



**Environmental
Protection Agency**

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

September 12, 2011

**RE: ELKEM METALS COMPANY
NPDES PERMIT NO. 3IN00036
ASHTABULA TWP, ASHTABULA COUNTY
COMPLIANCE EVALUATION INSPECTION
NOTICE OF VIOLATION**

CERTIFIED MAIL

Mr. David Renfew, Director
Human and Environmental Resources
Elkem Metals Company – Ashtabula LP
P.O. Box 266
Pittsburgh, Pennsylvania 15230-0266

Dear Mr. Renfew:

On September 7, 2011, a site inspection was conducted at the above referenced facility at 2700 Lake Road East (State Route 531), Ashtabula Township, Ashtabula County. The inspection was conducted by John Schmidt of Ohio EPA's Division of Surface Water (DSW). You and Wayne Linn represented Elkem Metals Company – Ashtabula LP (Elkem). 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 and to follow up on an inspection conducted in April 2011. The last compliance inspection were conducted on April 21 and 28, 2011.

The system consists of a sanitary treatment system (Elkem Sanitary WWTP) and an industrial treatment system (Elkem Industrial WWTP). These process remain unchanged from the April 21 and 28, 2011 inspections as referenced in the May 5, 2011 Notice of Violation (NOV), hence they will not be repeated here. A figure provided by Elkem is included for reference.

Observations

Following are observations and notations made during the inspection:

Elkem Sanitary WWTP

1. The sanitary wastewater treatment plant, rated at 50,000 gallons per day, is currently accepting about 30,000 gallons per day. Although the Elkem facility is now closed, Frontier is a tenant that currently is dismantling and recycling light rail cars at the property. The wastewater plant also receives domestic sanitary flow from the adjacent USALCO, Praxair, ESAB, and ASHTA facilities on a daily basis.
2. The plant is operated by Michael Mearini on behalf of Elkem, with assistance provided by Wayne Linn. Mr. Mearini assumed duties as operator of record on April 20, 2011 and is the operator of record for the facility.

3. Log books and the operation and a maintenance manual are maintained at the site and were available for inspection.
4. Examination of the Imhoff tank indicated that the tank is reasonably clean and functional. Effluent weirs need cleaning again, and some vegetation is noted at the effluent that must be removed.
5. Sludge is removed from the Imhoff tanks by gravity lines to sludge drying beds. Sludge is removed from the sludge drying beds for disposal at a licensed solid waste disposal facility. Sludge was removed from the facility approximately 23 months ago.
6. The trickling filter was observed as containing vegetation that must be removed, and only two of the four spray arms are functional.
7. The chlorination system mixing pump remains inoperable. Chlorine is added to the tank to provide disinfection. Sulfur dioxide is added to the outlet of the tank to provide de-chlorination. Post-disinfection aeration is also inoperable. Mr. Renfrew indicated that the chlorine mixing system and post-disinfection equipment have not been operational in the 12 years you have overseen this facility.
8. The water line valve box north of the trickling filters has been damaged again. This valve box was noted as damaged during the 2010 inspection.
9. The final effluent was clear as observed in a manhole at Outfall 601 between the Elkem WWTP and the final outfall (Outfall 002). The Elkem final discharge at the Ashtabula Power Plant (Outfall 002) was observed on April 21, 2010 as submerged at the outlet to Lake Erie. Outfall 601 (Elkem Sanitary WWTP) was observed to be producing an effluent of acceptable visual quality.
10. Samples are collected by Mr. Linn and Mr. Mearini. Mr. Linn and Mr. Mearini perform on-site analysis of pH, chlorine residual, and DO and perform observations of flow, color, odor, and turbidity. Results indicate that the effluent is complying with the permit. Mr. Linn inputs data into the eDMR system on behalf of Elkem Metals, with the pinning of the reports done by Mr. Renfrew.

Elkem Industrial WWTP

11. The pump at the Russell Road Ditch pump house was observed in operating condition with one pump in the station. Mr. Renfrew indicated that a second pump is maintained at the facility to replace the operating pump in the event of a pump failure. The pump station appears to be operating as designed. The pump station serves a drainage area of approximately 100 acres of the Elkem property.
12. Two overflow pipes had been constructed through the berm at the pump house intake to allow waste water to bypass Ponds 5a, 4a, 4b, 4c, and 4d for discharge directly to Lake Erie. As indicated during the April 2011 inspection, this bypass has apparently been in place at the Elkem facility for at least the past 12 years. The bypass was observed as not discharging.

13. The ponds used for settling the industrial wastewater (Ponds 4A, 4B, 4C, 4D, and 5A) appeared in acceptable condition. A former industrial process discharge line to the Pond 5C from No. 4 pump station has been removed as the pump station is no longer in operation. A section of the pipe remains in the pond berm. This pipe should be removed or grouted up to remove a potential overflow from the pond.
14. Seeps were observed along the south side of Pond 2 during the April 21, 2011 inspection by Mr. Winkler and the U.S. Army Corps of Engineers. Due to high water, this area could not be closely inspected during the April 28, 2011 inspection. All ponds need to be routinely inspected and any seeps repaired as needed. Elkem must develop an inspection schedule and maintain records of these inspections and repairs.
15. None of the equipment in the post-settling pH adjustment building was operational and had been destroyed or removed. None of the equipment in the pre-settling pH adjustment building (Building 163) was operational, and some equipment had been destroyed or removed.

Storm Water Management

16. The storm water pollution prevention plan (SWPPP) narrative was provided at the April 21, 2011 meeting. The latest revision date is listed as September 20, 1999. You indicated that the written part of the plan has not been updated since, to your knowledge. Ohio EPA files reflect a map titled *Elkem Metals – Site Drainage Map* dated February 1, 2007. The SWPPP must be reviewed at least annually for any changes in processes and personnel and updated accordingly. The plan does not reflect activities being conducted by your current tenant and your contractor that is closing Ponds 3 and 3a.
17. Elkem could not produce any records concerning the last annual site certification or inspection conducted for the facility. Elkem could not produce any records of any employee training on the SWPPP.
18. During both the April 21 and April 28 site visits, Ohio EPA noted that there are several piles of materials from both the demolition operations of the former Elkem Metals manufacturing operations as well as the metals recycling operations of your tenant. The SWPPP document must reflect treatment of waters in contact with materials other than simply passing through a series of settling ponds.

NPDES Permit Compliance Review

A review of the electronic discharge self-monitoring reports (eDMRs) received by Ohio EPA for the period April 1, 2011 through August 1, 2011 indicates apparent noncompliance of the terms and conditions of your NPDES permit. Specific instances of noncompliance are as follows:

Limit Violations

The following limit violations were noted for the period reviewed:

Station	Code	Parameter	Limit Type	Limit	Observed Value	Violation Date
001	00530	Total Suspended Solids	1D Conc	7	9.	7/7/2011
001	00530	Total Suspended Solids	1D Conc	7	8.	7/14/2011
001	00530	Total Suspended Solids	30D Conc	3.2	6.	7/1/2011
001	50092	Mercury, Total (Low Level)	30D Conc	1.3	13.5	7/1/2011
601	31648	E. coli	30D Conc	126	160.	7/1/2011
001	50092	Mercury, Total (Low Level)	30D Conc	1.3	26.	4/1/2011
001	50092	Mercury, Total (Low Level)	30D Qty	0.0000	.00005	4/1/2011
001	50092	Mercury, Total (Low Level)	30D Conc	1.3	13.	5/1/2011
001	50092	Mercury, Total (Low Level)	30D Qty	0.0000	.00002	5/1/2011
001	00530	Total Suspended Solids	1D Conc	7	8.	6/23/2011
001	00530	Total Suspended Solids	30D Conc	3.2	6.	6/1/2011
001	50092	Mercury, Total (Low Level)	30D Conc	1.3	5.59	6/1/2011

Based upon the above information, Elkem continues in **significant noncompliance** for both mercury and suspended solids. Elkem responded to the April 2011, May 2011, June 2011, and July 2011 violations with written responses dated July 8, 2011 and August 5, 2011. Elkem must locate the source of mercury and make necessary changes to its monitoring station to control for total suspended solids (TSS). **Frequency violations continue to occur monthly. The current permit must be reviewed by Elkem and its contract operator so that all parameters are monitored and reported at the proper frequency.**

Compliance Schedule Violations

The following compliance schedule violations were noted for the period reviewed:

Date	Event Code	Schedule Type	Compliance Milestone
6/1/2006	95999	Other	Status Report
6/1/2006	None	Other	E.Coli Status Report
6/1/2006	None	Other	E Coli PTI if needed
6/1/2006	95999	Other	E Coli Status Report
6/1/2006	05699	Other	E Coli Compliance
6/1/2006	None	Other	Hg Compliance Letter
6/1/2006	None	Other	Hg NPDES Mod if need
6/1/2006	None	Other	Apply Hg Variance

Given the time that has elapsed since these milestones were due, Elkem is in **significant noncompliance** with its NPDES permit for these milestones. Ohio EPA could not locate any record of submission of these status reports pursuant to your NPDES permit. Please provide this status report to Ohio EPA Northeast District as soon as possible.

Other NPDES and ORC Chapter 6111 Noncompliance

1. Impoundment Closure – Ponds 1, 1a, 2, 4a, 4b, 4c, 4d, and 5a: Ohio EPA notes that Elkem received a permit-to-install (PTI) to close setting ponds 1, 1a, and 2 in 2007. Elkem requested and received an extension to complete closure, but to date has not implemented the closure. Ohio EPA also requested that a PTI be submitted for the closure of Pond Nos. 4a, 4b, 4c, 4d, and 5a. **Elkem has failed to timely implement the closure and therefore must submit a new PTI application for closure of Ponds 1, 1a, and 2. The revised closure plan must also include the closure of Ponds 4a, 4b, 4c, 4d, and 5a. Within 60 days of the date of this letter, please submit a new PTI or a schedule for the proposed submittal of a new PTI.**
2. Storm Water Pollution Prevention Plan: Ohio EPA notes that we do not have a current copy of the storm water pollution prevention plan (SWPPP) for this facility. An SWPPP must be revised to reflect current operations of the facility, including provisions for both permanent storm water treatment and temporary storm water control for specific activities (construction and/or demolition). Also, the walk-through of buildings at the facility identified areas of unsecured materials that could leak or drain into sumps and floor drains at the facility to enter the WWTP. **Elkem must provide to a new or revised SWPPP by September 30, 2011.**

Comments

Ohio EPA offers the following comments:

1. Cessation of Regulated Operations: Process areas no longer used and not a part of the treatment system in the Industrial WWTP (pH adjustment areas) must have the systems decommissioned. All pH adjustment process equipment, tanks and their contents should be inventoried and removed for appropriate offsite disposal. These areas are subject to Ohio EPA's Cessation of Regulated Operations (CRO) program, as notified by Ohio EPA in August, 2006 and again in April 2010. Elkem must contact Frank Popotnik of Ohio EPA's CRO program at (330) 963-1198 regarding these obligations as soon as possible. Ohio EPA will expect that the process areas of the Elkem Industrial WWTP no longer being used to be decommissioned, inventoried, and removed for appropriate off-site disposal with 60 days of the date of this letter.
2. Construction of Pump Station to replace Elkem Sanitary WWTP and Elkem Industrial WWTP: During our April 21, 2011 and April 28, 2011 site visits, Elkem disclosed that it has contracted with William Boyle Engineering to prepare a PTI application to construct a pump station to replace the Elkem Sanitary WWTP and to tie under drains from Ponds 3 and 3a into this system. (Ohio EPA notes that the discharge channels from Ponds 4a, 4b, 4c, 4d, and 5a will also need to be provided with similar treatment until they are capped and there is no longer a discharge from these units.) Please provide Ohio EPA a schedule as to when we can expect this PTI. Elkem will also need to provide proposals of how to treat storm water containing mercury. **Elkem must provide a schedule for either a PTI for the pump station to replace the sanitary WWTP or a schedule to make improvements to the sanitary WWTP.**

Mr. David Renfrew, Elkem Metals Ashtabula LP
Elkem Ashtabula Facility
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3. Chlorine and Sulfur Dioxide Storage and Use: Ohio EPA notes that both chlorine dioxide and chlorine continue to be stored and used in the same building. Liquid chlorine is being used, but the self-contained breathing apparatus (SCBA) station is empty. These may be in violation of Occupational Safety and Health Administration (OSHA) rules. You and your operator should evaluate the safety of your current disinfection and dechlorination chemical usage and storage practices.

Please be advised that failure to submit complete and accurate eDMRs, failure to comply with the compliance schedule in your NPDES permit, failure to adequately operate and maintain your waste water treatment plant, failure to update your SWPPP, and failure to obtain PTIs for your Pond closures is each cause for an enforcement action pursuant to chapter 6111 of the Ohio Revised Code. Based on the above information, Elkem is considered to be in significant noncompliance with the terms and conditions of the NPDES permit and, therefore, subject to enforcement actions pursuant to Chapter 6111 of the Ohio Revised Code. Such actions can result in fines of up to \$10,000 per day of violation.

During this inspection, you indicated that you would be responding to Ohio EPA's May 5, 2011 NOV by September 30, 2011. You must inform this office, in writing, by September 30, 2011 as to the actions that have been or will be taken to correct the above violations. Your response 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 Ohio EPA does not hear from you, in writing, by September 30, 2011, the Ohio EPA Northeast District Office will refer this matter for enforcement.

If you have any questions or comments regarding this notification, 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/cl

att: Process flow Diagram, Permit 31B00012 from Permit Application

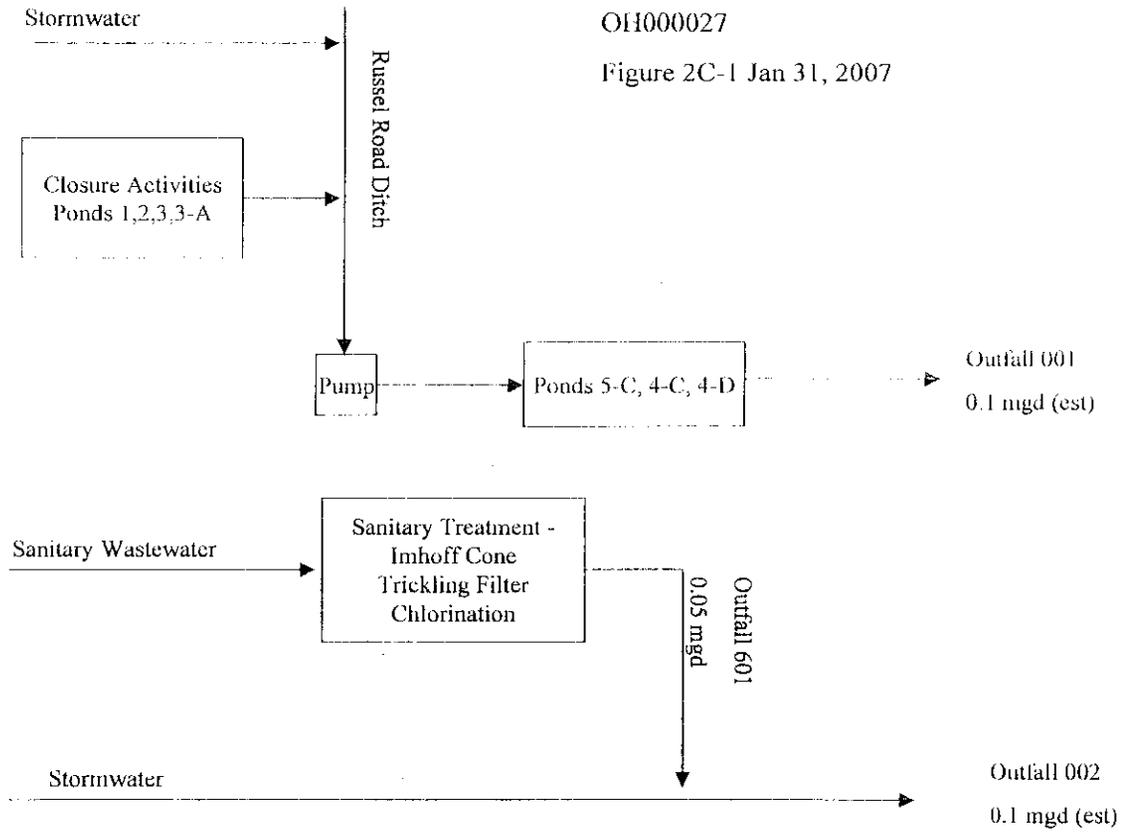
ec: Ted Conlin, DSW NEDO
Scott Winkler, DSW NEDO

pc: Frank Popotnik, Ohio EPA DHWM NEDO
Colum McKenna, Ohio EPA DSWIM NEDO
Michael Mearini, Supt, Ashtabula City WWTP

Elkem Metals Company - Ashtabula I.P

OH000027

Figure 2C-1 Jan 31, 2007



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