

NPDES Permit No. IL0031488

Notice No. JDS:25080101.jds

Public Notice Beginning Date: September 30, 2025

Public Notice Ending Date: October 30, 2025

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET

of

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By: Illinois EPA
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:

City of Troy
116 East Market
Troy, Illinois 62294

Name and Address of Facility:

City of Troy STP
Center Street
Troy, Illinois 62294
(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. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. 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 numbers 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 Jonathan Smith at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic wastewater for the City of Troy.

The length of the Permit is approximately 5 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, Troy Creek, Wendel Branch is 0 cfs.

The existing facility design average flow (DAF) for the facility is 1.350 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 3.902 MGD. Treatment consists of screening, grit removal, closed loop reactor activated sludge, filtration and UV disinfection. Sludge handling consists of belt filter press, lime stabilization, storage and land application.

The proposed facility design average flow (DAF) is 3.55 million gallons per day (MGD) and the design maximum flow (DMF) is 9.48 MGD. Treatment consists of screening, grit removal, sequential batch reactors, nitrification/denitrification, phosphorus removal, closed loop reactor activated sludge, filtration and UV disinfection. Sludge handling consists of belt filter press, lime stabilization, storage and land application.

This reissued Permit increases the facility's DAF, DMF, concentration limits, and/or load limits.

Application is made for the existing discharge(s) which is located in Madison County, Illinois.

The following information identifies the discharge point, receiving stream and stream classifications:

<u>Discharge Number</u>	<u>Receiving Stream</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Stream Classification</u>	<u>Integrity Rating</u>
B01	Troy Creek, Wendel Branch	38° 43' 35" North	89° 52' 18" West	General Use	Not Rated
A01	Troy Creek, Wendel Branch	38° 43' 35" North	89° 52' 18" West	General Use	Not Rated
001	Troy Creek, Wendel Branch	38° 43' 35" North	89° 52' 18" West	General Use	Not Rated

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

The stream segment(s), ODMA-TR-C2, receiving the discharge from outfall(s) 001 is not on the 2024 303(d) list of impaired waters.

The subject facility discharges to Troy Creek at a point where 0 cfs of flow exists upstream of the outfall during critical 7Q10 low-flow conditions. The facility has a OAF of 1.35 MGD and is permitted to expand to 3.55 MGD. Troy Creek is classified as a General Use Water. Troy Creek 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. Troy Creek is not subject to enhanced dissolved oxygen standards.

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The Troy facility discharges to Troy Creek (ODMA-TR-C2). Troy Creek, Waterbody Segment, ODMA-TR- C2, is not listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List. Aquatic life use is fully supported. From the treatment plant to the end of segment ODMA-TR-C2 is a distance of 1.66 stream miles.

Segment ODMA-TR-C3 is the next segment of Troy Creek. Troy Creek, Waterbody Segment, ODMA-TR- C3, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life with potential cause given as phosphorus. Segment ODMA-TR-C3 is 0.3 stream miles in length.

Troy Creek flows into Wendell Branch. Wendell Branch, Waterbody Segment, ODM, is not listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List. Aquatic life use is fully supported. From Troy Creek to the end of Wendell Branch is 1.95 miles in length.

Wendell Branch flows into Silver Creek. Silver Creek, Waterbody Segment, OD-06, is listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List as impaired for aquatic life with potential causes given as cause unknown, nitrogen, phosphorus, and sedimentation/siltation, and primary contact use with potential cause given as fecal coliform. Aesthetic quality use is fully supporting. From Wendell Branch to the end of Segment OD-06 is 9.06 miles in length.

Silver Creek flows into Silver Creek Ditch. Silver Creek Ditch, Waterbody Segment, ODF-OF-Cl, is not listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List. Aquatic life is fully supported. Segment ODF-OF-Cl is 7.77 stream miles in length.

Silver Creek Ditch flows into Silver Creek. Silver Creek, Waterbody Segment, OD-07, is not listed on the 2024 Illinois Integrated Water Quality Report and Section 303(d) List. Aesthetic quality and aquatic life uses are fully supported. Segment OD-07 is 33.65 stream miles in length.

The Troy effluent travels a total of 49.97 miles in the downstream continuum before it meets the Kaskaskia River. There is no algae impairment noted in the 303(d) List nor is there any impairment due to a cause of dissolved oxygen, indicating excess algae, anywhere in this downstream continuum. There is no evidence to imply that phosphorus from the Troy facility is causing any impairment prohibited by the narrative water quality standard.

The Troy effluent travels a total of 54.34 miles in the stream continuum before it joins the Kaskaskia River. There is no algae impairment noted in the 303(d) List nor is there any dissolved oxygen impairment due to excess algae anywhere in this downstream continuum. There is no evidence to imply that phosphorus from the Troy is causing any impairment prohibited by the narrative water quality standard.

The agency performed a risk assessment study for eutrophication during the previous permit renewal using monitoring results of sestonic chlorophyll-a concentration, pH and dissolved-oxygen saturation from 2 monitoring stations approximately 50 miles downstream of STP Outfall B01. The data was collected during the months of May through October in 2012 and 2016. The Agency's data from downstream monitoring stations OD-06 and OD-07 show median sestonic chlorophyll-a did not exceed 26 ug/L. In addition, the maximum pH and daily maximum dissolved-oxygen saturation did not exceed 8.35 and 110% respectively for 2 days or more at either station.

The agency has performed a risk assessment study for eutrophication during this permit renewal using monitoring results of sestonic chlorophyll-a concentration, pH and dissolved-oxygen saturation from 1 monitoring stations approximately 50 miles downstream of STP Outfall B01. The data was collected during the months of May through October in 2022 and 2024. The Agency's data from downstream monitoring station OD-07 show median sestonic chlorophyll-a did not exceed 26 ug/L. In addition, the maximum pH and daily maximum dissolved-oxygen saturation did not exceed 8.35 and 110% respectively for 2 days or more at either station.

The data for the downstream station OD-07, were similar for the 2012-2016 and the 2022-2024 dates. Both maps showed Median *Chlorophyll a* concentrations below 5 ug/L (with the 2022-2024 data being slightly less) and the none of the data had high pH with high percent dissolved-oxygen. Also, none of the pH data was above 9.0.

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): B01 STP (existing)

Load limits computed based on a design average flow (DAF) of 1.350 MGD (design maximum flow (DMF) of 3.902 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day			CONCENTRATION			Regulation
	DAF (DMF)*			LIMITS mg/L			
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
CBOD ₅	113 (325)		225 (651)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids	135 (391)		270 (781)	12		24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual						0.038	35 IAC 302.208
Ammonia Nitrogen: As (N)							35 IAC 355 and 35 IAC 302
March-May / Sept.-Oct	23 (65)	56 (163)	90 (260)	2.0	5.0	8.0	
June-August	17 (49)		34 (98)	1.5		3.0	
Nov.-Feb.	45 (130)		90 (260)	4.0		8.0	
PFAS Sum***						Monitor only	35 IAC 309.146
Copper	0.37 (1.1)		0.59 (1.7)	0.0328		0.0523	35 IAC 302.208
Total Phosphorus (as P)	Monitor Only						35 IAC 309.146
Total Nitrogen (as N)	Monitor Only						35 IAC 309.146
				Monthly Avg. not less than	Weekly Average not less than	Daily Minimum	
Dissolved Oxygen							
March-July				--	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

*Load Limits are calculated by using the formula: $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$.

**BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent.

*** 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 Publicly Owned Treatment Works who are classified as a major discharger by USEPA, and with the type and variety of industries that discharge to the sewer system, have the potential to receive wastewater contaminated by PFAS. To help eliminate and/or control the amount of PFAS being discharged to the sewer system, the permittee will be required to monitor for PFAS compounds and to require Best Management Practices (BMPs) be developed by specific industrial facilities.

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Discharge Number(s) and Name(s): B01 STP Outfall (existing) (Continued from the last Page)

Monitoring will be done on the wastewater treatment plant's influent, effluent and biosolids. The permit will also require BMPs be developed for those industrial facilities who have been identified by USEPA as having the potential to use and/or discharge PFAS compounds. Monitoring for PFAS has been added to the effluent limitations, monitoring, and reporting page(s) for outfalls (Outfall 001), and Special Conditions 23 and 24 have been added to the permit as well.

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): B01 STP (proposed)

Load limits computed based on a design average flow (DAF) of 3.55 MGD (design maximum flow (DMF) of 9.48 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day			CONCENTRATION			Regulation	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
CBOD ₅	296 (790)		592 (1581)	10		20	35 IAC 304.120 40 CFR 133.102	
Suspended Solids	355 (949)		711 (1898)	12		24	35 IAC 304.120 40 CFR 133.102	
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125	
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121	
Chlorine Residual							0.038	35 IAC 302.208
Ammonia Nitrogen: As (N)								35 IAC 355 and 35 IAC 302
March-May /Sept.-Oct.	59 (158)	148 (395)	237 (633)	2.0	5.0	8.0		
June-August	44 (119)		89 (237)	1.5		3.0		
Nov.-Feb.	118 (316)		237 (633)	4.0		8.0		
PFAS Sum****							Monitor only	35 IAC 309.146
Copper	0.97 (2.6)		1.5 (4.1)	0.0328		0.0523	35 IAC 302.208	
Total Phosphorus (as P)	15 (40)			0.5***			35 IAC 304.123	
Total Nitrogen (as N)	Monitor Only							35 IAC 304.123
Dissolved Oxygen				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
March-July				--	6.0	5.0	35 IAC 302.206	
August-February				5.5	4.0	3.5		

*Load Limits are calculated by using the formula: $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$.

**BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent.

***12 month rolling geometric mean (calculated monthly)

**** 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 Publicly Owned Treatment Works who are classified as a major discharger by USEPA, and with the type and variety of industries that discharge to the sewer system, have the potential to receive wastewater contaminated by PFAS. To help eliminate and/or control the amount of PFAS being discharged to the sewer system, the permittee will be required to monitor for PFAS compounds and to require Best Management Practices (BMPs) be developed by specific industrial facilities.

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Discharge Number(s) and Name(s): B01 STP Outfall (proposed) (Continued from the last Page)

Monitoring will be done on the wastewater treatment plant's influent, effluent and biosolids. The permit will also require BMPs be developed for those industrial facilities who have been identified by USEPA as having the potential to use and/or discharge PFAS compounds. Monitoring for PFAS has been added to the effluent limitations, monitoring, and reporting page(s) for outfalls (Outfall 001), and Special Conditions 23 and 24 have been added to the permit as well.

This Permit contains an authorization to treat and discharge excess flow as follows:

Discharge Number(s) and Name(s): A01 Excess Flows (Flows over 3.902 MGD) (existing)

<u>Parameter</u>	<u>CONCENTRATION LIMITS (mg/L)</u>		<u>Regulation</u>
	<u>Monthly Average</u>		
BOD ₅	Monitor Only		40 CFR 133.102
Suspended Solids	Monitor Only		40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units		35 IAC 304.125
Ammonia Nitrogen (as N)	Monitor Only		35 IAC 309.146

This Permit contains an authorization to treat and discharge excess flow as follows:

Discharge Number(s) and Name(s): A01 Excess Flows (Flows over 9.48 MGD) (proposed)

<u>Parameter</u>	<u>CONCENTRATION LIMITS (mg/L)</u>		<u>Regulation</u>
	<u>Monthly Average</u>		
BOD ₅	Monitor Only		40 CFR 133.102
Suspended Solids	Monitor Only		40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units		35 IAC 304.125
Ammonia Nitrogen (as N)	Monitor Only		35 IAC 309.146

Discharge Number(s) and Name(s): 001 Combined Discharge from A01 and B01 outfall

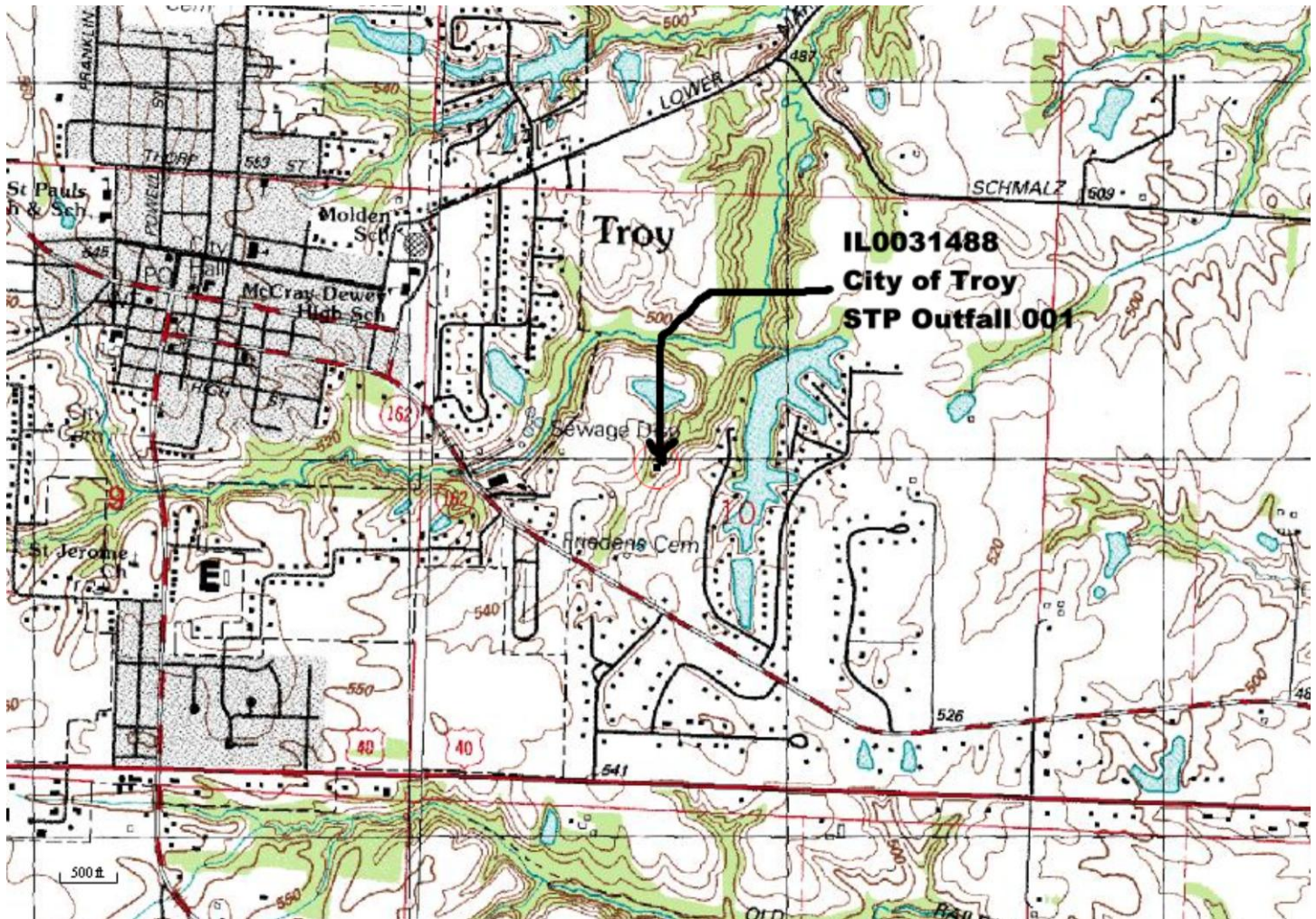
The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

<u>Parameter</u>	<u>CONCENTRATION LIMITS (mg/L)</u>		<u>Regulation</u>
	<u>Monthly Average</u>	<u>Weekly Average</u>	
BOD ₅ *	30	45	40 CFR 133.102
Suspended Solids*	30	45	40 CFR 133.102
pH	Shall be in the range of 6 to 9 standard units		35 IAC 304.125
Chlorine Residual	0.75		35 IAC 302.208
Ammonia Nitrogen (as N)	Monitor only		35 IAC 355 and 35 IAC 302
Total Phosphorus (as P)	Monitor only		35 IAC 309.146
Dissolved Oxygen	Monitor only		35 IAC 302.206

*The 30-day average percent removal shall not be less than 85 percent.

This draft Permit also contains the following requirements as special conditions:

1. Reopening of this Permit to include different final effluent limitations.
2. Operation of the facility by or under the supervision of a certified operator.
3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
4. More frequent monitoring requirement without Public Notice.
5. Prohibition against causing or contributing to violations of water quality standards.
6. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.
8. Effluent sampling point location.
9. Controlling the sources of infiltration and inflow into the sewer system.
10. Seasonal fecal coliform limits.
11. Monitoring for arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, weak acid dissociable cyanide, total cyanide, fluoride, dissolved iron, total iron, lead, manganese, mercury, nickel, oil, phenols, selenium, silver and zinc is required to be conducted semi-annually beginning 3 months from the effective date.
12. Burden reduction.
13. Submission of annual fiscal data.
14. A requirement for biomonitoring of the effluent.
15. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
16. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
17. Capacity, Management, Operations, and Maintenance (CMOM) plan.
18. Phosphorus Discharge Optimization Plan.
19. Notify agency of plant completion.
20. Total Nitrogen Monitoring
21. Reasonable Potential analysis and mixing study plan.
22. Requirement to meet 0.5 mg/L Total Phosphorus by 2030.
23. PFAS Testing and Reporting.
24. PFAS Reduction Program.



NPDES Permit No. IL0031488

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:

City of Troy
116 East Market
Troy, Illinois 62294

Facility Name and Address:

City of Troy STP
Center Street
Troy, Illinois 62294
(Madison County)

Receiving Waters: Troy Creek, Wendel Branch

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, 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 Effluent Limitations, Monitoring, and Reporting requirements; Special Conditions and Attachment H Standard Conditions attached 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.

Darin E. LeCrone, P.E.
Manager, Permit Section
Division of Water Pollution Control

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NPDES Permit No. IL0031488

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): B01 STP Outfall (existing)

Load limits computed based on a design average flow (DAF) of 1.350 MGD (design maximum flow (DMF) of 3.902 MGD).

From the effective date of this Permit until the start of operation of the proposed Treatment plant or expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day			CONCENTRATION			Sample Frequency	Sample Type
	DAF (DMF)*			LIMITS mg/L				
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Flow (MGD)							Continuous	
CBOD ₅ ** ⁽¹⁾	113 (325)		225 (651)	10		20	1 Day/Week	Composite
Suspended Solids ⁽¹⁾	135 (391)		270 (781)	12		24	1 Day/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						1 Day/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 mL (May through October)						3 Days/Week	Grab
Chlorine Residual						0.038	1 Day/Week	Grab
Ammonia Nitrogen: As (N)								
March-May/Sept.-Oct.	23 (65)	56 (163)	90 (260)	2.0	5.0	8.0	1 Day/Week	Composite
June-August	17 (49)		34 (98)	1.5		3.0	1 Day/Week	Composite
Nov.-Feb.	45 (130)		90 (260)	4.0		8.0	1 Day/Week	Composite
PFA****			****			****	****	****
PFAS Sum****			****			****	****	****
Copper	0.37 (1.1)		0.59 (1.7)	0.0328		0.0523	3 Days/Week	Composite
Total Phosphorus (as P)*****							Monitor Only	1 Day/Month
Total Nitrogen (as N)*****							Monitor Only	1 Day/Month
Dissolved Oxygen				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
March-July				--	6.0	5.0	1 Day/Week	Grab
August-February				5.5	4.0	3.5	1 Day/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

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NPDES Permit No. IL0031488

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): B01 STP Outfall (existing) (Continued from the last Page)

***See Special Condition 10.

****See Special Condition 23.

*****See Special Condition 22.

*****See Special Condition 20.

⁽¹⁾BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD₅ concentration to determine the effluent BOD₅ concentration. Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual, Total Phosphorus, Total Nitrogen and Nitrate shall be reported on DMR as daily maximum. Total Nitrogen is the sum total of Total Kjeldahl Nitrogen, Nitrate, and Nitrite.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Copper shall be reported on the DMR as monthly average and daily maximum value.

NPDES Permit No. IL0031488

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): B01 STP Outfall (proposed)

Load limits computed based on a design average flow (DAF) of 3.55 MGD (design maximum flow (DMF) of 9.48 MGD).

From the start of operation of the proposed plant until the expiration date of this permit, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	LOAD LIMITS lbs/day			CONCENTRATION			Sample Frequency	Sample Type
	DAF (DMF)*			LIMITS mg/L				
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Flow (MGD)							Continuous	
CBOD ₅ ** ⁽¹⁾	296 (790)		592 (1581)	10		20	1 Day/Week	Composite
Suspended Solids ⁽¹⁾	355 (949)		711 (1898)	12		24	1 Day/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						1 Day/Week	Grab
Fecal Coliform***	Daily Maximum shall not exceed 400 per 100 Ml (May through October)						3 Days/Week	Grab
Chlorine Residual						0.038	1 Day/Week	Grab
Ammonia Nitrogen: As (N)								
March-May/Sept.-Oct.	59 (158)	148 (395)	237 (633)	2.0	5.0	8.0	1 Day/Week	Composite
June-August	44 (119)		89 (237)	1.5		3.0	1 Day/Week	Composite
Nov.-Feb.	118 (316)		237 (633)	4.0		8.0	1 Day/Week	Composite
PFAS****			****			****	****	****
PFAS Sum****			****			****	****	****
Copper	0.97 (2.6)		1.5 (4.1)	0.0328		0.0523	3 Days/Week	Composite
Total Phosphorus (as P)*****	15 (40)			0.5			1 Day/Week	Composite
Total Nitrogen (as N)*****				Monitor Only		Monitor Only	1 Day/Week	Composite
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen								
March-July				--	6.0	5.0	1 Day/Week	Grab
August-February				5.5	4.0	3.5	1 Day/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

**Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

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NPDES Permit No. IL0031488

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): B01 STP Outfall (proposed) (Continued from the last Page)

***See Special Condition 10.

****See Special Condition 23.

*****See Special Condition 22.

*****See Special Condition 20.

⁽¹⁾BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD₅ concentration to determine the effluent BOD₅ concentration. Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day Average values of the effluent pollutant concentrations for a given time period.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual and Copper shall be reported on DMR as daily maximum.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Total Phosphorus, a 12-month rolling geometric mean (calculated monthly), shall be reported on the DMR as monthly average.

Total Nitrogen shall be reported on the DMR as a monthly average and daily maximum value. Total Nitrogen is the sum total of Total Kjeldahl Nitrogen, Nitrate and Nitrite.

Copper shall be reported on the DMR as monthly average and daily maximum value.

NPDES Permit No. IL0031488

Effluent, Limitations, Monitoring, and Reporting

Discharge Number(s) and Name(s): A01 Excess Flows (Flows over 3.902 MGD) (existing)

From the effective date of this Permit until the start of operation of the proposed plant or expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	CONCENTRATION LIMITS (mg/L)		Sample Frequency	Sample Type
	Monthly Average			
Total Flow (MG)	See Below		Daily When Discharging	Continuous
BOD ₂	Monitor Only		Daily When Discharging	Grab
Suspended Solids	Monitor Only		Daily When Discharging	Grab
pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
Ammonia Nitrogen (as N)	Monitor Only		Daily When Discharging	Grab

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

NPDES Permit No. IL0031488

Effluent, Limitations, Monitoring, and Reporting

Discharge Number(s) and Name(s): A01 Excess Flows (Flows over 9.48 MGD) (proposed)

From the start of operation of the proposed plant until the expiration date of this permit, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

Parameter	CONCENTRATION LIMITS (mg/L)		Sample Frequency	Sample Type
	Monthly Average			
Total Flow (MG)	See Below		Daily When Discharging	Continuous
BOD ₂	Monitor Only		Daily When Discharging	Grab
Suspended Solids	Monitor Only		Daily When Discharging	Grab
pH	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
Ammonia Nitrogen (as N)	Monitor Only		Daily When Discharging	Grab

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 Combined Discharge from Outfalls A01 and B01

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

<u>Parameter</u>	<u>CONCENTRATION LIMITS (mg/L)</u>		<u>Sample Frequency</u>	<u>Sample Type</u>
	<u>Monthly Average</u>	<u>Weekly Average</u>		
Total Flow (MG)			Daily When A01 is Discharging	Continuous
BOD ₅ **	30	45	Daily When A01 is Discharging	Grab
Suspended Solids**	30	45	Daily When A01 is Discharging	Grab
pH	Shall be in the range of 6 to 9 Standard Units		Daily When A01 is Discharging	Grab
Chlorine Residual	0.75		Daily When A01 is Discharging	Grab
Total Phosphorus (as P)	Monitor Only		Daily When A01 is Discharging	Grab
Dissolved Oxygen	Monitor Only	Monitor Only	Daily When A01 is Discharging	Grab
Ammonia Nitrogen (as N)***	Monitor Only		Daily When A01 is Discharging	Grab

*An explanation shall be provided in the comment section of the DMR should these facilities be used when the main treatment facility is not receiving Design Maximum Flow (DMF). The explanation shall identify the reasons the main facility is at a diminished treatment capacity. Additionally, the Permittee shall comply with the provisions of Special Condition 8.

**BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD₅ concentration to determine the effluent BOD₅ concentration. Percent removal is a percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

***See Special Condition 21.

NPDES Permit No. IL0031488

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 Combined Discharge from Outfalls A01 and B01.
(continued from last Page)

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column.

Report the number of days of discharge in the comments section of the DMR.

BOD5 and Suspended Solids shall be reported on the DMR as a monthly average and weekly average concentration.

pH shall be reported on the DMR as a minimum and a maximum.

Chlorine Residual shall be reported on the DMR as a monthly average.

Ammonia Nitrogen and total Phosphorus shall be reported on the DMR as a monthly average.

Dissolved Oxygen shall be reported on the DMR as a daily minimum value.

A Monthly Average value for Ammonia shall be computed for each month that A01 discharges beginning one month after the effective date of the permit. A Monthly Average concentration shall be determined by combining data collected from A01 and B01 (only B01 data from days when A01 is not discharging) for the reporting period. These monitoring results shall be submitted to the Agency on the DMR.

A Monthly and Weekly Average value for DO shall be computed for each month that A01 discharges beginning one month after the effective date of the permit. The Monthly and Weekly Averages concentrations for 001 shall be determined by combining data collected from A01 and B01 (only B01 data from days when A01 is not discharging) for the reporting period. These monitoring results shall be submitted to the Agency on the DMR.

NPDES Permit No. IL0031488

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

<u>Parameter</u>	<u>Sample Frequency</u>	<u>Sample Type</u>
Flow (MGD)	Continuous	
BOD ₅	1 Day/Week	Composite
Suspended Solids	1 Day/Week	Composite
PFAS**	**	**
PFAS Sum**	**	**

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

BOD₅ and Suspended Solids shall be reported on the DMR as a monthly average concentration.

** See Special Condition 23.

Biosolids Monitoring, and Reporting

Biosolids shall be monitored as follows:

<u>Parameter</u>	<u>Sample Frequency</u>	<u>Sample Type</u>
PFAS*	*	*
PFAS Sum*	*	*

*See Special Condition 23.

Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

SPECIAL CONDITION 3. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

SPECIAL CONDITION 4. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR § 122.63 and Without Public Notice.

SPECIAL CONDITION 5. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302 and 303.

SPECIAL CONDITION 6. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) 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 is required to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, <https://www2.illinois.gov/epa/topics/water-quality/surface-water/netdmr/pages/quick-answer-guide.aspx>.

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.

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 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

SPECIAL CONDITION 8. Samples taken in compliance with the effluent monitoring requirements shall be taken:

- A. For Outfall Number B01 shall be taken at a point:
Representative of the discharge of fully treated wastewater effluent, and When discharges are occurring from Outfall Number A01, prior to admixture with discharges from Outfall Number A01.
- B. For Outfall Number A01 shall be taken at a point:

Special Conditions

Representative of the discharge from the excess flow treatment unit(s) to Outfall Number 001, and Prior to admixture with discharges from Outfall Number B01.

- C. For Outfall Number 001 shall be taken at a point:
 Representative of the discharge from Outfall Number 001 but prior to entry into the receiving water; and . Representative of the admixture of all flow from Outfall Numbers A01 and B01.
1. On days when there are no discharges through Outfall Number A01 samples for all effluent limitations and monitoring parameters applicable to Outfall Number 001 can be taken at the location of sampling for Outfall Number B01. When this occurs, sample results for Outfall Number B01 must be reported on the DMRs for Outfall Number B01 and Outfall Number 001.
 2. On days when there are discharges through Outfall A01, samples for all effluent limitations and monitoring parameters applicable to Outfall 001 shall be representative of the discharge through Outfall 001 to the receiving water; and shall be taken at a point representative of the admixture of flows from Outfall Numbers A01 and B01.

SPECIAL CONDITION 9. This Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

SPECIAL CONDITION 10. Fecal Coliform limits for Discharge Number B01 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

SPECIAL CONDITION 11. The Permittee shall conduct semi-annual monitoring of the effluent and report concentrations (in mg/L) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit The sample shall be a 24-hour effluent composite except as otherwise provided below and the results shall be submitted on Discharge Monitoring Report (DMR) electronic forms, unless otherwise specified by the 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>
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
00720	Cyanide (total) (grab)***	5.0 µg/L
00722	Cyanide (grab) (available**** or amenable to chlorination)***	5.0 µg/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L

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32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

The minimum reporting limit for each parameter is specified by Illinois EPA as the regulatory authority.

The minimum reporting limit for each parameter shall be greater than or equal to the lowest calibration standard and within the acceptable calibration range of the instrument.

The minimum reporting limit is the value below which data are to be reported as non-detects.

The statistically-derived laboratory method detection limit for each parameter shall be less than the minimum reporting limit required for that parameter.

All sample containers, chemical and thermal preservation, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR Part 136.

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.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

***Analysis for cyanide (available or amenable to chlorination) is only required if cyanide (total) is detected at or above the minimum reporting limit.

****USEPA Method OIA-1677 or Standard Method SM 4500-CN G.

The Permittee shall provide a report briefly describing the permittee's pretreatment activities and an updated listing of the Permittee's significant industrial users. The list should specify which categorical pretreatment standards, if any, are applicable to each Industrial User. Permittees who operate multiple plants may provide a single report. Such report shall be submitted within six (6) months of the effective date of this Permit to the following addresses:

U.S. Environmental Protection Agency
 Region 5
 77 West Jackson Blvd.
 Chicago, Illinois 60604
 Attention: Water Assurance Branch Enforcement and Compliance

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 12. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for parameters due to sustained compliance. The IEPA may require that the influent and effluent sampling frequency for these parameters be increased without

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Public Notice. This provision does not limit EPA's authority to require additional monitoring, information or studies pursuant to Section 308 of the CWA.

SPECIAL CONDITION 13. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 14. The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) B01.

Biomonitoring

- A. Acute Toxicity – Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Edition) EPA/821-R-02-012, October 2002, and Whole Effluent Toxicity Methods Errata Sheet EPA/821-R-02-012-ES, December 2016. Unless substitute tests are pre-approved; the following tests are required:
1. Fish 96-hour static LC₅₀ Bioassay using fathead minnows (*Pimephales promelas*).
 2. Invertebrate 48-hour static LC₅₀ Bioassay using *Ceriodaphnia*.
- B. Testing Frequency – The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Sample collection and testing must be conducted in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit. When possible, bioassay sample collection should coincide with sample collection for metals analysis or other parameters that may contribute to effluent toxicity.
- C. Reporting – Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be emailed to EPA.PrmtSpecCondtns@Illinois.gov with "IL0031488 Special Condition 14" as the subject of the email within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit. The respective period in the testing schedule for which a report is being provided to Agency shall be clearly indicated as applicable on the first page of the report, for example, the *biomonitoring report for the 18th month, 15th month, 12th month, or 9th month.*
- D. Toxicity – Should a bioassay result in toxicity to >20% of organisms tested in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within one (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥ 50% of organisms tested in the 100% effluent treatments, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification and reduction evaluation process as outlined below.
- E. Toxicity Identification and Reduction Evaluation – Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatment, the Permittee must contact the IEPA within one (1) day of the results becoming available to the Permittee and begin the toxicity identification evaluation process in accordance with Methods for Aquatic Toxicity Identification Evaluations, EPA/600/6-91/003. The IEPA may also require, upon notification, that the Permittee prepare a plan for toxicity reduction evaluation to be developed in accordance with Toxicity Reduction

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Evaluation Guidance for Municipal Wastewater Treatment Plants, EPA/833B-99/002, which shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan for toxicity reduction evaluation within ninety (90) days following notification of such requirement. The Permittee shall implement the plan within ninety (90) days of IEPA approval or other such date as contained in a notification letter received from the IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 15. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for U.S. EPA and IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by this permit or the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The Permittee shall comply with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the

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following address:

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 16. 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 completion of an alternate Water Quality Study.

SPECIAL CONDITION 17. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement back-ups and ensuring that overflows or back-ups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by this permit and by Ill. Adm. Code 306.304. As part of the process to ultimately achieve compliance through the elimination of and mitigating the adverse impacts of any such overflows if they do occur, the Permittee shall (A) identify and report to IEPA all SSOs that do occur, and (B) update the existing Capacity, Management, Operations, and Maintenance (CMOM) plan at least annually and maintain it at the facility for review during Agency Field Operations Section inspections. The Permittee shall submit copies of the CMOM to the IEPA upon written request. The Permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they are designed.

The CMOM plan shall include the following elements:

A. Measures and Activities:

1. A complete map and system inventory for the collection system owned and operated by the Permittee;
2. Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
3. Documentation of unplanned maintenance;
4. An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; use flow monitoring and/or sewer hydraulic modeling, as necessary;
5. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee. Include preventative maintenance programs to prevent and/or eliminate collection system blockages from roots or grease, and prevent corrosion or negative effects of hydrogen sulfide which may be generated within collection system;

Special Conditions

6. Operational control, including documented system control procedures, scheduled inspections and testing, list of scheduled frequency of cleaning (and televising as necessary) of sewers;
7. The Permittee shall develop and implement an Asset Management strategy to ensure the long-term sustainability of the collection system. Asset Management shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace or rehabilitate particular assets and develop long-term funding strategies; and
8. Asset Management shall include but is not limited to the following elements:
 - a. Asset Inventory and State of the Asset;
 - b. Level of Service;
 - c. Critical Asset Identification;
 - d. Life Cycle Cost; and
 - e. Long-Term Funding Strategy.

B. Design and Performance Provisions:

1. Monitor the effectiveness of CMOM;
2. Upgrade the elements of the CMOM plan as necessary; and
3. Maintain a summary of CMOM activities.

C. Overflow Response Plan:

1. Know where overflows and back-ups within the facilities owned and operated by the Permittee occur;
2. Respond to each overflow or back-up to determine additional actions such as clean up; and
3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow/infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.
4. Identify the root cause of the overflow or basement backup, and document to files;
5. Identify actions or remediation efforts to reduce risk of reoccurrence of these overflows or basement backups in the future, and document to files.

D. System Evaluation Plan:

1. Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;
2. Evaluate plans to reduce I/I and eliminate SSOs;
3. Evaluate the effectiveness and performance in efforts to reduce excessive I/I in the collection system;
4. Special provisions for Pump Stations and force mains and other unique system components; and
5. Construction plans and schedules for correction.

E. Reporting and Monitoring Requirements:

1. Program for SSO detection and reporting; and
2. Program for tracking and reporting basement back-ups, including general public complaints.

F. Third Party Notice Plan:

1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;

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2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
3. Identifies who shall receive the notification;
4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
5. Includes a description of the lines of communication; and
6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

For additional information concerning USEPA CMOM guidance and Asset Management please refer to the following web site addresses. http://www.epa.gov/npdes/pubs/cmom_guide_for_collection_systems.pdf and http://water.epa.gov/type/watersheds/wastewater/upload/guide_smallsystems_assetmanagement_bestpractices.pdf

SPECIAL CONDITION 18. The Permittee shall maintain a Phosphorus Discharge Optimization Plan. The plan shall include a schedule for the implementation of these optimization measures. Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The Permittee's evaluation shall include, but not be limited to, an evaluation of the following optimization measures:

- A. WWTF influent reduction measures.
 1. Evaluate the phosphorus reduction potential of users.
 2. Determine which sources have the greatest opportunity for reducing phosphorus (i.e., industrial, commercial, institutional, municipal and others).
 - a. Determine whether known sources (i.e., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
 - b. Evaluate and implement local limits on influent sources of excessive phosphorus.
- B. WWTF effluent reduction measures.
 1. Reduce phosphorus discharges by optimizing existing treatment processes.
 - a. Adjust the solids retention time for nitrification, denitrification, or biological phosphorus removal.
 - b. Adjust aeration rates to reduce dissolved oxygen and promote simultaneous nitrification-denitrification.
 - c. Add baffles to existing units to improve microorganism conditions by creating divided anaerobic, anoxic, and aerobic zones.
 - d. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
 - e. Minimize impact on recycle streams by improving aeration within holding tanks.
 - f. Reconfigure flow through existing basins to enhance biological nutrient removal.
 - g. Increase volatile fatty acids for biological phosphorus removal.

SPECIAL CONDITION 19. The Permittee shall notify the IEPA in writing once the treatment plant expansion has been completed. A letter stating the date that the expansion was completed shall be sent to the following address within fourteen (14) days of the expansion becoming operational:

Illinois Environmental Protection Agency

Special Conditions

Bureau of Water
 Compliance Assurance Section, Mail Code #19
 2520 West Iles Avenue
 Post Office Box 19276
 Springfield, Illinois 62794-9276

SPECIAL CONDITION 20. The Permittee shall notify the IEPA in writing of any operational deficiencies and corrective measures to be taken if the treatment plant exceeds the concentration values of 10 mg/L of Total Nitrogen in the effluent. Correspondence shall be directed to:

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

Illinois Environmental Protection Agency
 Bureau of Water
 Springfield Field Office, Mail Code #10
 2520 West Iles Avenue
 Post Office Box 19276
 Springfield, Illinois 62794-9276

SPECIAL CONDITION 21. The Agency shall consider all monitoring data submitted by the discharger in accordance with the monitoring requirements of this permit for all parameters, including but not limited to data pertaining to ammonia and dissolved oxygen for discharges from Discharge Number 001, to determine whether the discharges are at levels which cause, have the reasonable potential to cause or contribute to exceedances of water quality standards; and, if so, to develop appropriate water quality based effluent limitations. If the discharger wants the Agency to consider mixing when determining the need for and establishment of water quality based effluent limitations, the discharger shall submit a study plan on mixing to the Agency for the Agency's review and comment.

SPECIAL CONDITION 22. An effluent limit of 0.5 mg/L Total Phosphorus 12 month rolling geometric mean (calculated monthly) (hereinafter "Limit"), will be applicable by the Permittee beginning December 31, 2035.

In order for the Permittee to achieve the above limit, it will be necessary to modify existing treatment facilities to include phosphorus removal to meet the future 0.5 mg/L total phosphorus. The Permittee must implement the following compliance measures consistent with the schedule below:

- | | | |
|----|--|---|
| 1. | Interim Report | 12 months from the effective date of this Permit and every 12 months thereafter |
| 2. | Design | Begin November 2028 |
| 3. | Submit for construction permit | January 2031 |
| 4. | Advertise for bids | August 2031 |
| 5. | Begin construction | January 2032 |
| 6. | Construction completion | January 2034 |
| 7. | Achieve compliance with the 0.5 mg/L Total Phosphorus 12 month rolling geometric mean (calculated monthly) (hereinafter "Limit") | December 2035 |

REPORTING

The Permittee shall submit progress reports electronically to EPA.PrmtSpecCondtns@illinois.gov with "IL0031488 Special Condition 22" as the subject of the email for the compliance schedule indicating: a)

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the date the item was completed, or b) that the item was not completed, the reasons for non-completion and the anticipated completion date to the Agency Compliance Section.

SPECIAL CONDITION 23. PFAS Testing and Reporting

1. PFAS Sample Frequency and Type of Sample.

<u>Sampling Point</u>	<u>Sample Frequency</u>	<u>Sample Type</u>	<u>Report****</u>
Effluent	Quarterly*	Grab***	ng/L
Influent	Quarterly*	Grab***	ng/L
Biosolids	Semiannually**	Grab***	ng/L

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

** Semiannually sampling – Testing done during the first half of each year (January through June) must be reported on the August NetDMR and sampling taken during the second half of each year (July through December) must be reported on the February NetDMR.

*** If the permittee prefers to collect composite samples instead grab samples, the permittee will be required to seek approval through the permit modification process. All samples shall be collected during dry weather flow, during normal business hours.

**** 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 each reporting period on the NetDMR.

2. Influent and effluent test results must be reported in nanograms per liter (ng/L) as a daily maximum concentration. Biosolids test results must be reported in nanograms per gram (ng/g) as a daily maximum.
3. 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.
4. 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 3 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 biosolids ranges listed in the table in Part 7 of this Special Condition.

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5. 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 on the Net DMRs along with the individual test results.

Test results for individual analytes which are below the ML as described in Parts 1 and 4 of this Special Condition should be assigned a value of zero (0) when calculating the PFAS Sum.

6. 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 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 permit modification request.
7. Specific PFAS constituents that must be tested for, and reported on, are listed in the following table:

Target Analyte Name	Abbreviation	CASRN Number	STORET	Minimum Level (ML)	
				Aqueous (ng/L)	Biosolids (ng/g)
Perfluoroalkyl carboxylic acids					
Perfluorobutanoic acid	PFBA	375-22-4	51522	4 – 16	6.4 – 16
Perfluoropentanoic acid	PFPeA	2706-90-3	51623	2 – 8	3.2 – 8
Perfluorohexanoic acid	PFHxA	307-24-4	51624	1 – 4	1.6 – 4
Perfluoroheptanoic acid	PFHpA	375-85-9	51625	1 – 4	1.6 – 4
Perfluorooctanoic acid	PFOA	335-67-1	51521	1 – 4	1.6 – 4
Perfluorononanoic acid	PFNA	375-95-1	51626	1 – 4	1.6 – 13
Perfluorodecanoic acid	PFDA	335-76-2	51627	1 – 4	1.6 – 4
Perfluoroundecanoic acid	PFUnA	2058-94-8	51628	1 – 4	1.6 – 5
Perfluorododecanoic acid	PFDoA	307-55-1	51629	1 – 4	1.6 – 4
Perfluorotridecanoic acid	PFTTrDA	72629-94-8	51630	1 – 4	1.6 – 4
Perfluorotetradecanoic acid	PFTeDA	376-06-7	51631	1 – 4	1.6 – 4
Perfluoroalkyl sulfonic acids					

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Acid Form					
Perfluorobutanesulfonic acid	PFBS	375-73-5	52602	1 – 4	1.6 – 4
Perfluoropentanesulfonic acid	PFPeS	2706-91-4	52610	1 – 4	1.6 – 4
Perfluorohexanesulfonic acid	PFHxS	355-46-4	52605	1 – 4	1.6 – 4
Perfluoroheptanesulfonic acid	PFHpS	375-92-8	52604	1 – 4	1.6 – 4
Perfluorooctanesulfonic acid	PFOS	1763-23-1	52606	1 – 4	1.6 – 4
Perfluorononanesulfonic acid	PFNS	68259-12-1	52611	1 – 4	1.6 – 4
Perfluorodecanesulfonic acid	PFDS	335-77-3	52603	1 – 4	1.6 – 4
Perfluorododecanesulfonic acid	PFDoS	79780-39-5	52632	1 – 4	1.6 – 4
Fluorotelomer sulfonic acids					
1H,1H,2H,2H-Perfluorohexane sulfonic acid	4:2 FTS	757124-72-4	52607	4 – 15	6.4 – 15
1H,1H,2H,2H-Perfluorooctane sulfonic acid	6:2 FTS	27619-97-2	52608	4 – 15	6.4 – 15
1H,1H,2H,2H-Perfluorodecane sulfonic acid	8:2 FTS	39108-34-4	52609	4 – 15	6.4 – 15
Perfluorooctane sulfonamides					
Perfluorooctanesulfonamide	PFOSA	754-91-6	51525	1 – 4	1.6 – 4
N-methyl perfluorooctanesulfonamide	NMeFOSA	31506-32-8	52641	1 – 4	1.6 – 4
N-ethyl perfluorooctanesulfonamide	NEtFOSA	4151-50-2	52642	1 – 4	1.6 – 4
Perfluorooctane sulfonamidoacetic acids					
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9	51644	1 – 4	1.6 – 4
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6	51643	1-4	1.6 – 4
Perfluorooctane sulfonamide ethanols					
N-methyl perfluorooctanesulfonamidoethanol	NMeFOSE	24448-09-7	51642	10 – 40	16 – 40
N-ethyl	NEtFOSE	1691-99-2	51641	10 – 40	16 – 40

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perfluorooctanesulfonamidoethanol					
Per- and Polyfluoroether carboxylic acids					
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6	52612	2 – 8	6.4 – 16
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4	52636	2 – 8	6.4 – 15
Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1	PF002	4 – 16	3.2 – 8
Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5	PF006	4 – 15	3.2 – 8
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6	52626	2 – 7	3.2 – 8
Ether sulfonic acids					
9-Chlorohexadecafluoro-3-oxanonane-1- sulfonic acid	9Cl-PF3ONS	756426-58-1	PF003	4 – 15	6.4 – 15
11-Chloroeicosafluoro-3-oxaundecane-1- sulfonic acid	11Cl-PF3OUdS	763051-92-9	PF004	4 – 15	6.4 – 15
Perfluoro(2-ethoxyethane) sulfonic acid	PFEESA	113507-82-7	52629	2 – 8	3.2 – 7
Fluorotelomer carboxylic acids					
3-Perfluoropropyl propanoic acid	3:3 FTCA	356-02-5	PF001	5 – 20	8 – 50
2H,2H,3H,3H-Perfluorooctanoic acid	5:3 FTCA	914637-49-3	PF007	25 – 100	40 – 100
3-Perfluoroheptyl propanoic acid	7:3 FTCA	812-70-4	PF005	25 – 100	40 – 100

SPECIAL CONDITION 24. PFAS Reduction Program:

1) PFAS Inventory:

- a) The Permittee shall develop an inventory of those facilities which may have the potential to contribute or discharge PFAS into the sanitary sewer system. At a minimum, facilities which fall under one or more of the following SIC (NAICS) codes must be considered for inclusion in this inventory:

1020 (212230), 1041 (212221), 1094 (212291), 1311 (211120), 2221 (313210), 2262 (313310), 2273 (314110), 2295 (313320), 2297 (313230), 2299 (313110), 2385 (314999), 2392 (314999), 2394 (314910), 2621 (322121), 2656 (322219), 2671 (322220), 2672 (322220), 2673 (322220), 2752

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(323111), 2796 (323120), 2813 (325120), 2819 (211130, 325130, 325180), 2821 (325211), 2822 (325212), 2824 (325220), 2841 (325611), 2842 (325612), 2843 (325613), 2844 (325611), 2851 (325510), 2869 (325110, 325193, 325199), 2899 (325199, 325510, 325998), 2911 (324110), 2992 (324191), 3011 (326211), 3081 (326113), 3082 (326121), 3083 (326130), 3089 (326121), 3111 (316110), 3231 (323215, 327310), 3471 (332813), 3479 (332812), 3497 (332999), 3577 (334418), 3589 (333318), 3629 (335999), 3643 (335931), 3651 (334310), 3663 (334220), 3672 (334412), 3674 (334413), 3679 (334419), 3841 (333249), 3861 (333316), 4581 (488119), 4953 (562211, 562212, 562213, 562219), 5169 (424690), 5719 (442291), 7217 (561740), 7641 (811420), 9711 (928110).

- b) Examples of other activities that may not have specific SIC codes, but have the potential to contribute or discharge PFAS into the sewer system, and therefore must also be included when developing the inventory list are:
- i) Waste Management: RCRA Subtitle C Treatment, Storage, and Disposal Facilities (RCRA Part B permit holders; not defined by NAICS code).
 - ii) Firefighting training facilities.
 - iii) Airports (Part139).
 - iv) Any other activities that the permittee determines are known or expected sources of PFAS.
- c) The following information must be included for each facility that is included in the inventory:
- i) The facility name and address,
 - ii) List of SIC code(s,) or other reasons, which require the facility to be placed on the inventory list,
 - iii) Identification of wastewater discharges from the industrial facility which may have the potential to contribute or discharge PFAS into the sanitary sewer system,
 - iv) Actual or estimated monthly average flow rate in gallons per day (gpd) of wastewater being discharged to the sanitary sewer system by the facility for the previous year.
- d) The Permittee must submit an initial inventory report within 12 months of the permit effective date. Subsequent annual updated reports of the inventory list will be due 12 months from the previous report due date for the term of the permit.

Information on the initial and subsequent updated inventory reports must include:

- i) The name, address, and NPDES permit number of the Permittee,
- ii) The name and address of each facility on the inventory list,
- iii) List of SIC code(s), or other reasons, for each facility which resulted in the facility to be placed on the inventory list,
- iv) Identification of wastewater discharges at each facility which may have the potential to contribute or discharge PFAS into the sanitary sewer system,

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- v) Actual or estimated monthly average flow rate in gallons per day (gpd) of wastewater being discharged to the sewer system during the previous year for each facility on the inventory list.

Annual updated reports should identify only those sites currently discharging wastewater to the sanitary sewer.

2) PFAS Reduction Initiative:

- a) Within 24 months from the effective date of the permit the Permittee shall develop and implement a PFAS reduction initiative. The reduction initiative must include PFAS loading reduction plans for facilities identified in the inventory under paragraph 1) of this Special Condition.
- b) The PFAS loading reduction plans referred to above must include, for facilities identified in the inventory, the following Best Management Practices (BMPs):
 - i) Evaluation of the potential for the facility to use products containing PFAS or have knowledge or suspect wastewater being discharged to the sewer system to contain PFAS.
 - 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) PFAS loading reduction plans must be reevaluated and updated on an annual basis. The updated plans must identify any changes made since the previous plan was submitted.
- d) The Permittee is required to submit a PFAS reduction report annually to the Illinois Environmental Protection Agency at the addresses identified under paragraph 3) of this Special Condition with the first report due 36 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 name and address for each facility on the most current inventory list,
- iii) The current PFAS loading reduction plans for each facility on the PFAS inventory list. Updated

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plans should include all changes made since the previous plan was submitted.

3) The Permittee shall submit the reports identified under paragraphs 1) and 2) of this Special Condition electronically or in writing to one of the following addresses:

a) EPA.PrmtSpecCondtns@Illinois.gov

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