

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 2
Enforcement and Compliance Assurance Division
Water Compliance Branch

Clean Water Act (CWA) Inspection Report

Program: Traditional NPDES	Inspection Type: Compliance Evaluation Inspection	
Permittee Name: Crucible Industries, LLC	NPDES/ICIS No.: NY0000825	
Inspection Entry Date: 9/27/2023 Inspection Entry Time: 9:10 AM	Inspection Exit Date: 9/27/2023 Inspection Exit Time: 3:00 PM	
Facility Inspected: Crucible Industries, LLC 575 State Fair Blvd. Syracuse, NY 13209 Lat, Long: 43.07022, -76.21169 NAICS / SIC Code: 3312		
EPA Representative(s): Katherine Green, Physical Scientist, CWA Compliance Section, US EPA Region 2		
State Representative(s): Valarie Ellis, P.E., Division of Water, NYSDEC Region 7 Matt Widay, P.E., Division of Water, NYSDEC Region 7		
On-Site Facility Representative(s): James Vreeland, Environmental & Maintenance Manager Steve Ericson, Head of Electrical Maintenance Anthony DiGiovanni, CNS Companies		
Responsible Official: James Vreeland, Environmental & Maintenance Manager		
Name and Signature of Inspector KATHERINE GREEN Katherine Green, CWA Compliance Section	Agency/Office/Phone Number Digitally signed by KATHERINE GREEN Date: 2024.01.02 16:54:44 -05'00' USEPA/R2/212-637-4226	Date
Name and Signature of Management QA Reviewer Justine Modigliani, P.E., Acting Manager Water Compliance Branch	Agency/Office/Phone Number Digitally signed by JUSTINE MODIGLIANI Date: 2024.01.02 17:07:32 -05'00' USEPA/R2/212-637-4268	Date

INTRODUCTION:

On September 27, 2023, the United States Environmental Protection Agency (EPA), Region 2, and the New York State Department of Environmental Conservation (NYSDEC), Region 7, conducted an unannounced Compliance Evaluation Inspection (CEI) of the Crucible Industries, LLC (the “Permittee” or “Crucible”) facility located at 575 State Fair Boulevard in Syracuse, New York (the “Facility”). Crucible is a steel manufacturer and conducts industrial activity under Standard Industrial Classification (SIC) code 3312 (Steel Works, Blast Furnaces, and Rolling Mills). Ms. Katherine Green of EPA Region 2 led the CEI and presented credentials to Mr. Jim Vreeland, Environmental & Maintenance Manager, upon arrival. The purpose of the CEI was to evaluate compliance with Crucible’s NYSDEC-issued State Pollutant Discharge Elimination System (SPDES) permit, NY0000825 (the “Permit”). The Permit went into effect on June 1, 2015 and expired on May 31, 2020 but

remains in effect under the provisions of the State Administrative Procedure Act (SAPA). Weather at the time of the CEI was sunny and approximately 65°F. During the CEI, Mr. Vreeland accompanied EPA and NYSDEC on a walk-through of the Facility.

FINDINGS AND OBSERVATIONS:

The Facility is located on a 73-acre property and is approximately 125 years old. Approximately 200 employees work at the Facility, which operates 24-7, with main production from 5 AM – 3 PM daily. Mr. Vreeland stated that 6 MG of water is used by the Facility each month as non-contact cooling water and contact cooling water, the latter of which is treated at the onsite wastewater treatment plant (WWTP) before being discharged. The Permit authorizes stormwater, groundwater and process wastewater discharges to Tributary 5A of Onondaga Lake through 11 outfalls, as follows:

Table 1 – Outfall Summary in SPDES Permit

<u>Outfall #</u>	<u>Description</u>
001	Treated process wastewater, lab rinse water, stormwater, groundwater, steam condensate
002	Stormwater and groundwater
003	Stormwater and groundwater
004	Stormwater, groundwater and steam condensate
005	Stormwater, groundwater, steam condensate and off-site flow
006	Stormwater, groundwater, steam condensate and cooling tower blowdown
007 - plugged	Non-contact cooling water, stormwater, groundwater and steam condensate
008	Stormwater, groundwater and steam condensate
011	Sink, stormwater, groundwater and steam condensate
012	Stormwater, groundwater and steam condensate
013	Non-contact cooling water, stormwater, groundwater and steam condensate

According to Mr. Vreeland, average flow through the WWTP is 350K gpd, which gets up to about 800K gpd during storm events. Flow is monitored continuously at the WWTP outfall (001) and instantaneously at the other outfalls. The Facility utilizes Certified Environmental Services, Inc. (CES) as its certified lab.

At the time of the CEI, Crucible had experienced a total of 14 effluent exceedances at 7 of its outfalls since January 2019, with exceedances most frequently occurring at outfall 011:

Table 2 – Effluent exceedances at Crucible (NY0000825) from January 2019 – September 2023

<u>Outfall #</u>	<u>Monitoring Period Date</u>	<u>Parameter Description</u>	<u>Statistical Base Type</u>	<u>Limit Value</u>	<u>DMR Value</u>	<u>Units</u>	<u>% Exceedance</u>
1	10/31/2020	Iron, total (as Fe)	DAILY MX	9.0703	10.7483	kg/d	18
4	2/29/2020	Solids, total suspended	DAILY MX	50	54	mg/L	8
5	6/30/2021	Solids, total suspended	DAILY MX	50	90	mg/L	80
5	3/31/2022	Solids, total suspended	DAILY MX	50	60.4	mg/L	21
5	7/31/2023	Solids, total suspended	DAILY MX	50	55	mg/L	10
6	4/30/2020	Oil & grease	DAILY MX	15	16	mg/L	7
8	4/30/2021	Solids, total suspended	DAILY MX	50	55	mg/L	10
11	11/30/2021	Oil & grease	DAILY MX	15	16	mg/L	7
11	12/31/2021	Oil & grease	DAILY MX	15	27	mg/L	80
11	5/31/2022	Solids, total suspended	DAILY MX	50	88	mg/L	76

11	5/31/2022	Oil & grease	DAILY MX	15	61.7	mg/L	311
11	6/30/2022	Solids, total suspended	DAILY MX	50	88	mg/L	76
11	6/30/2022	Oil & grease	DAILY MX	15	61.7	mg/L	311
12	2/28/2022	Mercury, total (as Hg)	DAILY MX	5E-05	7.01E-05	mg/L	40

Crucible is under a 1/9/2015 Consent Order with the NYSDEC, R7-20121030-88, under which it is required to address oily sheen discharges from the Facility. Under the Consent Order, Crucible developed an Oil & Grease (O&G) Investigative Plan, dated December 2021, updated October 2022, which details dry and wet sampling and other tasks to be performed over 30 months to identify potential sources of O&G to outfalls 006, 011 and 012.

According to Mr. Vreeland, the sewer line draining to outfall 011 was last cleaned approximately eight (8) years ago. During the Facility walk-through, sediment was observed on the roadways near the start of the 011 sewer line. Mr. Vreeland stated that the roads are swept once per year, in the fall before winter. The 011 sewer line receives roof drainage and also passes through the building containing Blaw-Knox (BK) #1 and #2, surface grinders which use coolant/hydraulic fluid. Flow passes through a tube skimmer and an oil/water separator before discharging via outfall 011 to Tributary 5A of Onondaga Lake.

Based on observations at the time of the CEI and review of materials prior to, during, and subsequent to the CEI, EPA identified the following Potential Non-Compliance Items and Areas of Concern:

POTENTIAL NON-COMPLIANCE ITEMS

1. Paragraph 1 under Industry Best Management Practices (page 14 of the Permit) requires the Permittee to develop, maintain, and implement a Best Management Practices (BMP) plan, a copy of which must be maintained at the Facility and shall be made available to authorized Department representatives upon request. Subsequent to the CEI, on October 6, 2023, EPA requested a copy of Crucible's current BMP plan via email but has not received the requested plan to date.
2. Paragraph 4 under Industry Best Management Practices (page 14 of the Permit) requires the Permittee to identify BMPs that have been established to prevent or minimize potential releases of pollutants to State waters, and where BMPs are inadequate or absent, appropriate BMPs shall be established. As described below, EPA observed areas of the Facility where BMPs were inadequate or absent.
 - a. As identified in photographs DSCN0329 – DSCN0332, coolant used in the BK #2 process collects on porous concrete flooring in the vicinity of the sewer line tributary to outfall 011. Although no oil sheen was observed in Tributary 5A at outfall 011 at the time of the CEI, Crucible experienced O&G effluent limit exceedances in 2021 and 2022, and oil sheens have been observed at outfall 011 since Crucible began implementing its O&G investigative plan. Fingerprint sampling performed as part of the investigative plan pointed to BK #2 as the source of the sheen. More rigorous good housekeeping and best management practices are needed in this area believed to be contributing to O&G issues at outfall 011.
 - b. As identified in photograph DSCN0358, no boom was in place at Outfall 011 at the time of the CEI.
 - c. Although no turbid discharge was observed from outfall 005 at the time of the CEI, the permittee experienced Total Suspended Solids (TSS) effluent limit exceedances at outfall 005 in 2021, 2022

and 2023. During the CEI, EPA observed the following potential sources of TSS, as well as other pollutants, in areas of the Facility draining to outfall 005:

- i. As identified in photographs DSCN0347 and DSCN0348, sediment had accumulated around a drain near the southwest corner of the dirt yard. In addition, dumpsters containing metals were located immediately adjacent to the drain and were uncovered.
 - ii. As identified in photographs DSCN0349 – DSCN0351, a storm drain surrounded by sediment lacked inlet protection. In addition, uncovered dumpsters containing a lyme mixture and a small pile of spilled lyme were immediately adjacent to the unprotected drain.
 - iii. As identified in photograph DSCN0355, a damaged manhole near the large tank located in the center of the dirt yard was in a condition such that sediment and other pollutants from the yard appeared to be able to enter the sewer leading to outfall 005 from the side of the manhole.
3. The Permit authorizes pollutant discharges through outfalls as described in Table 1, above, to Tributary 5A of Onondaga Lake in accordance with: effluent limitations; monitoring and reporting requirements other provisions and conditions set forth in the Permit; and 6 NYCRR Part 750-1 and 750-2. NYCRR Part 750-2.8(a)(2) requires Crucible to properly operate and maintain the Facility at all times. Proper operation and maintenance (O&M) also includes as a minimum, a preventive/corrective maintenance program and written O&M procedures. EPA observed the following O&M deficiencies at the onsite WWTP at the time of the CEI:
 - a. As identified in photographs DSCN0363 – DSCN0366, Tank A contained significant vegetative growth and had a broken skimmer arm, which Mr. Vreeland stated had been broken for close to a year. Mr. Vreeland explained that in order to clean the tank, all water used at the Facility must be turned off, and it takes four people approximately six hours to clean it. While EPA acknowledges the challenges associated with turning off water for an extended period of time at the Facility, Crucible must ensure proper O&M of the WWTP.
 - b. At the time of the CEI, Crucible did not have a preventative/corrective maintenance program or written O&M procedures for the WWTP.

AREAS OF CONCERN:

1. Downstream of BK #2 but prior to outfall 011 are a tube skimmer and oil/water separator. During the CEI, Mr. Vreeland stated that the tube skimmer drum is pumped down every three (3) days (to a tote, which is pumped to a truck and disposed offsite as used oil), and the oil/water separate is vacuumed out every two (2) weeks. It was unclear if regular maintenance activities associated with these two structural BMPs are documented as part of the Facility's BMP plan.
2. As identified in photographs DSCN0371 and DSCN0372, the inlet protection around a catch basin upstream of outfall 003 was damaged and in need of repair.
3. As identified in photographs DSCN0374 – DSCN0376, EPA observed oil residue on the pavement outside the straddle truck maintenance garage. At the time of the CEI, a straddle truck undergoing maintenance

was parked on top of the drain. According to Mr. Vreeland, the drain in this area flows to the WWTP; however, spills should be cleaned up and oily discharges to the drain minimized in order preserve adequate functioning of the WWTP.

CLOSING CONFERENCE:

EPA discussed preliminary findings from the CEI with Mr. Vreeland, Mr. Ericson and Mr. DiGiovanni on September 27, 2023, prior to departing the Facility.

ATTACHMENTS:

1. Photo Log
2. Photographs