Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.

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Eric J. Holcomb
Governor

Brian Rockensuess
Commissioner

February 15, 2024

Via Email to: bsmiller@uss.com
Mr. Brandon Miller, Environmental Engineer
US Steel Corporation
1 North Broadway
Gary, Indiana 46402

Dear Mr. Miller:

Re: Inspection Summary Letter
US Steel Corporation Gary Works
NPDES Permit No. IN0000281
Gary, Lake County

An inspection of the above-referenced facility or location was conducted by a representative of the Indiana Department of Environmental Management, Southeast Regional Office, pursuant to IC 13-18-3-9. A summary of the inspection is provided below:

Date(s) of Inspection:	February 07, 2024 , February 09, 2024
Type of Inspection:	Compliance Evaluation Inspection
Inspection Results:	Conditions evaluated were found to be satisfactory at the time of the inspection.

A copy of the NPDES Industrial Facility Inspection Report is enclosed for your records. Please direct any response to this letter and any questions to Nicholas Ream at 219-730-1691 or by email to nream@idem.IN.gov.

Sincerely,

Mark A. Amick, Director
Southeast Regional Office

Enclosure

NPDES Industrial Facility Inspection Report

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NPDES Permit Number:	Facility Type:		Facility Classification:	TEMPO AI ID
IN0000281	Industrial	Major	D	11591

Date(s) of Inspection: February 07, 2024 , February 09, 2024

Type of Inspection: Compliance Evaluation Inspection

Name and Location of Facility Inspected:

US Steel Corporation Gary Works

1 North Broadwav

Gary IN 46402 County: Lake

Receiving Waters/POTW: Grand Calumet River and Lake Michigan

Permit Expiration Date: 4/30/2026

Design Flow: NA

On Site Representative(s):

First Name	Last Name	Title	Email	Phone
Brandon	Miller	Environmental Engineer	bsmiller@uss.com	
Joe	Hanning	Manager - Environmental Control	jehanning@uss.com	
Alexis	Piscitelli	Senior Director of Environmental	apiscitelli@uss.com	

Was a verbal summary of the inspection given to the on-site rep? **Yes**

Certified Operator:	Number:	Class:	Effective Date:	Expiration Date:	Email:
Brandon Miller	20987	D	7-1-21	6-30-24	bsmiller@uss.com

Cyber Security Contact

Name: Email:

Responsible Official:
Mr. Brandon Miller, Environmental Engineer
1 North Broadway

Gary, Indiana 46402

Permittee: US Steel Corporation

Email: bsmiller@uss.com

Phone:

Fax:

Contacted? Yes

INSPECTION FINDINGS

- (●) Conditions evaluated were found to be satisfactory at the time of the inspection. (5)
- ( ) Violations were discovered but corrected during the inspection. (4)
- ( ) Potential problems were discovered or observed. (3)
- ( ) Violations were discovered and require a submittal from you and/or a follow-up inspection by IDEM. (2)
- ( ) Violations were discovered and may subject you to an appropriate enforcement response. (1)

AREAS EVALUATED DURING INSPECTION

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated

S	Receiving Waters	S	Facility/Site	S	Self-Monitoring	N	Enforcement
S	Effluent/Discharge	S	Operation	S	Flow Measurement		
S	Permit	S	Maintenance	S	Laboratory	S	Effluent Limits Compliance
		S	Sludge	S	Records/Reports	N	Other:

DETAILED AREA EVALUATIONS

Receiving Waters:

S 1. The receiving stream was visibly free of excessive deposits of settled solids, floating debris, oil, scum, or billowy foam.

Comments:

The receiving stream was free of notable foam, algae or solids at the following outfalls:

Grand Calumet River - 015, 018, 019, 020, 021, 028, 030, 033, and 034

Lake Michigan - 035, 037, and 039

Effluent/Discharge:

S 1. Final effluent was essentially free of excessive solids, floating debris, oil, scum, or billowy foam.

N 2. Pretreatment discharge into sanitary sewers appeared free of excessive oils, grease, solids, or foam and did not appear to be in violation of the local Sewer Use Ordinance.

N 3. Pretreatment discharge into sanitary sewers did not contain materials that pass through or interfere with the operation of the POTW.

Evaluation of Multiple Outfalls:

Outfall #	Insp. Date	Outfall Inspection Comments
015	2/7/2024	No problems were observed. The auto-sampler was inspected. Discharges are limited to Sinter Plant non-contact cooling water, Pulverized Coal Injection (PCI), East non-contact cooling water, steam condensate, and storm water runoff from Drainage Area #9.
018	2/7/2024	No problems were observed. Discharges are limited to PCI West non-contact cooling water, South End Blast Furnace non-contact cooling water, No. 4 Electric Power Station non-contact cooling water, Fab Shop steam condensates and air condition non-contact cooling water, storm water from drainage area #13, and potential flow from Outfall 18.
019	2/7/2024	No problems were observed. Discharges are limited to Blast Furnace No. 14 non-contact cooling water, No. 2 QBOP miscellaneous non-contact cooling water, No. 1 Electric Power Station non-contact cooling water, No. 4 Boiler House car wash, Central Water Treatment Plant wastewaters (brine regenerant), ultrafiltration backwash, RO concentrate, softener backwash and regenerant, Turboblower Boiler House boiler blowdown and condensates, No. 4 Boiler House blowdown, No. 5 Electric Power Cooling Station condensates and non-contact cooling water, No. 4 Boiler House condensate, Turboblower Boiler House condensate and Turboblower Condenser non-contact cooling water, Iron Producing AST Tar Tank condensate, Blast Furnace No. 8 non-contact cooling water, and storm water from Drainage Area #14.
020	2/7/2024	No problems were observed. Discharges are limited to No. 1 BOP Hood System non-contact cooling water, No. 1 BOP Continuous Caster noncontact cooling water, steam condensates (No. 1 BOP and No. 1 Continuous Caster), and storm water from Drainage Area #15.
021	2/7/2024	No problems were observed. Discharges are limited to No. 1 BOP Shop Cooling/Air Compressor non-contact cooling water, Steel Producing Area Air Conditioning condensates, Steel Producing Area steam condensates, and storm water from Drainage Area #16.
028	2/7/2024	No problems were observed. Discharges are limited to treated wastewater from the Slab Spray cooling, QBOP Vacuum Degasser overflow, #1 BOP Vacuum Degasser, QBOP, #2 Continuous Caster A/B Line, C Line, #1 Continuous Caster Line, and storm water. This is part of Administrative Outfall 600.
030	2/7/2024	No problems were observed. Discharges are limited to treated wastewater from the Slab Spray cooling, QBOP Vacuum Degasser overflow, #1 BOP, Vacuum Degasser, QBOP, #2 Continuous Caster A/B Line, C Line, #1 Continuous Caster Line, and storm water. This is part of Administrative Outfall 600.
501	2/7/2024	No problems were observed. The internal outfall discharge is limited remediation groundwater, boiler feed water pretreatment, freeze protection water, boiler blowdown and condensate, landfill leachate, truck wash water, miscellaneous clean up wastewaters, and storm water.
603	2/7/2024	No problems were observed. Only Thickeners 1 and 1A were observed of the five point administrative outfall. The discharge is limited to treated wastewater from the Slab Spray cooling, QBOP Vacuum Degasser overflow, #1 BOP, Vacuum Degasser, QBOP, #2 Continuous Caster A/B Line, C Line, #1 Continuous Caster Line, and storm water.
607	2/7/2024	No problems were observed. The internal outfall discharge is limited to SWD-1 landfill leachate, and wastewater from the vacuum trucks and truck wash decant pad.
035	2/7/2024	No problems were observed. The discharge is limited to No. 14 Blast Furnace non-contact cooling water, Steam Turbine Gen (Co-Gen Turbo Gen) noncontact cooling water, No. 5 Power Station non-contact cooling water, steam condensates (No. 5 Power Station, No. 14 Blast Furnace, Turbo Gen), and storm water from Drainage Area #24.

037	2/7/2024	No problems were observed. The discharge is limited to Box Anneal North Mill Furnaces non-contact cooling water, North Sheet Mill No. 10 Air Compressor non-contact cooling water, 80” Temper Mill non-contact cooling water, North Sheet Mill steam condensates, non-contact cooling waters from the 5-Stand Cold Reduction Mill, and No. 6 and 8 Galvanized Lines, and storm water from Drainage Area #26.
039	2/7/2024	No problems were observed. The discharge is limited to 84” Hot Strip Mill (HSM) non-contact cooling water (Reheat Furnace and Fire Water Distribution), 84” HSM steam condensates, 84” Roughing and Finishing Mills Oil Tanks and Filters, 84” Roughing Mill emergency overflow, and storm water from Drainage Area #27.
034	2/8/2024	No problems were observed. The discharge is limited to treated wastewaters from Internal Outfalls 604, 605, 606, and 608.
604	2/8/2024	No problems were observed. The discharge is limited to treated process wastewater from the 84” Hot Strip Mill, 84” and 80” Pickle Lines, North and South Sheet Mills and Tin Mills, Demineralization Plant filter backwash and regenerant, EGL and 84” Hot Strip Mill basement water, 84” Hot Strip Mill boiler feed water softener blowdown, and storm water from areas west of Buchanan Street.
605	2/8/2024	No problems were observed as viewed at the Final Treatment Plant. The discharge is limited to treated 84” Hot Strip Mill process wastewater, boiler blowdown, filter backwash, and condensates.
606	2/8/2024	No problems were observed. The discharge is limited to Sheet and Tin Mill non-contact cooling waters and steam condensate, Temper Mill non-contact cooling water, 5-Stand Cold Reduction Mill noncontact cooling water, Annealing non-contact cooling water, No. 6 Galvanizing Line non-contact cooling water, Waste Acid Recycling Facility non-contact cooling water, Old S and T Pump Stations and 48” Lift Station non-contact cooling waters, Internal Outfall 608 treated wastewaters, and storm water from a portion of Drainage Area #22.
608	2/8/2024	No problems were observed. The discharge is limited to treated process wastewater from the Chrome Wastewater Treatment Plant. The Tin Line is not in operation and chrome producing activities are minimal. Current wastewater being treated is from sumps in associated buildings.

Comments:
The effluent was clear and free of color at all inspected outfalls at the time of the inspection.

Permit:

S 1. Did the facility have a copy of the current permit available for reference.

N 2. If the permit expires within 180 days, has a renewal application been submitted?

S 3. Receiving waters are accurately described in the permit.

N 4. The permit has been properly transferred if there is a new owner.

S 5. The NPDES Permit Schedule of Compliance monitoring and reporting milestones have been met.

Comments:
The facility has a valid permit.

All compliance schedule milestones appear to have been met. US Steel is considering requesting a modification of the permit for the method of implementation used to meet 316(b) requirements.

Facility/Site:

N 1. The facility was found to have standby power or equivalent provision, If required.

N 2. An adequate alarm or notification system for power or equipment failure was available for the treatment facility.

S 3. Safe and adequate access was provided for inspection of all treatment units and outfalls.

S 4. Facilities and equipment did not appear beyond their useful life.

5. List any safety concerns noted during the inspection in the box below:

Comments:
The facility grounds are well maintained.

Operation:

N 1. All facilities and systems necessary for achieving compliance with the terms and conditions of the permit were operated efficiently, including an anticipated bypass report for steps of treatment taken out of service.

N 2. An adequate, qualified operating staff was found to be provided to carry out the operation of the facility, including:

a. Certified Operator's on-site attendance and/or qualified operations personnel attendance was adequate.
b. Adequate documentation of operational activities, including system monitoring and cleaning.
c. Adequate funding to ensure proper operation.

N 3. Solids handling procedures were adequate.

N 4. Documentation of solids removal, handling, and disposal was adequate.

Comments:
The Environmental Treatment Facility (ETF), associated with Outfall 501, was inspected. The east treatment train was not in operation at the time of the inspection due to the lack of flow. The ETF consists of oil and tar separation, biological equalization, activated sludge, clarification, and final sand filtration. All major processes appeared to be operating efficiently.

The Final Treatment Plant (FTP) was inspected. All treatment processes appeared to be operating efficiently with the exception of northernmost of the six APIs, which was off-line due to a track issue. There appeared to be sufficient capacity within the other five APIs and the effluent from the FTP was clear and colorless. A work order has been generated to repair the API.

The Chrome Treatment Plant, associated with Outfall 608, was inspected. Operations at the Chrome Treatment Plant are minimal as the Tin Line has been idled. Incoming wastewater is from three sumps, the #6 ETL, 4 Line Bay, and the #1 Tin Free Steel line. Due to the minimal flows, the clarifier is primarily empty and US Steel personnel are utilizing cloth filters to remove solids. The filter press is not currently in operation due to a lack of solids.

ST-17, associated with Outfall 034, was observed. These two basins are utilized as a final catch for potential oils and greases and contain structures designed to aid in CBOD removal. No sheens were observed within the basins at the time of the inspection.

Maintenance:

S 1. A maintenance record system has been established and includes maintenance/repair history and preventative maintenance plan.

S 2. Facility maintenance activities appeared adequate.

Comments:
All maintenance activities appeared adequate. Maintenance activities and work orders are maintained in an Oracle database, which also generates new work orders.

A sanitary spill was self-reported by US Steel personnel on September 11, 2023. This matter was addressed in an inspection report conducted by IDEM personnel on September 27, 2023. Please refer to that inspection report for more information as the incident will not be cited again within this inspection report.

Sludge:

S 1. Sludges, screenings, and slurries were found to be handled and disposed of properly.

Comments:
A records review during the inspection showed adequate handling, and disposal of sludge. Specifically, December 2023 records were reviewed for the on-site disposal of non-hazardous sludge, and September 2023 records were reviewed for disposal of hazardous sludge through Heritage Environmental.

Self-Monitoring:

S 1. Samples were found to be taken at pre-designated locations and were found to be representative.

S 2. Flow-proportioned samples were found to be obtained where needed.

S 3. The facility was found to conduct sampling of all waste streams, including type and frequency, as required in the permit.

S 4. Sample collection procedures, including automatic sampling, include:
a. Samples refrigerated during compositing.
b. Proper preservation techniques used.
c. Containers and holding times conform to 40 CFR 136.3.

S 5. Sample documentation was adequate and includes:
a. Dates, times, and locations of sampling.
b. Name of individual performing sampling.
c. Instantaneous flow for flow-weighted aliquots.
d. Chain of Custody records.

S 6. NPDES Permit Total Toxic Organic (TTO) requirements were being met.

S 7. NPDES Permit Whole Effluent Toxicity (WET) testing requirements were being met.

Comments:
The Self Monitoring Program was rated as satisfactory. All sampling practices are conducted accurately and at

the frequency required by the permit.

TTO requirements are being met via the Certification Statement for Total Toxic Organics.

Flow Measurement:

S 1. Flow was found to be properly monitored as required by the permit.

S 2. Flow data and calibration records were available for review, and document that monitoring equipment has been calibrated at the frequency required in the permit.

Comments:
The facility's flow measurement program, including all documentation, is adequate and representative. Records were provided that showed the dates of calibration and later dates of installation for the effluent meters. Due to the number of meters, these dates are scattered through the past 12 months and tracked for calibration.

Laboratory:

The following laboratory records were reviewed:

Contract Lab Reports Chain-of-Custody pH Bench Sheets

Chlorine Bench Sheets

N 1. The laboratory practices and protocol reviewed were adequate, including:

a. A written laboratory QA/QC manual was available.
b. Samples were found to be properly stored.
c. Approved analytical methods were used.
d. Calibration and maintenance of instruments was adequate.
e. QA/QC procedures were adequate.
f. Dates of analyses (and times, where required) were recorded.
g. Name of person performing analyses was recorded.

S 2. Review of lab records and/or on-site field testing equipment and protocols was found to be adequate.

Contract Lab Information	
ALS	Valparaiso, IN and Holland, MI

Comments:
All ALS Laboratory reports for July 3, 2023, reviewed during the inspection appeared to be accurate and complete. Additional laboratory reports from December 2023 were spot checked for accuracy and Chain-of-Custody completion.

Records/Reports:

The following records/reports were reviewed:

DMRs for the period of January 2023 to December 2023 were reviewed as part of the inspection.

S 1. All facility records for the period including the previous three years were available for review.

S 2. DMRs and MMRs were completed properly and accurately including:

a. "No Ex" column was accurate.
b. Signatory requirements were met.
c. Reports were prepared by or under the direction of a certified operator.

S 3. Bypass and Noncompliance reporting are adequate.

Comments:
The requested records were available and appear complete and accurate.

A sanitary leak to the Grand Calumet River on September 11, 2023, was properly reported to IDEM in a timely manner.

The storm water monitoring and non-numeric effluent limits were implemented within 12 months of the effective date of the permit.

The Storm Water Pollution Prevention Plan was revised within 12 months subsequent to the effective date of the permit.

Visible Oil Corrective Action Monitoring Program (VOCAMP) reports are being completed, as required by the NPDES permit.

Enforcement:

N 1. Agreed Order compliance milestones have been met.

Comments:

There was no Agreed Order at the time of the inspection.

Effluent Limits Compliance:

Yes 1. Were DMRs reviewed as part of the inspection?

DMRs for the period of January 2023 to December 2023 were reviewed as part of the inspection.

No 2. Were violations noted during the review of DMRs?

Comments:

IDEM REPRESENTATIVE

Inspector Name:	Email:	Phone Number:
Nicholas Ream	nream@idem.IN.gov	219-730-1691

Other staff participating in the inspection:

Name(s)	Phone Number(s)
Miya Spratt	219-312-1226

IDEM MANAGER REVIEW

IDEM Manager:	Date:
Mark A. Amick	2/12/2024