



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: March 27, 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 March 27, 2023.

The purpose of the reconnaissance inspection at Cleveland-Cliffs Burns Harbor, LLC was to discuss and observe the Storm Water Pollution Prevention Program, among other topics.

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: 2023.05.04
09:59:55 -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

Ramelito Biscocho, Wastewater Inspector
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 Reconnaissance 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:

March 27, 2023

EPA Representatives:

Joan Rogers, Environmental Scientist
Rogers.joan@epa.gov

312-886-2785

State Representatives:

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

219-730-1691

Ramelito Biscocho, Indiana Department of Environmental Management
Wastewater Inspector
rbiscoch@idem.in.gov

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Miya Spratt, Indiana Department of Environmental Management
Wastewater Inspector
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Facility Representatives:

Tom Maicher, Manager of the Environmental Plant
Robert.maciel@ClevelandCliffs.com

219-787-4961

Patrick Gorman, Operator
Patrick.gorman@ClevelandCliffs.com

Vinod Barot, Senior Environmental Engineer
Vinod.barot@ClevelandCliffs.com

219-787-2964

Report Prepared by: Joan Rogers

Inspector Signature/Date: JOAN ROGERS
Digitally signed by JOAN ROGERS
Date: 2023.04.26 15:47:07 -05'00'

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

Approver Signature/Date: RYAN BAHR
Digitally signed by RYAN BAHR
Date: 2023.05.04 09:57:46 -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 March 27, 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 March 27, 2023, was a Compliance Evaluation Reconnaissance Inspection to discuss the Storm Water Pollution Prevention Program (SWPPP) and observe the outfalls.

2. SITE INSPECTION

Site Entry and Opening Conference

Arrival Time:	9:00 A.M.	
Presented credentials?	Yes.	
Credentials presented to whom and at what time?	9:36 A.M. to Pat Gorman, Tom Maicher, and Vinod Barot.	
Was an opening conference held? With whom?	Yes. Mr. Gorman, Mr. Maicher, and Mr. Barot	
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 inspector, Ms. Joan Rogers, and IDEM inspectors Mr. Nick Ream, Ms. Miya Spratt, and Mr. Ramelito Biscocho, followed Mr. Barot to the Environmental Services Building conference room from the main office after EPA and IDEM inspectors received their visitor badges. During the opening conference at 9:45 A.M., the inspection team explained that the focus of the inspection was to discuss the SWPPP, the annual report for the SWPPP, follow up on the foam and oil investigations, and observe the outfalls.

The discussion started with a request to send the most recent version of the SWPPP to EPA and IDEM. Additionally, the inspection team wanted a copy of the most recent annual report for the SWPPP to be emailed. Those documents were emailed to IDEM and EPA on March 28, 2023.

The inspection team then asked for a summary of the oil in the foam at Outfall 002. Mr. Gorman stated that during an investigation into oil usage at the facility, drains in the Power House were discovered to be connected to underground tunnels, called the North and South Tunnels, for non-contact cooling water to flow to Outfall 002. Leaking oil from a turbine condensate pump. A drain pan below the pump collects the condenser water from the #1, #2, and #3 turbo blowers. A leaky seal for the #1 turbine condensate pump allowed oil to get into the drain pan which overflowed onto the floor and to a nearby floor drain. That drain was one of the drains that was connected to the South Tunnel and the oil was transported to Outfall 002.

CCBH personnel have begun to map all the floor drains, approximately 235, and install new seal tight manholes on any that had a connection to the North or South Tunnels. Some of the floor drains were

installed to allow flow to Outfall 002, but the facility personnel are closing all of them. Any oil released in the Power House will be contained and sold to a third-party vendor for reuse. New maps of the drains will be created. Mr. Maicher recently ordered signage for any drains that flow to the Outfalls. The signage says, "Drains to Outfall 002." EPA and IDEM inspectors requested to see the drain pan below the turbine condensate pump and the drain it flowed to.

Ms. Joyce Casillas is the person responsible for the SWPPP and SWPPP updates, but Mr. Barot stated that the facility just completed its annual stormwater training. There are 19 contractors in the SWPPP team. The team recommends changes to the SWPPP and then it is updated. The updated version with the new recommendations is not complete yet. Some of the new recommendations included the findings from the investigation at the Power House. Mr. Barot stated that there were no major stormwater issues discovered during the last round of inspections.

Mr. Ream then turned the focus of the discussion to the oil sheens that were first observed at Outfalls 011 and 001 in December 2022 and most recently on February 24, 2023. On March 1, 2023, CCBH submitted a five-day letter to IDEM stating that a leak of approximately 3,000 gallons of oil from the 602 Oil House at the Finishing Mill had been discovered. The leak was due to a transfer valve was left open while filling a day tank from the bulk oil tanks. The bulk oil tanks consist of two tanks, EGL1 and EGL2, which are tied together. When the day tank overflowed, the oil was pumped to a sump and then to the wastewater treatment facilities. This was more oil than those facilities can handle, and the oil flowed to the internal Outfall 011 and the external Outfall 001.

As a preventative measure, CCBH personnel have installed a rapid loss alarm on the bulk tanks that will send a notice via email if the bulk tanks drain 150 gallons or more within thirty minutes or oil is being removed from the tanks for more than two hours. They have also installed a level sensor on the day tank which also will notify operators via email if it the day tank is close to overflowing. EPA and IDEM inspectors requested to see where the sensors and alarms were placed.

The inspection team concluded the interview portion of the inspection at 10:21 A.M.

Facility Walkthrough

See Attachment A for the photolog of the photos taken during the facility walkthrough. EPA and IDEM stated that they would like to observe the Power House and Outfall 002, Outfall 003, the 602 Oil House at the Finishing Mill, Outfall 011, and Outfall 001.

Power House

EPA and IDEM inspectors arrived at the Power House at 10:36 A.M. where they met Mr. Josh Davich, Manager of Power Station Operations. Mr. Davich led the inspection team to the drain that allowed flow from the drain pan below the #1 turbine condensate pump and the oil from the leaky seal on that pump to flow to the South Tunnel. Mr. Davich showed the team the new sealed manhole.

Outside the Power House, Mr. Davich showed the inspection team Manhole 3116, which was painted bright pink, where weekly internal process grab samples are taken from the flow. This flow is the primary effluent from the Power House to the Dirty Industrial Sewer and then to the Secondary Wastewater Treatment Plant. The grab samples are only visual checks for turbidity currently. The plans in the future are to install a real-time oil sampler that would detect oil in the process wastewater as soon as it leaves the Power House.

Additionally, Mr. Davich showed the inspection team the Fire Pump House, below which the two tunnels converge and flow to Outfall 002. In the future, a real-time oil sampler would also be installed at this location to detect any oil in the water flowing to Outfall 002.

EPA and IDEM inspectors requested a copy of the spreadsheet that was being created to identify all the drains in the Power House. EPA received this spreadsheet on March 28, 2023.

Outfall 002

The inspectors arrived at Outfall 002 at 11:14 A.M. There was a very small amount of foam behind the first sprayer bar but none at the permanent boom or at the external boom. Mr. Barot stated that they change the external boom one time per week.

Mr. Gorman showed the inspectors a retention pond, called the West Retention Pond, uphill from Outfall 002 that is a new stormwater control. The retention pond is in a naturally low-lying area and the area around has been altered to direct stormwater to the pond. Stormwater that has traveled over the ground will end up in the retention pond instead of in Lake Michigan near Outfall 002.

Outfall 003

EPA, IDEM and CCBH personnel then drove to Outfall 003 and arrived at 11:35 A.M. EPA observed that the water in Outfall 003 was turbid, but that was due to the north wind. There was no sheening observed.

602 Oil House at the Finishing Mill

EPA, IDEM and CCBH personnel arrived at the 602 Oil House at the Finishing Mill at 11:52 A.M. The 602 Oil House is used for bulk oil storage. The EPA and IDEM inspectors were introduced to Mr. Mark Scarsella, Senior Planner, who showed them the two bulk oil tanks and the piping that ties them together. He stated that there is now a high-level alarm on the Slitter Line Tank which receives oil from the bulk tanks. The bulk tanks also have a rapid loss alarm installed that will send an alarm through the IBA computer network system if oil is transferred for longer than two hours or more than 150 gallons in 30 minutes. The sensors are not visible, and the system does not currently have a way to determine if the sensors are functioning or not. Ms. Rogers requested any emails that have been sent from the alarm system to be shared with EPA and IDEM.

Outfall 011

The inspection team followed CCBH personnel to Outfall 011 and arrived at 12:14 P.M. In previous inspections, EPA and IDEM noted vegetation growing on the weirs of the lagoons. Some vegetation was still present, but it was greatly reduced. In the sample building for Outfall 011, the pump tubing had recently been changed on March 6, 2023. The sampler was otherwise working properly and maintaining the proper temperature inside.

Mr. Gorman showed the EPA and IDEM inspectors the new bridge over Outfall 011 that have the new flow sensors. The flow sensors are level sensors, and they are still being calibrated. The new level sensors will align the flow calculations for Outfall 011 with the sampling done at that location.

Mr. Gorman stated that the absorbant booms along the outfall pathway are changed every three days. Ms. Rogers observed one small oil sheen blob at Outfall 011, but otherwise, the water was clear.

Outfall 001

EPA and IDEM followed facility personnel to Outfall 001 and arrived there at 12:31 P.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 March 6, 2023, and the flow at the time of the inspection was 73,500 gallons.

Closing Conference

EPA and IDEM provided a closing conference to the facility personnel at Outfall 001 and reiterated the documents requested during the inspection. There were no areas of concern observed on the day of the inspection.

EPA exited the facility at 12:50 P.M.

3. DOCUMENTS RECEIVED FROM FACILITY

No documents were received during the inspection.

4. AREAS OF CONCERN

No areas of concern were observed during the inspection.

5. LIST OF ATTACHMENTS

A) Photolog