



**Environmental
Protection Agency**

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

March 7, 2012

RE: TRUMBULL COUNTY
VILLAGE OF MCDONALD
MCDONALD STEEL CORPORATION
NPDES NO. 3ID00058

Mr. William Clark, Operations Manager
McDonald Steel Corporation
100 Ohio Avenue
PO Box 416
McDonald, OH 44437

Dear Mr. Clark:

On February 9, 2012, a pre-permit / compliance evaluation inspection (CEI) was conducted at the McDonald Steel Corporation, 100 Ohio Avenue, McDonald. Present during the inspection were Mr. Greg Gottschalk, representing McDonald Steel, and Ms. Brianne Ciccone and this writer, of the Ohio EPA.

The purpose of the February 9th inspection was to discuss the current manufacturing status of McDonald Steel; observe the permitted intake and outfall stations as contained in the National Pollutant Discharge Elimination System (NPDES) permit; and review the information contained within the NPDES permit application as submitted by McDonald Steel. The last Ohio EPA compliance evaluation inspection conducted was on February 15, 2006.

At the time of the February 9th inspection, the following observations were made, or items were discussed:

- 1) The water intake for the plant, STA 801, was observed. The area around the intake pipe has a floating oil / grease boom on the surface of the water.
- 2) A new intake pump at STA 801 has been installed since the last inspection. Approximately two to three million gallons of water is taken in daily from the Mahoning River.
- 3) Water is taken in daily and pumped to a storage tower / stand pipe. The water storage tower has a capacity of approximately 540,000 gallons.
- 4) From the water storage tower the water flows over the top of the roller stands for cooling purposes. The water flows in a once through cooling process, with no chemicals added.
- 5) The cooling water enters a scale pit, and subsequently the sedimentation basin.
- 6) The sedimentation basin is checked daily for oil & grease. If oil & grease is observed, the rope oil skimmer is utilized to remove the floating oil, which is collected into 55-gallon drums. Drums are picked up by Environmental Specialists, Inc., on an as-needed basis.

- 7) Flow discharged from the sedimentation basin, to the Mahoning River, passes a sonic flow meter, where flow is measured by a Magnetrol 341 control unit. Flow data is stored in the Magnetrol 341 control unit for a 30 day period.
- 8) The effluent discharge location to the Mahoning River is identified as STA 001. The mixing zone of the effluent with the receiving stream is surrounded with an oil / grease floating boom, used as a secondary backup to prevent any stray oil from entering the river. The boom is changed out every 3 to 4 months.
- 9) NPDES permit-required samples for pH and flow are collected and run daily by Mr. Gottschalk. Remaining samples collected are analyzed by Cardinal Environmental labs in Youngstown. Suspended solids and oil & grease are run weekly; zinc is performed monthly; arsenic, cadmium, lead, chromium, and copper are run once per year.
- 10) The NPDES permit renewal application was reviewed with Mr. Gottschalk. The renewal application consisted of Forms 1 (General Information), 2C (Existing Manufacturing, Commercial Operations), 2F (Storm Water Discharges Associated with Industrial Activity), and the Anti Degradation Addendum form.
- 11) According to the (2010) information provided in the NPDES renewal application, which was submitted in January 2011:
 - a) The #14-14" Mill & Reheat Furnace operated 5 Turns per week, 12 months per year, @140 Tons per Turn.
 - b) The #16-8" Mill & Reheat Furnace operated 2 Turns per week, 4 months per year, @61 Tons per Turn.
 - c) Average Long Term Total volume for the #14 Mill was approximately 0.6 MGD.
 - d) Average Long Term Total volume for the #16 Mill was approximately 0.55 MGD.
 - e) Total Maximum Daily Flow for the STA 001 outfall was reported as 1.69 MGD.
 - f) Total Tons produced from Mills # 14 and #16 is approximately 201 Tons per day.
- 12) Based upon operating data provided in the NPDES renewal application, the renewal permit will contain the following recommended permit limitations and/or monitoring requirements:
 - a) Total Suspended Solids and Oil & Grease concentrations and loadings, as per 40 CFR 420.72 Subpart G, will be continued for STA 001 as in the previous NPDES permit.
 - b) Monitoring of pH and flow will continue at once per day for STA 001, as in the previous NPDES permit.
 - c) Monitoring for Zinc will continue at once per month for STA 001, as in the previous NPDES permit.
 - d) Monitoring for Arsenic, Cadmium, Copper, Chromium, Lead, BOD, and COD, will continue at once per year for STA 001, for one annual storm related event during the month of September, as in the previous NPDES permit.
 - e) Influent monitoring at STA 801 will continue at once per week for Total Suspended Solids and Oil & Grease.
 - f) Oil & Grease monitoring requirements will be changed from the erroneous one per week 24 hour composite in the old NPDES permit, to one per week grab sample in the new permit.
 - g) The renewed NPDES permit will require a sign be erected on the stream bank at the effluent STA 001, where it enters the receiving stream. The sign will require the name of the NPDES permit owner; and a telephone contact number.

A SWIMS computer search for the discharge data submitted by McDonald Steel was conducted prior to the February 9th inspection. The electronic Discharge Monitoring Report (eDMR) data search covered the period of February 1, 2006, through February 1, 2012. Results of the eDMR data search found the following effluent numeric violations for the period reviewed:

McDonald Steel
NPDES NO. 3ID00058
EFFLUENT NUMERIC VIOLATIONS
(FEB. 1, 2006 – FEB. 1, 2012)

Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
June 2006	Total Suspended Solids	30D Conc	7	8.	6/1/2006
June 2006	Total Suspended Solids	1D Conc	19	21.5	6/7/2006
December 2006	Oil and Grease, Hexane	1D Conc	4.6	8.96	12/13/2006
April 2008	Total Suspended Solids	30D Conc	6.9	8.5	4/1/2008
June 2009	Total Suspended Solids	30D Conc	6.9	7.	6/1/2009
February 2010	Total Suspended Solids	30D Conc	6.9	8.	2/1/2010

Once the NPDES renewal permit is drafted and public noticed, there will be a 30 day comment period during which Ohio EPA will address any comments submitted during that period. Following the comment period, the NPDES permit will be issued as final.

If there are questions or comments regarding the content of this correspondence, please contact this office.

Respectfully,



Charles E. Allen
Environmental Engineer
Division of Surface Water

CEA/cs