

NPDES Permit No. IL0046213

Notice No. 21041501.skt

Public Notice Beginning Date: November 6, 2024

Public Notice Ending Date: December 06, 2024

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
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

City of East Peoria
2232 East Washington Street
East Peoria, Illinois 61611

Name and Address of Facility:

East Peoria STP # 3
3601 North Main Street
East Peoria, Illinois 61611
(Tazewell 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 Surinder Tandon 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 East Peoria.

The length of the Permit is approximately 5 years.

The main discharge number is B01. The seven day once in ten year low flow (7Q10) of the receiving stream, Illinois River is 2968 cfs.

The design average flow (DAF) for the facility is 1.2 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 2.4 MGD. Treatment consists of bar screen, aeration tanks, clarifiers, aerobic digesters, chlorination/dechlorination.

This treatment works does not have an approved pretreatment program. There are 4 NSCIUs.

Application is made for the existing discharge(s) which are located in "Type county name" 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>
001	Illinois River	40° 42' 58" North	89° 32' 27" West	General Use	Not Rated
A01	Illinois River	40° 42' 58" North	89° 32' 27" West	General Use	Not Rated
B01	Illinois River	40° 42' 58" North	89° 32' 27" West	General Use	Not Rated

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

The East Peoria STP #3 facility discharges to the Illinois River D-30. The Illinois River, Waterbody Segment, D-30, is listed on the 2020/2022 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, mercury, mirex, polychlorinated biphenyls (PCBs) and toxaphene, and public and food processing water supplies with potential causes given as iron and total dissolved solids (TDS). Aesthetic quality, aquatic life and primary contact uses are fully supported. From the treatment plant to the end of segment D-30 is a distance of approximately 2.5 stream miles.

Segment D-05 is the next segment of the Illinois River. The Illinois River, Waterbody Segment, D-05, is listed on the 2020/2022 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, mercury, mirex, polychlorinated biphenyls (PCBs) and toxaphene, and primary contact recreation use with a potential cause given as fecal coliform. Aesthetic quality and aquatic life uses are fully supported. Segment D-05 is 12.22 stream miles in length.

Segment D-31 is the next segment of the Illinois River. The Illinois River, Waterbody Segment, D-31, is listed on the 2020/2022 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, mercury, mirex, polychlorinated biphenyls (PCBs) and toxaphene, and primary contact recreation use with a potential cause given as fecal coliform. Aquatic life uses are fully supported. Segment D-31 is 66.51 stream miles in length.

Segment D-32 is the next segment of the Illinois River. The Illinois River, Waterbody Segment, D-31, is listed on the 2020/2022 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, mercury, mirex, polychlorinated biphenyls (PCBs) and toxaphene, and aquatic life use with a potential cause given as dissolved oxygen. Primary contact use is fully supported. Segment D-32 is 34.05 stream miles in length.

Segment D-01 is the next segment of the Illinois River. The Illinois River, Waterbody Segment, D-01, is listed on the 2020/2022 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, mercury, mirex, polychlorinated biphenyls (PCBs) and toxaphene. Primary contact recreation, aesthetic quality, and aquatic life uses are fully supported. Segment D-01 is 48.28 stream miles in length.

The East Peoria STP #3 effluent travels a total of 163.56 miles in the receiving stream before it joins the Mississippi River.

A waterbody or segment is at risk of eutrophication if there is available information that plant, algal or cyanobacterial growth is causing or will cause violation of a water quality standard. The Agency has determined that the Permittee's treatment plant effluent is located upstream of a waterbody or stream segment that has been determined to be at risk of eutrophication due to phosphorus levels in the waterbody. This determination was made upon reviewing available information concerning the characteristics of the relevant waterbody/segment (such as extent of aquatic habitat and nature of the biological community) and the relevant facility (such as quantity of discharge flow and nutrient load relative to the stream flow).

The downstream median sestonic chlorophyll a concentration is not greater than 26 ug/L; the daily maximum pH has not been greater than 9.0; and there are 3 days where the daily maximum pH has been greater than 8.35 and the daily maximum dissolved oxygen saturation is greater than 110%, based on previous Agency water quality stream monitoring.

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 Outfall

Load limits computed based on a design average flow (DAF) of 1.2 MGD (design maximum flow (DMF) of 2.4 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
		<u>DAF (DMF)</u>		<u>LIMITS mg/L</u>			
Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
CBOD ₅ **	200 (400)	400 (801)		20	40		35 IAC 304.120 40 CFR 133.102
Suspended Solids**	250 (500)	450 (901)		25	45		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 Max shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual					.038		35 IAC 302.208
Ammonia Nitrogen (as N)							
March	-	-	32 (64)		3.2		35 IAC 355 and 35 IAC 302
April-May/Sept.-Oct.	25 (50)		32 (64)	2.5	3.2		
June	25 (50)		31 (62)	2.5	3.1		
Nov	-		39 (78)		3.9		
Total Phosphorus (as P)					Monitor only		35 IAC 309.146
Total Nitrogen (as N)					Monitor only		35 IAC 309.146
PFAS					Monitor only		35 IAC 309.146
Copper			0.6 (1.2)		0.061		35 IAC 309.146

*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.

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

Discharge Number(s) and Name(s): A01 Excess Flow Outfall (Flow in excess of 1667 gpm)

<u>Parameter</u>	<u>CONCENTRATION LIMITS (mg/L)</u>		<u>Regulation</u>
	<u>Monthly Average</u>	<u>Weekly Average</u>	
Total Flow (MG)			
Fecal Coliform	Daily Maximum Shall not Exceed 400 per 100 mL		35 IAC 304.121
BOD ₅		Monitor Only	35 IAC 309.146
Suspended Solids		Monitor Only	35 IAC 309.146
Ammonia Nitrogen (as N)		Monitor Only	35 IAC 309.146

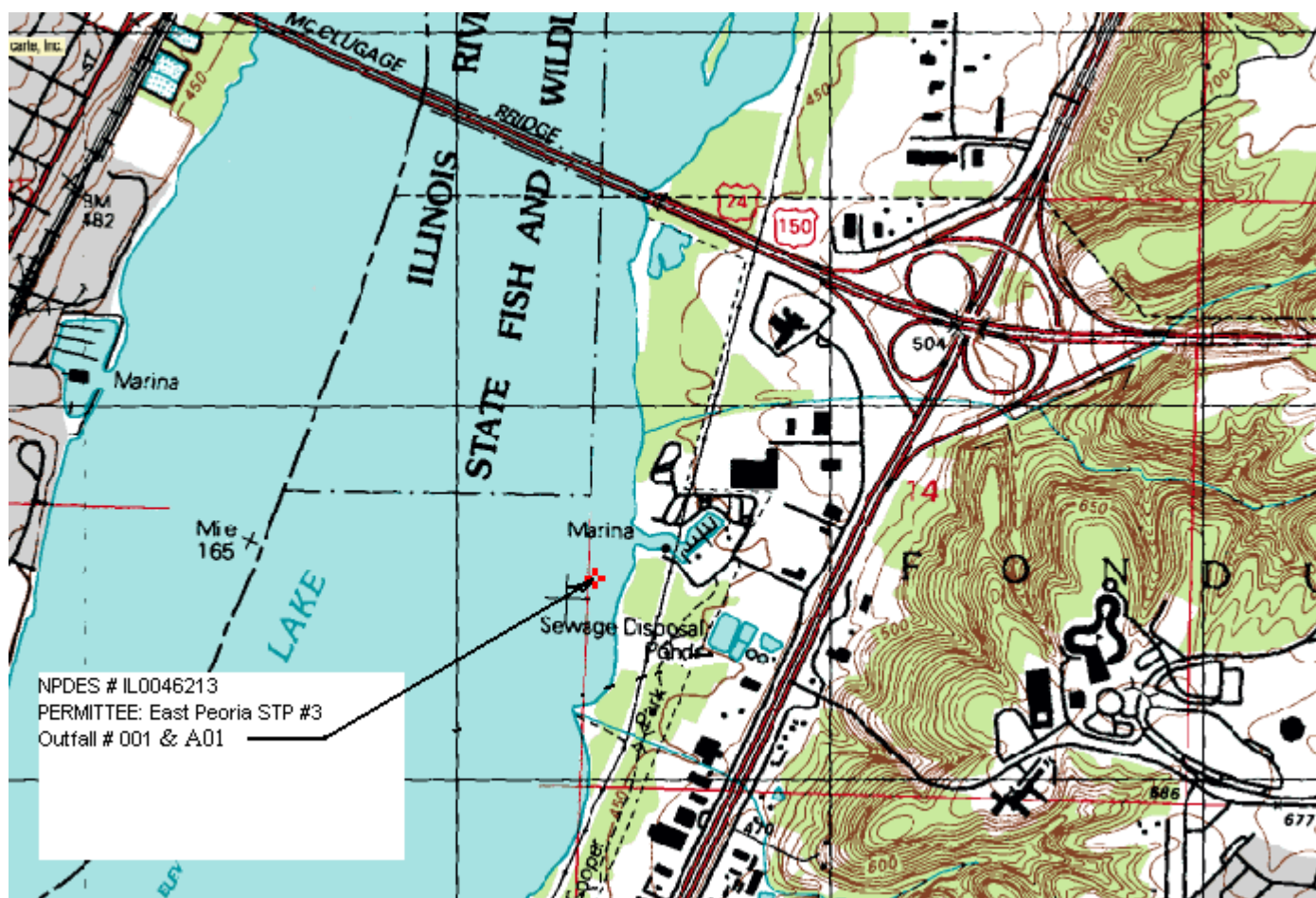
Discharge Number(s) and Name(s): 001 Combined Discharge from Outfalls A01 and B01

<u>Parameter</u>	<u>CONCENTRATION LIMITS (mg/L)</u>			<u>Sample Frequency</u>
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	
Total Flow (MG)				
BOD ₅ *	30	45		35 IAC 304.120 40 CFR 133.102
Suspended Solids*	30	45		35 IAC 304.120 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 309.146

*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 in the event of operational, maintenance or other problems resulting in possible effluent deterioration.
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. Submission of annual fiscal data.
13. A requirement for biomonitoring of the effluent.
14. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
15. Special condition for conducting field studies to demonstrate the availability of a mixing zone and ZID for ammonia and total residual chlorine.
16. Reopening of this permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
17. Submission of Capacity, Management, Operations and Maintenance (CMOM) plan.
18. Reissued Phosphorus Discharge Optimization Plan.
19. The Permittee implements and administers an industrial pretreatment program pursuant to 40 CFR §403
20. Requirement to meet 0.5 mg/L Total Phosphorus 12 month rolling geometric mean by 2030.
21. Requirement for participation in the Illinois River Watershed Study Group (IRSG).
22. PFAS Testing and Reporting
23. PFAS Minimization Program



NPDES Permit No. IL0046213

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

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 East Peoria
2232 East Washington Street
East Peoria, Illinois 61611

Facility Name and Address:

East Peoria STP # 3
3601 North Main Street
East Peoria, Illinois 61611
(Tazewell County)

Receiving Waters: Illinois River

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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Effluent Limitations, Monitoring, and Reporting

FINAL

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

Load limits computed based on a design average flow (DAF) of 1.2 MGD (design maximum flow (DMF) of 2.4 MGD).

Excess flow facilities (if applicable) shall not be utilized until the main treatment facility is receiving its maximum practical flow.

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>LOAD LIMITS lbs/day</u>			<u>CONCENTRATION</u>			<u>Sample Frequency</u>	<u>Sample Type</u>
	<u>Monthly Average</u>	<u>DAF (DMF)* Weekly Average</u>	<u>Daily Maximum</u>	<u>Monthly Average</u>	<u>LIMITS mg/L Weekly Average</u>	<u>Daily Maximum</u>		
Flow (MGD)							Continuous	
CBOD ₅ **,**	200 (400)	400 (801)		20	40		3 Days/Week	Composite
Suspended Solids***	250 (500)	450 (901)		25	45		3 Days/Week	Composite
pH	Shall be in the range of 6 to 9 Standard Units						3 Days/Week	Grab
Fecal Coliform****	Daily Maximum shall not exceed 400 per 100 mL (May through October)						3 Days/Week	Grab
Chlorine Residual****						0.038	3 Days/Week	Grab
Ammonia Nitrogen: As (N)								
March			32 (64)			3.2	3 Days/Week	Composite
April-May/Sept.-Oct.	25 (50)		32 (64)	2.5		3.2	3 Days/Week	Composite
June-August	25 (50)		31 (62)	2.5		3.1	3 Days/Week	Composite
Nov.-Feb.			39 (78)			3.9	3 Days/Week	Composite
Copper			0.6 (1.2)			0.061	1 Day/Week	Composite
Total Phosphorus (as P)						Monitor only	1 Day/Week	Composite
Total Nitrogen (as N)						Monitor only	1 Day/Week	Composite
PFAS*****						Monitor only	*****	*****

*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.*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 10.

*****See Special Condition 22.

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

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

Chlorine Residual shall be reported on the DMR as daily maximum value.

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

Total Phosphorus shall be reported on the DMR as a daily maximum value.

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

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): A01 Excess Flow Outfall (Flows over 2.4 MGD)

These flow facilities shall not be utilized until the main treatment facility is receiving its design maximum flow (DMF)* (flows in excess of 1667 gpm.)

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:

		CONCENTRATION LIMITS mg/L		
Parameter		Monthly Average	Sample Frequency	Sample Type
Total Flow (MG)	See Below		Daily When Discharging	Continuous
BOD ₅		Monitor Only	Daily When Discharging	Grab
Suspended Solids		Monitor Only	Daily When Discharging	Grab
Fecal Coliform	Daily Maximum Shall Not Exceed 400 per 100 mL		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.

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

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

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

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

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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>Daily Maximum</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
Ammonia Nitrogen (as N)***	Monitor Only		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 7.

**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.

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 concentration.

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

Chlorine Residual shall be reported on the DMR as daily maximum.

Ammonia Nitrogen shall be reported on the DMR as a daily maximum value.

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.

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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	3 Days/Week <u>And daily when A01 is discharging</u>	Composite
Suspended Solids	3 Days/Week <u>And daily when A01 is discharging</u>	Composite
PFAS*	*	*

*See Special Condition 22.

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.

Biosolids Monitoring, and Reporting

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

*See Special Condition 22

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.

SPECIAL CONDITION 6. 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 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
1021 North Grand Avenue East
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:
 - 1. 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. If fecal Coliform limits are different for Discharge Numbers B01 and A01, sampling shall occur at a point representative of the discharge and prior to admixture, if hardware allows.
- B. For Outfall Number A01 shall be taken at a point:
 - 1. Representative of the discharge from the excess flow treatment unit(s) to Outfall Number 001, and
 - 2. Prior to admixture with discharges from Outfall Number B01.
- C. For Outfall Number 001 shall be taken at a point:
 - 1. Representative of the discharge from Outfall Number 001 but prior to entry into the receiving water; and
 - 2. Representative of the admixture of all flow from Outfall Numbers A01 and B01.
 - a. 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.
 - b. 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 Conditions

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 CODE</u>	<u>PARAMETER</u>	<u>Minimum 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
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.

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

The Permittee shall sample and analyze the effluent for the pollutants identified in 40 CFR Appendix J, Table 2. Provide data from a minimum of 3 samples taken within four and one-half years prior to the expiration of this Permit. Samples must be representative of the seasonal variation in the discharge. All samples must be collected and analyzed in accordance with analytical methods approved under 40 CFR Part 136. Sample results shall be submitted with the application for renewal of this Permit.

The Permittee must provide notice of any new introduction of pollutants from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act as if it were directly discharging these pollutants and any substantial change in the volume or character of pollutants being introduced by a source introducing pollutants at the time of issuance of this Permit. The notice must include information on the quality and quantity of effluent introduced and any anticipated impact of the change on the quantity or quality of the effluent to be discharged.

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
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 12. 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 13. 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 Ed.) EPA/821-R-02-012. 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 mailed to IEPA, Bureau of Water, Compliance Assurance Section or emailed to EPA.PrmtSpecCondtns@Illinois.gov within one week of receipt from

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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.

- 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 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 by the IEPA. The Permittee shall implement the plan within ninety (90) days 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 14. 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 following address:

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Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 15. Modeling or field studies may be used to demonstrate the availability of a mixing zone and ZID for ammonia and total residual chlorine. The purpose of these optional studies is to define the dilution ratios present during 7Q10 low receiving stream flow conditions. Any report submitted to the IEPA should show effluent concentrations at various distances downstream of the effluent outfall, sufficient to demonstrate the areas of the mixing zone and ZID (zone of initial dilution), during the observed or modeled low flow condition. The mixing regulations of 35 IAC 302.102 will then be used to determine if the conditions necessary for the Agency to grant a mixing zone and ZID are present. If the permittee intends to pursue this option, a study plan outlining the methodologies proposed to be used must be submitted for IEPA approval. The IEPA will review the submitted sample data and may reopen and modify this Permit to eliminate or include revised effluent limitations based on the results of the collected data.

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;
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.

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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;
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 and implement 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 electronically to EPA.PrmtSpecCondtns@illinois.gov with "IL0046213 Special Condition 18" as the subject of the email by March 31 of each year. As part of 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 implementation of local limits on influent sources of excessive phosphorus.

B. WWTF effluent reduction measures.

1. Reduce phosphorus discharges by optimizing existing treatment processes.

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- a. Adjust the solids retention time for either 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. Schedule for Implementing the POTW Pretreatment Program

Under the authority of Sections 307(b) and 402(b)(8) of the Clean Water Act, and implementing regulations 40 CFR 403, the Permittee may be required to develop a Pretreatment Program. This program shall enable the Permittee to detect and enforce against violations of Pretreatment Standards promulgated under Sections 307(b) and 307(c) of the Clean Water Act, prohibitive discharge standards as set forth in 40 CFR § 403.5, and state and local limits.

Pursuant to 40 CFR 403.3(c) the U.S. EPA, Region 5 is the Approval Authority in Illinois. The Permittee shall submit a copy of each activity below to the USEPA, Region 5 with a copy to IEPA.

The schedule for the development of this Pretreatment Program is as follows:

ITEMCOMPLETION DATE

- | | |
|--|--|
| <p>A. Develop an industrial user inventory pursuant to 40 CFR § 403.8(f)(2)(i-iii), including identification of industrial users and the character and volume of pollutants contributed to the publicly owned treatment works (POTW) by the industrial users. The inventory shall include a list of all industrial users (IUs) discharging to the Permittee that are subject to categorical pretreatment standards under 40 CFR § 403.6 and 40 CFR Chapter I, Subchapter N, or would otherwise be considered significant under 40 CFR § 403.3(t).</p> | <p>6 months from the effective date of this Permit</p> |
| <p>B. Submit a proposed Pretreatment Program consistent with 40 CFR §§ 403.8 and 403.9(f). The proposed Pretreatment Program shall contain the following elements</p> <ol style="list-style-type: none"> 1. A statement from an official representative of the Permittee or their legal counsel regarding the adequacy of the Permittee's legal authority to carry out the pretreatment program; 2. A sewer use ordinance or other authorities to be relied upon by the POTW for administration of the Pretreatment Program; 3. An Enforcement Response Plan (with monitoring and inspection program procedures); 4. Local limitations developed pursuant to 40 CFR 403.5(c) and USEPA guidance; 5. A description of the Permittee's organization (including organization charts) which will administer the Pretreatment Program; and 6. A description of funding levels and manpower resources available to implement the Pretreatment Program. | <p>12 months from the date of notification by the Approval Authority that development of a Pretreatment Program is necessary</p> |

Upon approval by the Regional Administrator of the Pretreatment Program, this Permit will be modified or, alternatively, upon request, revoked and reissued to incorporate the conditions of that Pretreatment Program.

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Upon approval by the Regional Administrator, this Permit may be modified to eliminate the requirement to develop a Pretreatment Program should further developments during the preparation of the program warrant its discontinuance.

All items in the schedule shall be sent to USEPA (electronically if possible to r5npdes@epa.gov) and IEPA. All mailed items shall be sent to the following addresses:

United States Environmental Protection Agency
Region 5
NPDES Programs Branch
77 West Jackson Boulevard
Chicago, Illinois 60604-3950
Attention: NPDES Programs Branch WN-16J

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62794-9276
Attention: Compliance Assurance Section

Removal Allowances

Any application for authority to revise categorical pretreatment standards to reflect POTW removal of pollutants must be submitted to the USEPA in accordance with 40 CFR § 403.7(c).

SPECIAL CONDITION 20.

- A. Subject to paragraph B below, an effluent limit of 0.5 mg/L Total Phosphorus 12 month rolling geometric mean (calculated monthly) basis (hereinafter "Limit"), shall be met by the Permittee by January 1, 2030, unless the Permittee demonstrates that meeting such Limit is not technologically or economically feasible in one of the following manners:
1. the Limit is not technologically feasible through the use of biological phosphorus removal (BPR) process(es) at the treatment facility; or
 2. the Limit would result in substantial and widespread economic or social impact. Substantial and widespread economic impacts must be demonstrated using applicable USEPA guidance, including but not limited to any of the following documents:
 - a. Interim Economic Guidance for Water Quality Standards, March 1995, EPA-823-95-002;
 - b. Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development, February 1997, EPA-832—97-004;
 - c. Financial Capability Assessment Framework for Municipal Clean Water Act Requirements, November 24, 2014; and
 - d. any additional USEPA guidance on affordability issues that revises, supplements or replaces those USEPA guidance documents; or
 3. the Limit can only be met by chemical addition for phosphorus removal at the treatment facility in addition to those processes currently contemplated; or
 4. the Limit is demonstrated not to be feasible by January 1, 2030, but is feasible within a longer timeline, then the Limit shall be met as soon feasible and approved by the Agency; or
 5. the Limit is demonstrated not to be achievable, then an effluent limit that is achievable by the Permittee (along with associated timeline) will apply instead, except that the effluent limit shall not exceed 0.6 mg/L Total Phosphorus 12 month rolling geometric mean (calculated monthly).
- B. The Limit shall be met by the Permittee by January 1, 2030, except in the following circumstances:
1. If the Permittee develops a written plan, preliminary engineering report or facility plan no later than January 1, 2025, to rebuild or replace the secondary treatment process(es) of the treatment facility, the Limit shall be met by December 31, 2035; or
 2. If the Permittee decides to construct/operate biological nutrient removal (BNR) process(es), incorporating nitrogen reduction, the Limit shall be met by December 31, 2035; or
 3. If the Permittee decides to use chemical addition for phosphorus removal instead of BPR, the Limit and the effluent limit of 1.0 mg/L Total Phosphorus monthly average shall be met by December 31, 2025.

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- C. The Permittee shall identify and provide adequate justification of any exception identified in paragraph A or circumstance identified in paragraph B, regarding meeting the Limit. The justification shall be submitted to the Agency at the time of renewal of this permit or by December 31, 2025, whichever date is first. Any justification or demonstration performed by the Permittee pursuant to paragraph A or circumstance pursuant to paragraph B must be reviewed and approved by the Agency. The Agency will renew or modify the NPDES permit as necessary.
- D. For purposes of this permit, the following definitions are used:
1. BPR (Biological Phosphorus Removal) is defined herein as treatment processes which do not require use of supplemental treatment processes at the treatment facilities before or after the biological system, such as but not limited to, chemical addition, carbon supplementation, fermentation, or filtration. The use of filtration or additional equipment to meet other effluent limits is not prohibited, but those processes will not be considered part of the BPR process for purposes of this permit; and
 2. BNR (Biological Nutrient Removal) is defined herein as treatment processes used for nitrogen and phosphorus removal from wastewater before it is discharged. BNR treatment processes, as defined herein, do not require use of supplemental treatment processes at the treatment facilities before or after the biological system, such as but not limited to, chemical addition, carbon supplementation, fermentation or filtration. The use of filtration or additional equipment to meet other effluent limits is not prohibited, but those processes will not be considered part of the BNR process for purposes of this permit.
- E. The 0.5 mg/L Total Phosphorus 12 month rolling geometric mean (calculated monthly) effluent limit applies to the effluent from the treatment plant.

SPECIAL CONDITION 21. The Permittee shall participate in the Illinois River Watershed Study Group (IRSG) throughout the duration of this permit cycle. The Permittee shall participate to determine the most cost effective means to remove nutrient impacts on dissolved oxygen and offensive conditions in the Illinois River to the extent feasible. By January 31 and July 31 of each year during the permit cycle, the Permittee shall submit a report to the Agency summarizing the activities of the ISRG during the previous six-month period.

SPECIAL CONDITION 22. 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	ug/kg

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

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

*** If the permittee prefers to collect a composite sample instead of a grab sample, the composite sample shall be a manual composite consisting of a minimum of 4 separate grab samples that will be manually mixed at the lab for analysis. Composite samples shall not be collected using the typical automatic composite sampling equipment. All samples shall be collected during dry weather flow, during normal business hours.

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 micrograms per kilograms (ug/kg) as a daily maximum load.

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3. Monitoring for Per- and polyfluoroalkyl Substances (PFAS) shall be performed using USEPA 3rd draft test method 1633 or subsequent draft test method. Upon USEPA's final approval and incorporation under 40 CFR 136, the approved method shall be used for PFAS testing.
4. The Minimum Level (ML) of Detection identified in paragraph 6) of this Special Condition is based on the USEPA's 3rd Draft Method 1633, dated December 2022. The permittee shall use these minimum levels of detection until they are replaced by subsequent draft methods, or a final method is defined under 40 CFR 136. At that time of update the permittee shall use the revised minimum level of detection values as part of this permit.
5. Following two years of quarterly sampling, the permittee may request a reduction in testing frequency, or an elimination of testing, by filing an NPDES permit modification request with the Agency. Quarterly sampling shall continue until such time as the Agency modifies the NPDES permit to either reduce or eliminate the quarterly sampling requirement.
6. Specific PFAS constituents that must be tested for, and reported on, are listed in the following table:

Target Analyte Name	Abbreviation	CAS Number	STORET	Minimum Level (ML) of Detection	
Perfluoroalkyl carboxylic acids				Aqueous (ng/L)	Solids (ng/g)
Perfluorobutanoic acid	PFBA	375-22-4	51522	2.0	0.8
Perfluoropentanoic acid	PFPeA	2706-90-3	51623	2.0	0.4
Perfluorohexanoic acid	PFHxA	307-24-4	51624	2.0	0.2
Perfluoroheptanoic acid	PFHpA	375-85-9	51625	2.0	0.2
Perfluorooctanoic acid	PFOA	335-67-1	51521	2.0	0.2
Perfluorononanoic acid	PFNA	375-95-1	51626	2.0	0.2
Perfluorodecanoic acid	PFDA	335-76-2	51627	2.0	0.2
Perfluoroundecanoic acid	PFUnA	2058-94-8	51628	2.0	0.2
Perfluorododecanoic acid	PFDoA	307-55-1	51629	2.0	0.2
Perfluorotridecanoic acid	PFTTrDA	72629-94-8	51630	2.0	0.2
Perfluorotetradecanoic acid	PFTeDA	376-06-7	51631	2.0	0.2
Perfluoroalkyl sulfonic acids					
Acid Forms					
Perfluorobutanesulfonic acid	PFBS	375-73-5	52602	2.0	0.2
Perfluoropentanesulfonic acid	PFPeS	2706-91-4	52610	2.0	0.2
Perfluorohexanesulfonic acid	PFHxS	355-46-4	52605	2.0	0.2
Perfluoroheptanesulfonic acid	PFHpS	375-92-8	52604	2.0	0.2
Perfluorooctanesulfonic acid	PFOS	1763-23-1	52606	2.0	0.2
Perfluorononanesulfonic acid	PFNS	68259-12-1	52611	2.0	0.2
Perfluorodecanesulfonic acid	PFDS	335-77-3	52603	2.0	0.2
Perfluorododecanesulfonic acid	PFDoS	79780-39-5	52632	2.0	0.2

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Fluorotelomer sulfonic acids					
1H,1H, 2H, 2H-Perfluorohexane sulfonic acid	4:2FTS	757124-72-4	52605	5.0	0.8
1H,1H, 2H, 2H-Perfluorooctane sulfonic acid	6:2FTS	27619-97-2	62606	10	0.8
1H,1H, 2H, 2H-Perfluorodecane sulfonic acid	8:2FTS	39108-34-4	52603	10	0.8
Perfluorooctane sulfonamides					
Perfluorooctanesulfonamide	PFOSA	754-91-6	51525	2.0	0.2
N-methyl perfluorooctanesulfonamide	NMeFOSA	31506-32-8	52641	2.0	0.2
N-ethyl perfluorooctanesulfonamide	NEtFOSA	4151-50-2	52642	2.0	0.2
Perfluorooctane sulfonamidoacetic acids					
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9	51644	2.0	0.2
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2991-50-6	51643	2.0	0.2
Perfluorooctane sulfonamide ethanols					
N-methyl perfluorooctanesulfonamidoethanol	NMeFOSE	24448-09-7	51642	10	2
N-ethyl perfluorooctanesulfonamidoethanol	NEtFOSE	1691-99-2	51641	20	2
Per- and Polyfluoroether carboxylic acids					
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6	52612	5.0	0.8
4,8-Dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4	52636	5.0	0.8
Perfluoro-3-methoxypropanoic acid	PFMPA	377-73-1	PF002	2.0	0.4
Perfluoro-4-methoxybutanoic acid	PFMBA	863090-89-5	PF006	2.0	0.4
Nonafluoro-3,6-dioxaheptanoic acid	NFDHA	151772-58-6		5.0	0.4
Ether sulfonic acids					
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	9Cl-PF3ONS	756426-58-1	PF003	5.0	0.8
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9	PF004	5.0	0.8
Perfluoro(2-ethoxyethane)sulfonic acid	PFEESA	113507-82-7		2.0	0.4
Fluorotelomer carboxylic acids					
3-Perfluoropropyl propanoic acid	3:3FTCA	356-02-5	PF001	10	1.0
2H,2H,3H,3H-Perfluorooctanoic acid	5:3FTCA	914637-49-3	PF007	20	5.0
3-Perfluoroheptyl propanoic acid	7:3FTCA	812-70-4	PF007	20	5.0

Special ConditionsSPECIAL CONDITION 23. PFAS Reduction Program:

1) PFAS Inventory:

- a) The Permittee shall develop an inventory of those of 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 (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) Landfill leachate,
 - ii) Firefighting training facilities,
 - iii) 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,
- 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:

Special Conditions

- 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 permit 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 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
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

