

REPORT OF INDUSTRIAL STORM WATER COMPLIANCE EVALUATION INSPECTION (CEI)

At
Sioux City Foundry
801 Division Street
Sioux City, Iowa
NPDES Number: IA3870-3715

On
January 18, 2022

By
U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)

INTRODUCTION

An Industrial Storm Water inspection was performed at Sioux City Foundry in Sioux City, Iowa on January 18, 2022. This inspection was performed pursuant to Section 308(a) of the Clean Water Act as amended. This inspection was conducted in accordance with the procedures described herein and followed all applicable EPA Region 7 Standard Operating Procedures. This narrative report and attachments present the findings and observations made during the Industrial Storm Water CEI.

PARTICIPANTS

Sioux City Foundry:

Valerie Corbin, EHS Director, 712-251-5666, vcorbin@siouxcityfoundry.com
Donald Pinney, Maintenance Foreman, 712-251-8006, dpinney@siouxcityfoundry.com

U.S. Environmental Protection Agency (EPA):

Hannah Lewis, Life Scientist, 913-551-7679, lewis.hannah@epa.gov

INSPECTION PROCEDURES

I arrived unannounced at Sioux City Foundry and presented myself at the facility office on January 18, 2022. I stated that I needed to conduct a storm water inspection of the facility. I met with Ms. Corbin, presented my credentials, and explained the scope and purpose of the inspection. I informed Ms. Corbin that I would be performing a complete industrial stormwater inspection under the authority of Section 308(a) of the Federal Water Pollution Control Act to evaluate the facility's compliance status with the requirements of the Clean Water Act and with the National Pollution Discharge Elimination System (NPDES) permit, which was issued by the Iowa Department of Natural Resources (IDNR). I explained that the inspection would consist of a review of required records, a review of the Storm Water Pollution Prevention Plan (SWPPP), and a visual inspection of the facility. I stated that I would document my findings and

observations by making photocopies, taking photographs and/or videos, and obtaining statements from facility staff. During that time, Ms. Corbin provided a copy of the SWPPP and SWPPP site inspections, and Mr. Pinney joined the inspection. I explained the Confidential Business Information (CBI) form, and Ms. Corbin returned a signed copy to me without any claims.

Prior to entering the facility, I conducted a visual reconnaissance of the facility searching for areas of concern observable from the public roads such as discharges, drainage patterns, flow directions, distance and direction of nearest perennial waters, visual condition of perennial waters, facility location, and layout. The north, east, and south property boundaries include roadways with curb inlets, while an adjacent business borders the west boundary.

Mr. Pinney escorted me on a tour of the facility. Ms. Corbin was unable to attend the entire inspection on January 18, so an exit briefing was conducted with her by phone on January 24, 2022. This phone conversation included the findings and recommendations of the visual inspection. See attachment 2 for the digital photographs and photo log. See attachment 3 for the facility layout including photo locations.

FACILITY DESCRIPTION

Facility Operations

The facility's activities include, but are not limited to welding, cutting, painting, and storing of steel and rebar; coating of rebar with epoxy; and abrasive blasting. The waste fines from abrasive blasting conducted indoors are collected and bagged for disposal. According to Mr. Pinney, outdoor abrasive blasting activities have not occurred for at least five years due to needed equipment repairs. Painting activities ceased approximately 8 months prior to the inspection but could restart in the future. Sioux City Foundry owns 23.8 acres of property at 801 Division Street, but industrial activities classified under Standard Industrial Classification code 3441 are only conducted on approximately 15 acres. The facility is located approximately 140 yards from the Floyd River in Sioux City, Iowa (attachment 3). A levee lies between the facility and the river. The facility discharges stormwater to the City of Sioux City's storm sewer system which leads through the levee and discharges to the Floyd River. Facility operations occur Monday through Friday for twelve hours each day. Depending upon staffing needs, there are between 70 and 119 people employed at the facility at one time.

Rebar is delivered by rail or truck and stored outdoors along the east side of the site (Photo 1). The rebar is sorted using a shaker table located in the southeast corner of the site (Photo 2). Scrap metal is disposed of in roll-off dumpsters near the shaker table (Photo 10). Steel is delivered by truck and stored indoors. Cutting, welding, coating, painting, and abrasive blasting of the steel or rebar is conducted indoors.

Fuel is stored in one of three aboveground storage tanks near the west boundary (photos 15, 16). The two 500-gallon gasoline tanks are surrounded by a concrete secondary containment structure. A 2,000-gallon double-walled tank holding diesel is next to the concrete containment structure. Hazardous and non-hazardous wastes stored in 55-gallon drums are located near the west boundary under a lean-to with secondary containment (photo 17). The lean-to is not enclosed on the east side allowing precipitation to enter the secondary containment structures

and lessening their capacity to hold leaked material from the drums. These containment structures should be monitored on a regular basis, especially after precipitation events.

Stormwater runoff from the building rooftops is collected by gutters and directed to storm sewer inlets. There are 21 outdoor storm sewer inlets across the site as seen on the SWPPP map (attachment 4). Some of the inlets are high-impact areas due to large volumes of runoff or proximity of potential pollutants. Six inlets between the Rebar Epoxy Shop and the Machine Center receive runoff from rooftop gutters. Five inlets receive runoff from the rebar storage areas. One inlet receives runoff from the southwest roll-off dumpsters and bagged abrasive blasting waste. One inlet receives runoff from the shaker table and a scrap metal roll-off dumpster in the southeast corner of the facility. One inlet receives runoff from the northeast gate and 18-wheeler parking. Also, stormwater runoff from the northwest portion of the site flows to a retention pond. The pond does not have a discharge pipe; a hose is used to pump water from the pond.

Three storm sewer inlets are located inside the Steel Service Center/Fabrication building. One is dedicated to funneling roof drains down a vertical pipe directly to the storm sewer inlet in the floor. During the inspection, water was draining down the vertical pipe. A second storm sewer inlet is located next to it. This second inlet was elevated above the main floor. The area surrounding the second inlet was not wet and did not show evidence of any spills nearby. Mr. Pinney stated that the inlet is not used by facility staff. A third storm sewer inlet is located near the incoming warehouse doors at the northeast corner of the building (photo 18). The area surrounding the inlet was dry and did not show evidence of any spills nearby. Mr. Pinney stated that the third inlet is not used by facility staff. The indoor storm inlets are considered illicit connections to the City's storm sewer system. The facility should contact the City to determine the best method to address the issue so that illicit discharges cannot occur.

Regulatory History

Sioux City Foundry was authorized to discharge stormwater associated with industrial activities under the IDNR NPDES General Permit No. 1 on November 24, 1998. The current general permit is effective through February 28, 2023 (attachment 5). According to ECHO (Enforcement and Compliance History Online) and IDNR, the facility has not been inspected by IDNR for stormwater concerns.

FINDINGS AND OBSERVATIONS

An Industrial Storm Water CEI to determine whether Sioux City Foundry is in compliance with their NPDES General Permit was conducted on January 18, 2022. The following findings were noted during the plant and record review. A complete summary is given in the NPDES Industrial Storm Water Worksheet (Industrial) as attachment 1. The weather conditions at the time of the inspection were windy and 50°F. According to the High Plains Regional Climate Center website, a 24-hour rainfall event over 0.50 inches near Sioux City was not recorded during the previous 19 days. However, a snowfall event of 1.4 inches was recorded on January 14, 2022.

Storm Water Pollution Prevention Plan (SWPPP)

The facility's NPDES Permit requires that the facility have a SWPPP (attachment 4). Ms. Corbin provided a hard copy of the SWPPP and site inspections during the inspection. Later, a digital copy of the SWPPP was emailed to me. Three deficiencies were found related to the SWPPP. Personnel training on the SWPPP was not conducted in 2021 per Section 8.0 of the SWPPP. Also, the SWPPP was found to be incomplete because it did not include the three storm sewer inlets located indoors. Lastly, the SWPPP does not include structural controls at the outdoor storm inlets to control sediment and debris.

Other Observations

Poor housekeeping practices were noted around some storm sewer inlets. Yellow tags, wire, and small pieces of wood were present on top of or around the rebar area inlets (Photos 1, 3, 13). Fines produced during abrasive blasting are collected and bagged for disposal. The bagged fines are stored outdoors near the southwest roll-off dumpsters. During the inspection, the bags were not sealed which could allow the fines to escape and enter the nearby storm inlet (Photo 7). As seen in Photo 7, snow melt was draining into the nearby storm inlet. The snow melt appeared clear.

Surface areas along the north, east, and west of the Steel Service Center/Fabrication building are comprised of compacted rock and sand. Surface areas south of the Maintenance Building and Rebar Epoxy Shop are comprised of concrete or grass. None of the outdoor storm inlets had inlet protection devices installed. Although sediment and debris were not noted inside the inlets during the inspection, the potential for pollutants like sediment and debris to enter the inlets is high. The outdoor storm sewer inlets, especially inlets to the north, east, and west of the Rebar Epoxy Shop, should have inlet protection devices to control pollutants.

SUMMARY

Part III.C.4.B(8) of the NPDES permit requires a pollution prevention plan to identify periodic dates for training personnel on the SWPPP. According to Section 8.0 of the SWPPP, personnel training on the SWPPP is to be conducted annually. Training records were provided for 2019 and 2020, but training was not conducted in 2021.

The SWPPP is incomplete because it does not include the storm sewer inlets located indoors, as required by Part III.C. of the NPDES permit.

The indoor storm inlets are connected to the City of Sioux City's storm sewer system and thus are considered illicit connections. The facility should inform the City of the indoor storm inlets and discuss with the City how to address the issue preventing any illicit discharge as required by Part III.C.4.D. of the NPDES permit.

The facility did not implement good housekeeping efforts like picking up trash and debris within the rebar storage areas and sealing the bagged fines from abrasive blasting activities prior to placing them outdoors for disposal, as required by Section 6.0 of the SWPPP and Part III.C.4.B(4) of the NPDES permit.

The facility should investigate and install inlet protection devices at the outdoor storm sewer inlets to prevent pollutants from entering the inlets, as required in by Part III.C.4.B(7) of the NPDES permit.

The facility should ensure regular monitoring of the outdoor secondary containment structures for available capacity, especially after precipitation occurs.

The facility emailed documents on January 31 and March 4 in response to the inspection (attachment 6).

HANNAH
LEWIS

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Hannah Lewis
Life Scientist

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Nicole Moran
Acting Chief, Water Branch

ATTACHMENTS:

1. NPDES Industrial Storm Water Worksheet (6 pages)
2. Photo Log and Photos (11 pages)
3. Facility Layout with Photo Locations (2 page)
4. Sioux City Foundry SWPPP (70 pages)
5. IDNR Stormwater Runoff from Industrial Activity General Permit No.1 (30 pages)
6. Facility Responses to Inspection (17 pages)