional response is required at this time to address these mercury violations. A review of Ohio EPA files indicates no response to the Primephales (fathead minnow) toxicity violation from March 2011. Please provide a written explanation to this violation, along with measures to ensure that it is not repeated.

Reporting Violations

No reporting code or frequency violations were noted for the reporting period reviewed.

Compliance Schedule Violations

The following compliance schedule obligations were noted for the reporting period reviewed:

App No	Permit Effective Date	Permit Expiration Date	Schedule Due Date	Completion Date	Event Code	Schedule Type	Schedule Milestone
3IC00071	9/01/2011	07/31/12	03/01/2012	2/20/2012	---	Report	Hg Water & Rainfall
3IC00071	9/01/2011	07/31/12	03/01/2012	2/20/2012	---	Report	Off-Site & Area Hg
3IC00071	9/01/2011	07/31/12	09/01/2012		---	Report	Hg Reduction Report

Completed milestones were met within the prescribed times, and incomplete milestones are not yet due. No response is required.

Please inform this office, in writing, within 30 days of the date of this letter as to the actions we discussed that have been or will be taken to correct the above noncompliance or explanations if you believe the noncompliance issues noted are in error. Your response to this letter should include the dates that the actions have been or will be completed. Please be advised that past or present issues of noncompliance can continue as subjects of future enforcement actions by Ohio EPA.

If you have any questions or comments regarding this inspection, please feel free to contact me at (330) 963-1175.

Respectively,



John M. Schmidt P.E., R.S.
Environmental Engineer
Division of Surface Water

JMS/cs

File: Industrial/ESAB Group, Inc./pc

