



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO ATTENTION OF
ECW-15J

VIA EMAIL

Mr. Tom Maicher
Environmental Manager
Cleveland Cliffs Burns Harbor
250 West U.S. Highway 12
Burns Harbor, IN 46304

Subject: August 28, 2023, Reconnaissance Inspection Report for Cleveland-Cliffs Burns Harbor, NPDES Permit Number IN0000175

Dear Mr. Maicher:

Enclosed, please find a copy of the U.S. Environmental Protection Agency Inspection Report that describes and documents the activities at Cleveland-Cliffs Burns Harbor, LLC on August 28, 2023.

The purpose of the inspection at Cleveland-Cliffs Burns Harbor, LLC was to perform a reconnaissance inspection of the facility.

If you have any questions or concerns regarding this letter, or the inspection report, please contact Joan Rogers at (312) 886-2785 or at rogers.joan@epa.gov.

Sincerely,

RYAN BAHR
Digitally signed by RYAN
BAHR
Date: 2023.08.28
15:39:35 -05'00'

Ryan J. Bahr, Section 2 Supervisor
Water Enforcement and Compliance Assurance Branch

Enclosure

cc: Nicholas Ream, Environmental Engineer
Indiana Department of Environmental Management

Jason House, Branch Chief of Wastewater
Compliance Indiana Department of Environmental
Management

Morgan Swanson, Environmental Engineer
Cleveland-Cliffs Burns Harbor

Vinod Barot, Senior Environmental Engineer
Cleveland-Cliffs Burns Harbor

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

Purpose: Compliance Evaluation Inspection

Facility:

Cleveland Cliffs Burns Harbor, LLC
250 US-12
Burns Harbor, Indiana 46304
Porter County
41.625, -87.117

NPDES Permit Number: IN0000175

Date of Inspection: August 28, 2023

EPA Representatives:

Joan Rogers, Environmental Scientist 312-886-2785
Rogers.joan@epa.gov

State Representatives:

Nicholas Ream, Indiana Department of Environmental Management 219-730-1691
Wastewater Inspector
nream@idem.IN.gov

Miya Spratt, Indiana Department of Environmental Management 219-464-0233
Wastewater Inspector
mspratt@idem.in.gov

Craig Shedlak, IDEM Intern 317-233-5298

Facility Representatives:

Tom Maicher, Manager of the Environmental Plant 219-787-4961
Robert.maciel@ClevelandCliffs.com

Morgan Swanson, Environmental Engineer 219-787-2646
Morgan.swanson@ClevelandCliffs.com

Billi McDowell, Senior Maintenance Engineer

Report Prepared by: Joan Rogers

Inspector Signature/Date: JOAN ROGERS
Digitally signed by JOAN ROGERS
Date: 2023.08.28 15:25:33 -05'00'

Approver Name and Title: Ryan Bahr, Supervisor, Section 2, WECAB

Approver Signature/Date: RYAN BAHR
Digitally signed by RYAN BAHR
Date: 2023.08.28 15:39:15 -05'00'

1. BACKGROUND

The purpose of this report is to describe and document the reconnaissance inspection at the Cleveland Cliffs Burns Harbor facility on August 28, 2023. This inspection was performed pursuant to Section 308(a) of the Federal Water Pollution Control Act, as amended. This was a joint inspection by EPA and the Indiana Department of Environmental Management (IDEM).

The Cleveland Cliffs Burns Harbor (CCBH) facility is one of the largest fully integrated steel mills in North America, with the capacity to produce approximately 5 million tons of raw steel per year. They operate under NPDES Permit No. IN0000175, which was issued on January 1, 2022, and expires on December 31, 2026.

The inspection on August 28, 2023, was a reconnaissance inspection to determine compliance with the NPDES Permit and observe the outfalls in addition to observing and discussing the wastewater generated within the 80" Hot Strip Mill.

2. SITE INSPECTION

Site Entry and Opening Conference

Arrival Time:	9:09 A.M.
Presented credentials?	Yes.
Credentials presented to whom and at what time?	9:13 A.M. to Morgan Swanson.
Was an opening conference held? With whom?	Yes, with Ms. Swanson.
If photographs or documents were taken, does the facility consider any to be Confidential Business Information (CBI)?	No.
Which information does the facility consider to be CBI?	None.
Is the EPA vehicle parked in approved location?	Yes.
Location where EPA vehicle was parked?	Environmental Services Building.

EPA inspectors, Ms. Joan Rogers, and IDEM inspectors Mr. Nick Ream, Ms. Spratt, and Mr. Shedlak drove to the Outfall 011 and discussed the purpose of the inspection with Ms. Swanson. During the opening conference at 9:14 A.M., the inspection team explained that the focus of the inspection was to determine compliance with the facility's NPDES Permit, observe the outfalls and discuss and observe the 80" Hot Strip Mill to understand the wastewater that is generated in that process.

Facility Walkthrough

See Attachment A for the photolog of the photos taken during the facility walkthrough.

Outfall 011

The inspection team followed CCBH personnel to Outfall 011 and arrived at 9:13 A.M. In the sample building for Outfall 011, the pump tubing had been changed on August 4, 2023, and the suction tubing had been changed on August 10, 2023. The sampler was working properly, but the temperature on the thermometer inside the sampler was 6°C. Ms. Swanson stated that the samples had just been removed from the sampler within the past hour and that probably was why the inside of the sampler was over the required temperature. Later in the inspection, Ms. Swanson provided the inspection team with a copy of the Earlyman Worksheet that listed the temperature of the inside of the sampler when facility personnel arrived to take the samples out. The temperature of the sampler at that time was 2°C. EPA did not observe any sheening in the water at Outfall 011 on the day of the inspection.

While driving to and from Outfall 011, EPA observed a tree growing out of an aerator in the south lagoon and vegetation growing out of the weir for the south lagoon.

Outfall 001

EPA and IDEM followed facility personnel to Outfall 001 and arrived there at 9:30 A.M. The auto-sampler in the sample building appeared to be functioning properly and no sheen was observed on the water on the day of the inspection. The ISCO pump tubing was last changed on July 5, 2023, and the suction tubing was changed on August 10, 2023. The flow at the time of the inspection was 111,000 GPM.

80" Hot Strip Mill

The inspection team arrived at the 80" Hot Strip Mill at 10:09 A.M. and met Ms. Billi McDowell. Ms. McDowell explained that the purpose of the 80" Hot Strip Mill is to take the slabs of steel, heat them up in a furnace, and roll them out. The rough rolling process reduces the slab from 10" thick to approximately 1" to 1.5" thick. The finishing rolling process then rolls the steel to a few millimeters thick and rolls the steel into a coil.

Water in the 80" Hot Strip Mill is generally used to cool the rolls that roll out the steel. Additional water is used to clean the scale off the steel. The 80" Hot Strip Mill uses Lake Michigan water which has been filtered.

Wastewater during cooling of the rolls drops into a flume below the roll table and flows to either the Rougher Scale Pit or the Finisher Scale Pit. Oil skimmers in each pit remove waste oil from the wastewater. Wastewater in the Rougher Scale Pit can be reused after scale has dropped out, but the wastewater from the Finisher Scale Pit flows to the Dirty Industrial Wastewater (DIW) Sewer. The major concerns for the environmental group are removal of the oil in the wastewater and the temperature of the wastewater.

EPA and IDEM inspectors observed a slab of steel move through the rollers until it passed through the Finishing process and was wound onto a coil. The steel is approximately 2000°F as it passes through the rollers and the 80" Hot Strip Mill can have three slabs of steel going through the rolling process at one time.

Outfall 003

EPA, IDEM, and CCBH personnel then drove to Outfall 003 and arrived at 11:15 A.M. Although the water was rather turbid, there was no sheening observed.

Outfall 002

The inspectors arrived at Outfall 002 at 11:30 A.M. The inspectors observed foam in the Outfall channel but only a minimal amount of foam outside of outfall 002. There was an external boom installed on the day of the inspection.

Closing Conference

EPA and IDEM provided a closing conference to the facility personnel at Outfall 002 at 11:45 A.M. stating that they didn't observe any areas of concern on the day of the inspection.

EPA exited the facility at 11:50 A.M.

3. DOCUMENTS RECEIVED FROM FACILITY

EPA received one drawing of the water processes at the 80" Hot Strip Mill and the Earlyman Worksheet for the Outfall samplers.

4. AREAS OF CONCERN

There were no areas of concern.

5. LIST OF ATTACHMENTS

A) Photolog