CWA COMPLIANCE EVALUATION INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5

Purpose:	Compliance Evaluation Inspection
Facility:	Belmont Plating Works, Inc. 3410 North River Road Franklin Park, IL 60131
Permit Number:	Metropolitan Water Reclamation District of Greater Chicago Industrial User Discharge Authorization No. 11138-5
Date of Inspection:	July 22, 2014 to July 23, 2014
EPA Representatives:	Donald R. Schwer III, Enforcement Officer, 312-353-8752; Jonathon Moody, Environmental Engineer, 440-250-1708; John Gierczak, Environmental Engineer, 440-250-1713; Maynard Shaw, Chemical Engineer, 312-353-5867; Dan Chachakis, Environ. Protection Specialist, 312-886-9871
MWRD Representatives:	Ronald Rogowski, Environmental Engineer Steve Spiewak, Pollution Control Officer Max Cole, Environmental Specialist
Facility Representatives:	Dave Toni, President Mark Toni, Vice President Jeff Zak, Consultant, Scientific Control Laboratories
Report Prepared by:	Donald R. Schwer III, Enforcement Officer, 312-353-8752
Report Date:	August 29, 2014

Inspector's Signature: DR Schwer III

1.0 Background

The purpose of this report is to describe, evaluate and document Belmont Plating Works, Inc. herein referred to as "BPW" compliance with the Clean Water Act (CWA) at its Franklin Park, Illinois facility on July 22-23, 2014. This inspection was performed pursuant to Section 308(a) of the Federal Water Pollution Control Act, as amended.

BPW is an electroplating job shop with a Standard Industrial Classification (SIC) code of 3471. BPW electroplates copper, nickel, cadmium, tin, chromium, and zinc. BPW's effluent is subject to Metropolitan Water Reclamation District of Greater Chicago (MWRD) Industrial User Discharge Authorization No. 11138-5. The Discharge Authorization became effective on February 15, 2013 and expires on February 14, 2017. The facility has been covered under an MWRD Discharge Authorization for approximately 25 years.

The Discharge Authorization covers the following, specific wastewater streams from its facility:

i) Electroplating Wastewater,
ii) Metal Finishing Wastewater, and
iii) Sanitary, Boiler Makeup Wastewater.

According to the Discharge Authorization, BPW has flow volume limits and effluent limits. The facility is required to monitor semi-annually for a minimum of 3 days within a two-week period and submit the results on or before April 27, 2014 and October 27, 2014. The monitoring location is at a manhole located on King Street. The facility is required to have a Slug Control, Containment, and Countermeasure Plan to provide protection from accidental discharge to the sewerage system.

In the past the facility had been covered under Illinois Environmental Protection Agency's (IEPA) General NPDES Permit for Storm Water Discharges from Industrial Activities. The facility applied for no exposure certification on June 8, 2010 and was granted no exposure certification on June 30, 2010.

2.0 Site Inspection

At 8:30 a.m. on July 22, 2014, I arrived at the facility. An opening conference was conducted in the facility's laboratory. The facility provided an overview of their operations. The facility was currently in its maintenance season. Although the facility plates many metals, barrel plating with Zinc is the most significant process conducted at the facility. The plating operations in Building 1 and 2 are existing sources regulated under 40 CFR 413- Subpart A- Electroplating of Common Metals Subcategory (40 CFR 413.14(c) and 40 CFR 413.14(g)). The plating operations in building 3 are new sources regulated under 40 CFR 433- Subpart A- Metal Finishing Subcategory (40 CFR 433.17).

The facility is permitted for an average daily flow of 151,000 gallons per day (GDP). In the latest discharge authorization request, it was calculated that 84% of the regulated process flow at the facility was 413 categorical processes and the remaining 16% of the flow at the facility was

433 categorical processes. The facility has a dilutional flow from sanitary and boiler makeup wastewater. The combined wastestream formula was used to calculate limits. Stormwater that is pumped to the pretreatment system was not accounted for in the combined wastestream formula calculation.

BPW water source is from the Village of Franklin Park. They have multiple water meters which they use to calculate their water use. BPW estimates the amount of water used in sanitary. Flow from the 413 and 433 categorical processes is calculated from incoming city water meters. A sub-meter is used to calculate flow for boiler makeup wastewater.

I asked about the floor drains around the facility and where they drained. Mr. Toni said all the floor drains have been plugged. I asked about where the roof drains in the facility drained. The facility did not know where the roof drains drained.

2.1 Walkthrough

Day 1

We performed a walkthrough of the facility. We walked the lab. I observed staining and corrosion in the laboratory sink on the north side of the wall. We continued to the processes in building 3 and then to the chemical storage. There was a drain in the floor of the chemical storage room. A hose was inserted into the drain. The hose appeared to be attached to the compressor. The room contained 55 gallon drums of chemicals. I observed secondary containment for the drums. I observed that some of the drums overhung the sides of the secondary containment. I observed dirt or soiled material around the drain. Later, Mr. Toni said the drain was connected to a dry sump.

We continued to building 2. We observed the wastewater treatment from the area next to the doorway. I asked to tour the waste water treatment area. Mr. Toni did not allow me to tour the wastewater treatment area due to safety concerns. I asked to observe the pH meters on the wastewater treatment area. Mr. Toni did not allow me to observe the pH meters. We continued to building 1. We observed process operations at building 1.

Day 2

We performed a walkthrough of the outside of the facility to evaluate areas that contained stormwater drains. I walked east along the north end of the facility. I observed that not all the stormwater drains have been disconnected as exhibited from the facility's diagram. The dock drain for building 1 and 3 were not disconnected. The facility had only disconnected the drains outside of building 2. For the drains that were blocked, the rain water is pumped to the waste water treatment system. I walked to the stormwater outlet at the Des Plaines River. The bottom of the stormwater outlet was corroded. The corrosion did not look like it had been actively occurring.

We walked around the outside of the business office at 9145 King Street to observe the stormwater drains. Historical aerials, that were reviewed prior to the inspection, exhibited stored

materials around this facility. The area surrounding the 9145 King Street location had a few dumpsters. I observed that the piles of stored materials as exhibited in the historical aerials were no longer there.

2.2 File Review

I reviewed records from 2011 until present. Documents discussed and reviewed included Continued Compliance Reports and enforcement related documents.

On July 12, 2012, MWRD issued a Notice of Noncompliance to BPW for exceedences in the daily max and monthly average limits for zinc concentrations. The cause of the problem was related to inadequate maintenance of the facility's sand filter system. The facility replaced sand filter cartridges and the system was rebedded. In the letter describing the cause of the problem to MWRD, BPW stated that a preventative maintenance checklist was developed for daily, weekly, and monthly checks. During the inspection, the facility could not produce this checklist. I questioned Mr. Javier De Jesus, Wastewater Treatment Operator, on the use of the checklist. He said he was unaware of the checklist. I asked what kind of checks he performs on the pretreatment system. He said he checks the pH in the tanks daily and calibrates the meters weekly throughout the system. He said he checks chemical levels and checks the flow of the water in the sand filter. Mr. De Jesus does not document any of the checks that he performs on the system. As far as the facility representatives were aware, there were no daily logs of the pretreatment systems performance, such as logs of the pH at various points in the system.

On September 29, 2011, MWRD issued Cease and Desist Order 88090 for exceedences in the zinc monthly average. This Cease and Desist Order was rescinded on November 28, 2011 based on additional data submitted by BPW.

On May 4, 2011, MWRD issued Cease and Desist Order 87896 for exceedences in the daily max and monthly average limits for zinc and mercury concentrations and monthly averages for total metals. The facility performed repeat sampling and responded with the required RD-112 form. On the RD-112 form dated May 20, 2011, the facility said the exceedences were caused by leaking seals from a pump for the cadmium cyanide plating tank solution. Additionally, the sand filter needed to be cleaned. Mr. Toni said the facility has not implemented any preventative maintenance procedures with regard to checking proper operation of pumps.

I reviewed the Slug Control, Containment, and Countermeasure Plan which the facility had improperly labeled as a Spill Prevention Control and Countermeasure Plan. The plan met the requirements of the Slug Control, Containment, and Countermeasure Plan.

3.0 Exit Briefing

EPA conducted a closing conference at 12:00 p.m. on July 23, 2014 in which I presented the following preliminary findings to Mr. Toni:

1. The facility diagram was mislabeled. All stormwater drains were labeled as sealed. Only the stormwater drains adjacent to building 2 were sealed.

2. The facility is not accounting for stormwater that is added to the pretreatment system when using the combined wastestream formula.

3. The facility had a Notice of Noncomplaince and Cease and Desist Order for effluent violations. The facility had not implemented procedures for preventative maintenance.

4.0 Potential Violations

1. When calculating the alternative concentration limits with respect to 40 CFR 403.6(e)(1)(i), all dilution or unregulated streams, including stormwater streams, need to included in the calculation. The facility did not account for stormwater when calculating alternative concentrations limits using the combined wastestream formula.

2. The facility has had numerous effluent violation which resulted in Notices of Noncompliance and Cease and Desist Orders. The facility has not implemented procedures for preventative maintenance.

5.0 Concerns

1. Stormwater drains were not labeled appropriately on the facility diagram.