

NPDES Permit No. IL0000329
Notice No. YA:26010601.docx

Public Notice Beginning Date: May 1, 2026

Public Notice Ending Date: May 31, 2026

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water,
Division of Water Pollution Control
Permit Section
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

United States Steel Corporation
Granite City Works
1951 State Street
Granite City, Illinois 62040

Name and Address of Facility:

United States Steel Corporation
Granite City Works
20th and State Street
Granite City, Illinois 62040
(Madison County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Yousif Alkola at 217/782-0610.

The applicant is engaged in production of flat rolled steel products in an integrated steel mill (SIC 3312, 3316, and 2999). Plant operation results in an average discharge of 25.0 MGD of treated process wastewater from Outfall 001, 0.604 MGD of cold rolling mill wastewater from Outfall B01, and 0.20 MGD of landfill leachate wastewater from Outfall C01.

To address Per- and polyfluoroalkyl substances (PFAS) under the NPDES permit program the Illinois Environmental Protection Agency (IEPA), Bureau of Water, Permit Section has implemented a PFAS Reduction Initiative. Under this initiative, it has been determined that those facilities who are classified as a major discharger by USEPA regulations because of the type of industry, volume of wastewater, or type of wastewater being discharged, there is the potential for the facility to use and/or discharge PFAS compounds. Because of this potential many of these facilities will be required by IEPA to perform monitoring for PFAS compounds in their discharges and to implement Best Management Practices to reduce the potential of discharging PFAS to surface waters. Monitoring for PFAS has been added to the effluent limitations, monitoring, and reporting page(s) for Outfall 001, and Special Conditions 12 and 13 have been added to the permit as well.

Application is made for new and existing discharge(s) which are located in Madison County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Biological Stream Characterization
001	Horseshoe Lake	38° 41' 31" North	90° 06' 28" West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The subject facility discharges to the Horseshoe Lake at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The facility has a DAF of 25.0 MGD. The facility withdraws water from the Mississippi River and discharges to Horseshoe Lake. Horseshoe lake is classified as a General Use Water. Horseshoe Lake is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication Integrating Multiple Taxa in a Biological Stream Rating System, nor is it given an integrity rating in that document. Horseshoe Lake, Waterbody Segment, IL_RJC, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for fish consumption use with potential causes given as aldrin, dieldrin, endrin, heptachlor, mirex and polychlorinated biphenyls, and aesthetic quality use with potential causes given as total phosphorus and total suspended solids. Aquatic life use is fully supported. Horseshoe lake is not subject to enhanced dissolved oxygen standards.

The following parameters have been identified as the pollutants causing impairment:

Designated Use	Potential Cause
Fish Consumption	aldrin, dieldrin, endrin, heptachlor, mirex and polychlorinated biphenyls
Aesthetic Quality	total phosphorus and total suspended solids

The discharge(s) from the facility shall be monitored and limited at all times as follows:

PARAMETER	LOAD LIMITS lbs/day			CONCENTRATION LIMITS mg/l		
	DAF (DMF)					
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Flow (MGD)				Measure		35 IAC 309.146
pH				6.0 - 9.0		35 IAC 304.125
CBOD ₅	2085	4170	35 IAC 304.120(c)	10	20	35 IAC 304.120(c)
Total Suspended Solids	2502	5004	35 IAC 304.120(c)	12	24	35 IAC 304.120(c)
Oil & Grease	1511	3492	40 CFR 420	15	30	35 IAC 304.124
Iron (total)	417	834	35 IAC 304.124	2	4	35 IAC 304.124
Iron (dissolved)		209	35 IAC 302.208		1	35 IAC 302.208
Lead (total)	5.3	16	40 CFR 420	.09	0.4	35 IAC 302.208
Zinc (total)	12	33	40 CFR 420.01(b)	0.17	0.96	40 CFR 120.44(l) 35 IAC 302.208
Cyanide (total)	19	35	35 IAC 304.124	0.1	0.2	35 IAC 302.208
Cyanide (available by OIA 1677)	1.1	4.6	35 IAC 302.208	0.0052	0.022	35 IAC 302.208
Phenol (4AAP)	5.0	10	Variance of 301(g) of CWA		0.1	35 IAC 302.208
Fluoride		834	IPCB AS 90-4		4	IPCB AS 90-4
Ammonia Nitrogen* Spring/Fall	521	2585	35 IAC 355	2.5	12.4	35 IAC 355

IAC = Illinois Administrative Code

Outfall: 001 Treated Process Wastewater

Summer	479	3128	35 IAC 355	2.3	15	35 IAC 355
Winter	834	1188	35 IAC 355	4.0	5.7	35 IAC 355
March	688	1188	35 IAC 355	3.3	5.7	35 IAC 355
Phosphorus					Monitor Only	35 IAC 309.146
PFAS**					Report	
PFAS Sum**		**			**	
Tetrachloroethylene					Monitor Only	35 IAC 302
Naphthalene					Monitor Only	35 IAC 302

*Spring/Fall is April-May and September-October. Summer is June-August. Winter is November-February. Weekly average limits apply for Spring/Fall and Summer. Weekly average limits are as follows: Spring/Fall: 6.2 mg/L; Summer: 5.7 mg/L. No weekly average limit applies in Winter or March.

** See Special Condition 12

PARAMETER	LOAD LIMITS lbs/day			CONCENTRATION LIMITS mg/l		
	DAF (DMF)					
	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall: B01 - Cold Rolling Mill Wastewater						
Flow (MGD)						Measure
Tetrachloroethylene		1.1	40 CFR 420			
Naphthalene		0.69	40 CFR 420			

Outfall: C01 - Landfill Leachate Wastewater

Flow (MGD)						Measure
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Load Limit Calculations:

- A. Load limit calculations for the following pollutant parameters were based on an average flow of 25.0 MGD and using the formula of average flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): for outfall 001, CBOD₅, Total Suspended Solids, Iron (total), Iron (dissolved), Cyanide (Total), Cyanide (available), Fluoride, and Ammonia as Nitrogen.
- B. Production based load limits were calculated by multiplying the average production by the effluent limit contained in 40 CFR 420. Production figures utilized in these calculations are based on production from the previous permit application from 2020 at the request of the permittee because production for the most recent 5 years is not representative of future anticipated production trends. Production figures utilized in these calculations for the following subcategories are as follows:

<u>Subcategory</u>	<u>Production Rate</u>
Subpart C - Iron Making Subcategory	7793 tons/day
Subpart D - Steel Making Subcategory	7793 tons/day
Subpart F - Continuous Casting Subcategory	8579 tons/day
Subpart G - Hot Forming Subcategory	11,362 tons/day
Subpart I - Acid Pickling Subcategory	3084 tons/day
Subpart J - Cold Forming Subcategory	2065 tons/day
Subpart K - Alkaline Cleaning Subcategory	1656 tons/day
Subpart L - Hot Coating Subcategory	1656 tons/day

For outfall 001: Oil & Grease, Lead, Zinc, and Phenol (4AAP); for outfall A01: Naphthalene and Benzo(a)pyrene; for outfall B01: Naphthalene and Tetrachloroethylene were limited using Federal production based load limits. The following sample calculation shows the methodology utilized to determine production based load limitations:

For outfall B01, Naphthalene Daily Maximum Load Limit = Effluent Limitation from 40 CFR 420.103(a)(5)-BAT x Production Rate = 0.000167 lb/1000 lb product x 2065 tons/day x (2000 lb/ton) = 0.69 lb/day = Naphthalene Daily Maximum Load Limit at outfall B01.

When several subcategories have effluent limitations for a pollutant, the load limits from each subcategory are added to obtain the total federal production based load limit.

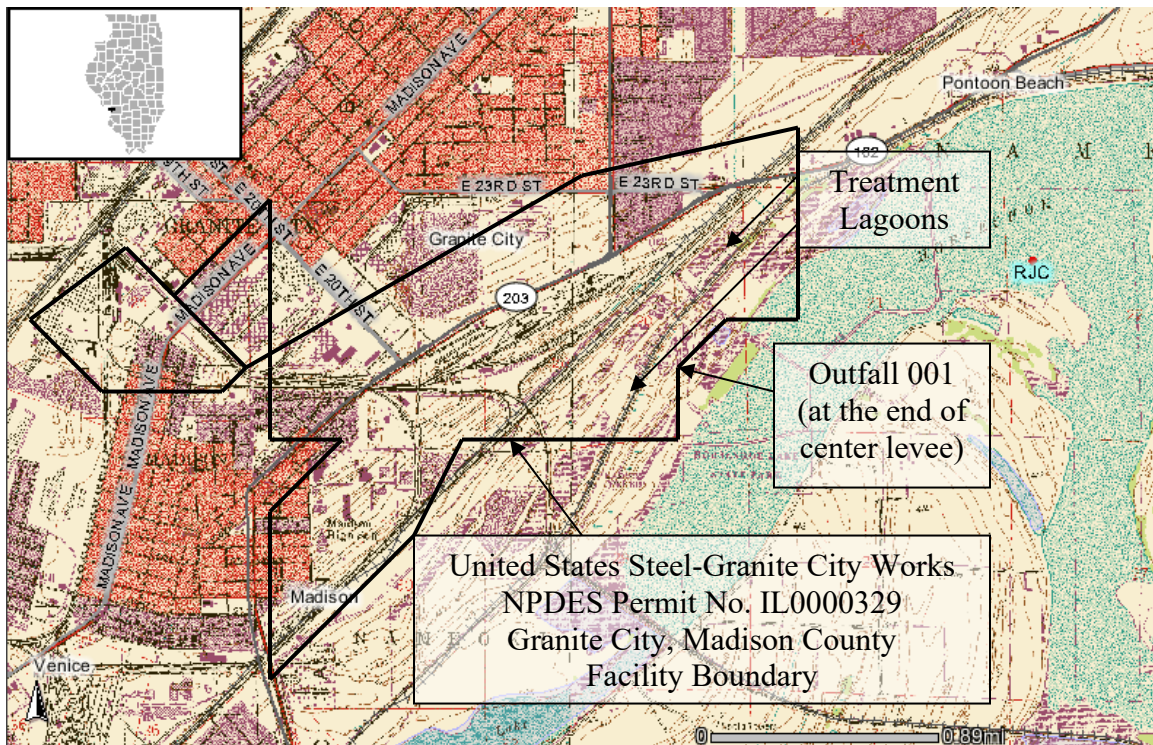
The intake consists of 4 pumps which can pump 13,900 GPM each and pump through a 54-inch diameter pipe. When pumping at the DAF of 25.0 MGD, they give a flow velocity of approximately 2.4 feet/second.

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

Special Conditions are used to clarify discharge and monitoring requirements. Samples for each outfall shall be taken at points representative of each waste stream. A Certified Class K operator is required. Non-compliance loads of zinc may be demonstrated to not be in violation of the permit limits by submitting calculations for zinc background credits, which will account for any zinc that is drawn into the system when the influent water is taken from the Mississippi River. The permittee shall take additional metals monitoring at outfall 001.

A Total Maximum Daily Load (TMDL) Study has not been completed for Horseshoe Lake for any parameter.



Public Notice of Draft Permit

Public Notice Number YA:26010601.docx is hereby given by Illinois EPA, Division of Water Pollution Control, Permit Section, 2520 West Iles Avenue, Post Office Box 19276, Springfield, Illinois 62794-9276 (herein Agency) that a draft National Pollutant Discharge Elimination System (NPDES) Permit Number IL0000329 has been prepared under 40 CFR 124.6(d) for United States Steel Corporation, Granite City Works, 20th and State Streets, Granite City, Illinois 62040 for discharge into Horseshoe Lake from the United States Steel Corporation, Granite City Works, 1951 State Street, Granite City, Illinois 62040, (Madison County). Facility is an integrated steel mill, located in Granite City, in Madison County, in Southeastern Illinois. Two Iron Blast Furnaces are used to make molten iron. Steel is made in two Basic Oxygen Furnaces, using scrap steel and molten iron. The steel is formed into slabs by two Continuous Casters. Steel slabs are converted into rolls by an 80-inch Hot Strip Mill, pickled in a Hydrochloric Acid Pickling station, and cold formed by a Direct Application Cold-Rolling Mill. The facility also employs two Galvanizing Lines for finishing of the steel. The final product from the facility is coiled sheet steel, though some steel is sold as cast slabs or unfinished coils.

The application, draft permit and other documents are available for inspection and may be copied at the Agency between 9:30 A.M. and 3:30 P.M. Monday through Friday. A Fact Sheet containing more detailed information is available at no charge. For further information, call the Public Notice Clerk at 217/782-0610.

Interested persons are invited to submit written comments on the draft permit to the Agency at the above address. The NPDES Permit and Joint Public Notice numbers must appear on each comment page. All comments received by the Agency not later than 30 days from the date of this publication shall be considered in making the final decision regarding permit issuance.

Any interested person may submit written request for a public hearing on the draft permit, stating their name and address, the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to these issues in the hearing. Such requests must be received by the Agency not later than 30 days from the date of this publication.

If written comments and/or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing.

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NPDES Permit No. IL0000329

Illinois Environmental Protection Agency

Division of Water Pollution Control

2520 West Iles Avenue

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Facility Name and Address:

United States Steel Corporation
Granite City Works
1951 State Street
Granite City, Illinois 62040

United States Steel Corporation
Granite City Works
20th and State Street
Granite City, Illinois 62040
(Madison County)

Discharge Number and Name:

Receiving Waters:

001 Treated Process Wastewater
B01 Cold Rolling Mill Wastewater
C01 Landfill Leachate Wastewater

Horseshoe Lake
Internal Outfall
Internal Outfall

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Stephen F. Nightingale, P.E.
Manager, Industrial Unit, Permit Section
Division of Water Pollution Control

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NPDES Permit No. IL0000329

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 Treated Process Wastewater – (DAF = 25.0 MGD)

Treated Process Wastewater consists of wastewater from the blast furnace, basic oxygen furnace, 80” hot strip mill, landfill leachates, galvanizing lines, sanitary, stormwater runoff, continuous casters, boiler blowdown, maintenance shops, laboratories, cold mill, continuous pickler, and miscellaneous flows

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)	See Special Condition 1				Measure When Monitoring	
pH	See Special Condition 2		6.0 - 9.0		2/Week	Grab
CBOD ₅	2085	4170	10	20	1/Week	Composite
Total Suspended Solids	2502	5004	12	24	1/Week	Composite
Oil & Grease	1511	3492	15	30	1/Week	Grab
Iron (total)	417	834	2	4	1/Month	Composite
Iron (dissolved)		209		1	1/Month	Composite
Lead (total)	5.3	16	0.09	0.4	1/Quarter	Composite
Zinc (total)	12	33	0.17	0.96	2/Week	Composite
Cyanide (total)	19	35	0.1	0.2	2/Month	Composite
Cyanide (available by OIA 1677)	1.1	4.6	0.0052	0.022	2/Month	Composite
Phenol (4AAP)	5.0	10		0.1	1/Week	Composite
Fluoride		834		4	1/Week	Composite
Ammonia-Nitrogen*						
Spring/Fall	521	2585	2.5	12.4	1/Week	Composite
Summer	479	3128	2.3	15.0	1/Week	Composite
Winter	834	1188	4.0	5.7	1/Week	Composite
March	688	1188	3.3	5.7	1/Week	Composite
Phosphorus				Monitor Only	1/Quarter	Grab
PFAS**				Report	**	**
PFAS Sum**		**		**	**	**
Tetrachloroethylene				Monitor Only	2/Year	Grab
Naphthalene				Monitor Only	1/Quarter	Grab

*For Ammonia as Nitrogen, Spring/Fall is April-May and September-October. Summer is June-August. Winter is November-February. Weekly average limits will apply. For Spring/Fall, weekly average limit is 6.2 mg/L (1292 lb/day). Summer weekly average limit is 5.7 mg/L (1188 lb/day). There is no weekly average limit for Winter or March.

** See Special Condition 12

NPDES Permit No. IL0000329

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): B01, C01

PARAMETER	LOAD LIMITS lbs/day <u>DAF (DMF)</u>		CONCENTRATION <u>LIMITS mg/l</u>		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Outfall: B01 - Cold Rolling Mill Wastewater						
Flow (MGD)	See Special Condition 1				When Monitoring	Measure
Tetrachloroethylene		1.1			2/Year	Grab
Naphthalene		0.69			1/Quarter	Grab
Outfall: C01 - Landfill Leachate Wastewater						
Flow (MGD)	See Special Condition 1				Continuous	Measure

Special Conditions

SPECIAL CONDITION 1. Flow shall be reported as a daily maximum and a monthly average, and shall be reported on the monthly Discharge Monitoring Report Form.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 4. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 5. For purposes of this permit, load limits for Phenol (4AAP) have been based on actual plant discharges, and load limits for Ammonia (as N) have been based on water quality standards, and are included in accordance with a 301(g) variance of the Clean Water Act approved by the USEPA. Any changes to these load limits can only be made following Public Notice and opportunity for hearing.

SPECIAL CONDITION 6. The permittee may show that an apparent noncompliance of load limits for zinc is not a violation by applying background credits for intake waters and by submission of calculations as defined below.

The load calculations for comparison to Zinc load limits shall be made as follows:

$$M = (C_e - C_r) \times F \times 8.34$$

Where:

M = Outfall 001 load limit (lbs/day)

C_e = Outfall 001 effluent concentration (mg/l)

C_r = Intake water concentration (mg/l)

F = Outfall 001 effluent flow (MGD)

Concentrations limits for outfall 001 are absolute and no background credit shall be allowed.

SPECIAL CONDITION 7. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) electronic forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee will be required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA beginning December 21, 2016. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/net-dmr/index.html>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

NPDES Permit No. IL0000329

Special Conditions

Permittees that have been granted a waiver shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 Attention: Compliance Assurance Section, Mail Code # 19
 2520 West Iles Avenue
 Post Office Box 19276
 Springfield, Illinois 62794-9276

SPECIAL CONDITION 8. Samples taken in compliance with the effluent monitoring requirements for internal outfall B01 shall be taken at a point representative of the discharge of Cold Rolling Mill wastewater, but prior to mixing with any other wastewater sources. Samples taken in compliance with the effluent monitoring requirements for internal outfall C01 shall be taken at a point representative of the discharge of Landfill Leachate Wastewater, but prior to mixing with any other wastewater sources. Samples taken in compliance with the effluent monitoring requirements for outfall 001 shall be taken at a point representative of the discharge, but before entering the receiving water.

SPECIAL CONDITION 9. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 10. The Permittee shall monitor the effluent from Outfall 001 for the following parameters on a 2/year basis. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on the DMR's to IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

<u>STORET</u> <u>CODE</u>	<u>PARAMETER</u>	<u>Minimum</u> <u>reporting limit</u>
10197	Antimony	5.0 ug/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (Hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury	0.2 ug/L
01067	Nickel	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

The analyses for the above parameters shall meet the detection limits as established for accepted test procedures listed in 40 CFR 136.

All samples for mercury must be analyzed by EPA Method 1631E using the digestion procedure described in Section 11.1.1.2 of 1631E, which dictates that samples must be heated at 50°C for 6 hours in a bromine chloride (BrCl) solution in closed vessels.

SPECIAL CONDITION 11: This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or upon approval of an alternate Water Quality Study.

Special ConditionsSpecial Condition 12. PFAS Testing and Reporting

For the duration of this permit the permittee shall sample the discharge at a point of discharge, but prior to discharging to the Publicly Owned Treatment Works sewer system as follows:

<u>Parameter</u>	<u>Sample Frequency</u>	<u>Sample Type</u>	<u>Report****</u>
PFAS****	Quarterly**	grab***	ng/L
PFAS Sum****	Quarterly**	grab***	ng/L

** Quarterly sampling – Testing done during the first quarter (January – March) must be reported in May, testing done in the second quarter (April – June) must be reported in August, testing done in the third quarter (July – September) must be reported in November, and testing done in the fourth quarter (October – December) must be reported in February.

*** If the permittee prefers to collect composite samples instead of grab samples, the permittee will be required to seek approval through the supplemental permit process.

**** The Minimum Level (ML) of quantification established for PFAS by the laboratory, when using the approved analytical method, shall be submitted with the test results to the address identified in Part 6 of this Special Condition.

- 1) Test results must be reported in nanograms per liter (ng/L) as a daily maximum concentration for aqueous samples. Solid test results must be reported in nanograms per gram (ng/g) as a daily maximum.
- 2) USEPA Method 1633A - Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS (finalized December 2024) is to be used when testing for PFAS. When PFAS analytical methods are promulgated through rulemaking and incorporated into 40 CFR Part 136, the permittee shall follow the approved methods.
- 3) When testing for PFAS the laboratory shall determine their limit of quantitation (LOQ) for each analyte in accordance with the test method identified in Part 2 of this Special Condition. The LOQ is synonymous with Minimum Level (ML) and Reporting Limit. The laboratory LOQs (Minimum Levels) must not exceed the upper limit of the aqueous and solid ranges listed in the table in Part 7 of this Special Condition.
- 4) In addition to the testing and reporting requirements for the individual PFAS analytes listed on Part 7 of this Special Condition the permittee shall report the PFAS Sum. For purposes of this permit the PFAS Sum is the arithmetic summation of the individual analytes listed in Part 7 that are associated with a particular sampling event and location. Results must be submitted to the address identified in Part 6 of this Special Condition.

Test results for individual analytes which are below the ML as described in Parts 2 and 3 of this Special Condition should be assigned a value of zero (0) when calculating the PFAS Sum.

- 5) If sample results for PFAS are consistently below the minimum level (ML) of quantification for two consecutive years using USEPA Method 1633A or methods approved under 40 CFR Part 136, once finalized, the permittee may request a reevaluation of the testing requirements. Documentation supporting the request for a reduction in monitoring for PFAS must be made by the permittee as a supplemental permit request.

NPDES Permit No. IL0000329

Special Conditions

6) The Permittee shall submit PFAS sampling results required by this Special Condition electronically or in writing to one of the following addresses:

- a) EPA.PrmtSpecCondtns@Illinois.gov, or
- b) Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

7) Specific PFAS constituents that must be analyzed for are listed in the following table:

Target Analyte Name	Abbreviation	CASRN Number	STORET	Minimum Level (ML)	
				Aqueous (ng/L)	Solid (ng/g)
Perfluoroalkyl carboxylic acids					
Perfluorobutanoic acid	PFBA	375-22-4	51522	4 – 16	0.64 – 1.6
Perfluoropentanoic acid	PFPeA	2706-90-3	51623	2 – 8	0.32 – 0.8
Perfluorohexanoic acid	PFHxA	307-24-4	51624	1 – 4	0.16 – 0.4
Perfluoroheptanoic acid	PFHpA	375-85-9	51625	1 – 4	0.16 – 0.4
Perfluorooctanoic acid	PFOA	335-67-1	51521	1 – 4	0.16 – 0.4
Perfluorononanoic acid	PFNA	375-95-1	51626	1 – 4	0.16 – 1.3
Perfluorodecanoic acid	PFDA	335-76-2	51627	1 – 4	0.16 – 0.4
Perfluoroundecanoic acid	PFUnA	2058-94-8	51628	1 – 4	0.16 – 0.5
Perfluorododecanoic acid	PFDoA	307-55-1	51629	1 – 4	0.16 – 0.4
Perfluorotridecanoic acid	PFTrDA	72629-94-8	51630	1 – 4	0.16 – 0.4
Perfluorotetradecanoic acid	PFTeDA	376-06-7	51631	1 – 4	0.16 – 0.4
Perfluoroalkyl sulfonic acids					
Acid Form					
Perfluorobutanesulfonic acid	PFBS	375-73-5	52602	1 – 4	0.16 – 0.4
Perfluoropentanesulfonic acid	PFPeS	2706-91-4	52610	1 – 4	0.16 – 0.4

Special Conditions

Perfluorohexanesulfonic acid	PFHxS	355-46-4	52605	1 – 4	0.16 – 0.4
Perfluoroheptanesulfonic acid	PFHpS	375-92-8	52604	1 – 4	0.16 – 0.4
Perfluorooctanesulfonic acid	PFOS	1763-23-1	52606	1 – 4	0.16 – 0.4
Perfluorononanesulfonic acid	PFNS	68259-12-1	52611	1 – 4	0.16 – 0.4
Perfluorodecanesulfonic acid	PFDS	335-77-3	52603	1 – 4	0.16 – 0.4
Perfluorododecanesulfonic acid	PFDoS	79780-39-5	52632	1 – 4	0.16 – 0.4
Fluorotelomer sulfonic acids					
1H,1H,2H,2H-Perfluorohexane sulfonic acid	4:2 FTS	757124-72-4	52607	4 – 15	0.64 – 1.5
1H,1H,2H,2H-Perfluorooctane sulfonic acid	6:2 FTS	27619-97-2	52608	4 – 15	0.64 – 1.5
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	8:2 FTS	39108-34-4	52609	4 – 15	0.64 – 1.5
Perfluorooctane sulfonamides					
Perfluorooctanesulfonamide	PFOSA	754-91-6	51525	1 – 4	0.16 – 0.4
N-methyl perfluorooctanesulfonamide	NMeFOSA	31506-32-8	52641	1 – 4	0.16 – 0.4
N-ethyl perfluorooctanesulfonamide	NEtFOSA	4151-50-2	52642	1 – 4	0.16 – 0.4
Perfluorooctane sulfonamidoacetic acids					
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9	51644	1 – 4	0.16 – 0.4
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6	51643	1-4	0.16 – 0.4
Perfluorooctane sulfonamide ethanols					
N-methyl perfluorooctanesulfonamidoethanol	NMeFOSE	24448-09-7	51642	10 – 40	1.6 – 4
N-ethyl perfluorooctanesulfonamidoethanol	NEtFOSE	1691-99-2	51641	10 – 40	1.6 – 4
Per- and Polyfluoroether carboxylic acids					
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6	52612	2 – 8	0.64 – 1.6
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4	52636	2 – 8	0.64 – 1.5
Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1	PF002	4 – 16	0.32 – 0.8

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Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5	PF006	4 – 15	0.32 – 0.8
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6	52626	2 – 7	0.32 – 0.8
Ether sulfonic acids					
9-Chlorohexadecafluoro-3-oxanonane-1- sulfonic acid	9Cl-PF3ONS	756426-58-1	PF003	4 – 15	0.64 – 1.5
11-Chloroeicosafluoro-3-oxaundecane-1- sulfonic acid	11Cl-PF3OUdS	763051-92-9	PF004	4 – 15	0.64 – 1.5
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	113507-82-7	52629	2 – 8	0.32 – 0.7
Fluorotelomer carboxylic acids					
3-Perfluoropropyl propanoic acid	3:3 FTCA	356-02-5	PF001	5 – 20	0.80 – 5
2H,2H,3H,3H-Perfluorooctanoic acid	5:3 FTCA	914637-49-3	PF007	25 – 100	4 – 10
3-Perfluoroheptyl propanoic acid	7:3 FTCA	812-70-4	PF005	25 – 100	4 – 10

Special Condition No 13. PFAS Minimization Program:

1) PFAS Reduction Initiative:

- a) Within 6 months from the effective date of the permit the Permittee shall develop and implement a PFAS reduction initiative. The reduction initiative must include Best Management Practices (BMPs).
- b) Best Management Practices (BMPs) must include an evaluation based on product substitution, reduction, or elimination of PFAS in discharges as detected by USEPA Method 1633A, or methods approved under 40 CFR Part 136, once finalized. When developing a BMP, the following should be considered, at a minimum:
 - i) Evaluation of the potential for the industrial facility to use products containing PFAS or have knowledge or suspect wastewater being discharged to the sewer system.
 - ii) Evaluation of Pollution prevention/source reduction opportunities which may include:
 - (1) Product elimination or substitution when a reasonable alternative to using PFAS is available in the industrial process,
 - (2) Accidental discharge minimization by optimizing operations and good housekeeping practices,
 - (3) Equipment decontamination or replacement (such as in metal finishing facilities) where PFAS products have historically been used to prevent discharge of legacy PFAS following the implementation of product substitution.
 - iii) Identification of the measures being taken to reduce PFAS loading from the facility, and any available information, including facility wastewater testing for PFAS, and/or the loading reduction achieved.
- c) BMPs for PFAS must be reevaluated in accordance with paragraph 1 b) of this Special Condition and updated on an annual basis.

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The reevaluated BMP's must include any updates made since the previous BMP was submitted.

- d) The Permittee is required to submit a PFAS reduction report annually to the Illinois Environmental Protection Agency at the address indicated under paragraph 2) of this Special Condition, with the first report due 12 months from the permit effective date. Subsequent annual reports shall be due 12 months following the previous report's due date.

PFAS reduction reports must include the following information:

- i) The name, address, and NPDES permit number of the Permittee,
 - ii) The current BMP for the facility. Reevaluated BMP's must also include all updates made since the previous BMP was submitted.
- 2) The Permittee shall submit the PFAS reduction reports identified under paragraphs 1) of this Special Condition electronically or in writing to one of the following addresses:
- a) EPA.PrmtSpecCondtns@Illinois.gov, or
 - b) Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

Special Condition No 14. Cooling Water Intake Structure.

Based on available information, the Agency has determined that the operation of the cooling water intake structure must meet the equivalent of Best Technology Available (BTA) in accordance with the Best Professional Judgment provisions of 40 CFR 125.3 and 40 CFR 125.90(b), based on information available at the time of permit reissuance.

The Permittee shall comply with the requirements of the Cooling Water Intake Structure Existing Facilities Rule as found at 40 CFR 122 and 125. Any application materials and submissions required for compliance with the Existing Facilities Rule, shall be submitted to the Agency no later than 4 years from the effective date of this permit.

If for any reason, the Cooling Water Intake Structure Existing Facilities Rule is stayed or remanded by the courts, the Permittee shall comply with the requirements below. The information required below is necessary to further evaluate cooling water intake structure operations based on the most up to date information, in accordance with the Best Professional Judgment provisions of 40 CFR 125.3 and 40 CFR 125.90(b):

A. The permittee shall submit the following information/studies within 4 years of the effective date of the permit:

1. Source Water Physical Data to include:

- a) A narrative description and scaled drawings showing the physical configuration of all source water bodies used by the facility including aerial dimensions, depths, salinity and temperature regimes;
- b) Identification and characterization of the source waterbody's hydrological and geomorphological features, as well as the methods used to conduct any physical studies to determine the intake's area of influence and the results of such studies; and
- c) Location maps.

2. Source Waterbody Flow Information

The permittee shall provide the annual mean flow of the waterbody, any supporting documentation and engineering calculations to support the analysis of whether the design intake flow is greater than five percent of the mean annual flow of the river or stream for purposes of determining applicable performance standards. Representative historical data (from a period of time up to 10 years) shall be used, if available.

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3. Impingement Mortality and Entrainment Characterization Study

The permittee shall submit an Impingement Mortality and Entrainment Characterization Study whose purpose is to provide information to support the development of a calculation baseline for evaluating impingement mortality and entrainment and to characterize current impingement mortality and entrainment. The Study shall include the following in sufficient detail to support establishment of baseline conditions:

- a) Taxonomic identification of all life stages of fish and shellfish and any species protected under Federal, State, or Tribal law (including threatened or endangered species) that are in the vicinity of the cooling water intake structure(s) and are susceptible to impingement and entrainment;
- b) A characterization of all life stages of fish and shellfish, and any species protected under Federal, or State law, including a description of the abundance and temporal and spatial characteristics in the vicinity of the cooling water intake structure(s). These may include historical data that are representative of the current operation of the facility and of biological conditions at the site; and
- c) Documentation of the current impingement mortality and entrainment of all life stages of fish, shellfish, and any species protected under Federal, State, or Tribal Law (including threatened or endangered species) and an estimate of impingement mortality and entrainment to be used as the calculation baseline. The documentation may include historical data that are representative of the current operation of the facility and of biological conditions at the site. Impingement mortality and entrainment samples to support the calculations required must be collected during periods of representative operational flows for the cooling water intake structure and the flows associated with the samples must be documented.

The Permittee shall submit the documentation identified under this Special Condition electronically or in writing to one of the following addresses:

- a. EPA.PrmtSpecCondtns@Illinois.gov, or
- b. Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

B. The permittee shall comply with the following requirements:

1. At all times properly operate and maintain the intake equipment as demonstrated in the application material supporting the BTA determination.
2. Inform IEPA of any proposed changes to the cooling water intake structure or proposed changes to operations at the facility that affect impingement mortality and/or entrainment.
3. Debris collected on intake screens is prohibited from being discharged back to the canal. Debris does not include living fish or other living aquatic organisms.
4. Compliance Alternatives. The permittee must evaluate each of the following alternatives for establishing best available technology for minimizing adverse environmental impacts at the facility due to operation of the intake structure:
 - a) Evaluate operational procedures and/or propose facility modifications to reduce the intake through-screen velocity to less than 0.5 ft/sec. The operational evaluation may consider modified circulating water pump operation; reduced flow associated with capacity utilization, recalculation or determination of actual total water withdrawal capacity. The evaluation report and any implementation plan for the operational changes and/ or facility modification shall be submitted to the Agency with the renewal application for this permit.
 - b) Complete a fish impingement and entrainment mortality minimization alternatives evaluation. The evaluation may include an assessment of modification of the traveling screens, consideration of a separate fish and debris return system and include time frames and cost analysis to implement these measures. The evaluation report and implementation plan for any operational changes and/ or facility modifications shall be submitted to the Agency with the renewal application for this permit.

C. All required reports shall be submitted to the Industrial Unit, Permit Section and Compliance Assurance Section at the address stated above

This special condition does not relieve the permittee of the responsibility of complying with any other laws, regulations, or judicial orders issued pursuant to Section 316(b) of the Clean Water Act.

