

NPDES Permit No. IL0021156

Notice No. LAT:250515

Public Notice Beginning Date: January 22, 2026

Public Notice Ending Date: February 23, 2026

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
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

City of South Beloit
519 Blackhawk Blvd. Suite 2
South Beloit, Illinois 61080

Name and Address of Facility:

City of South Beloit - STP
100 Perry Avenue
South Beloit, Illinois 61080
(Winnebago County)

The Illinois Environmental Protection Agency (Illinois EPA) 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 Illinois EPA 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 Illinois EPA 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 Illinois EPA 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 Lisa Tossi 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 South Beloit.

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, Rock River is 346.3 cfs.

The design average flow (DAF) for the existing facility is 3.0 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 7.43 MGD. Treatment consists of screening, grit removal, fine screens, activated sludge, phosphorous removal system, final clarifiers,

UV disinfection, post aeration, aerobic digestion, and land application of sludge.

This reissued Permit does not increase the facility's DAF, concentration limits, and/or load limits. The DMF has increased from 5.6 MGD to 7.43 MGD because the previously proposed plant has become operational. DMF based load limits have increased. An anti-degradation assessment is not required per 35 IAC 302.105(d)(1), as increasing the DMF is considered a short-term discharge with negligible impacts on water quality.

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

Discharge Number	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Rock River	42° 29' 09" North	89° 02' 45" West	General Use	Not Rated
002 (high flow)	Rock River	42° 29' 11" North	89° 02' 49" 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, Waterbody Segment P-09, receiving the discharge from outfalls 001 and 002 are on the 303(d) list of impaired waters. There are 5.85 miles from the treatment plant to Segment P-09.

Potential Causes

Fecal Coliform

Mercury & polychlorinated biphenyls

Uses Impaired

Primary contact use

Fish consumption

The stream segment, Waterbody Segment P-15, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Segment P-15 is 20.43 miles in length.

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

Potential Causes

Aldrin, deldrin, endrin, heptachlor, mercury, murex, polychlorinated biphenyls, and toxaphene

Fecal coliform

Uses Impaired

Fish consumption

Primary contact use

The stream segment, Waterbody Segment P-23, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Segment P-23 is 7.5 miles in length.

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

Potential Causes

Mercury and polychlorinated biphenyls

Uses Impaired

Fish consumption

The stream segment, Waterbody Segment P-14, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Segment P-14 is 11.01 miles in length.

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

Potential Causes

Mercury and polychlorinated biphenyls

Fecal coliform

Uses Impaired

Fish consumption

Primary contact

The stream segment, Waterbody Segment P-20, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Segment P-20 is 25.14 miles in length.

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

Potential Causes

Aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls and toxaphene

Uses Impaired

Fish consumption

The stream segment, Waterbody Segment P-21, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Stream segment P-21 is 18.47 miles in length.

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

Potential Causes

Aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls and toxaphene

Uses Impaired

Fish consumption

The stream segment, Waterbody Segment P-06, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Stream segment P-06 is 11.31 miles in length.

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

Potential Causes

Mercury, polychlorinated biphenyls

Alteration in stream-side or littoral vegetative covers, cause unknown, fish passage barrier, and loss of instream cover

Fecal Coliform

Uses Impaired

Fish consumption

Aquatic life

Primary contact

The stream segment, Waterbody Segment P-24, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Stream segment P-06 is 25.55 miles in length.

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

Potential Causes

Aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls and toxaphene

Loss of instream cover

Uses Impaired

Fish consumption

Aquatic life

The stream segment, Waterbody Segment P-04, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Stream segment P-06 is 29.63 miles in length.

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

Potential Causes

Aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls and toxaphene

Flow regimen modification

Fecal coliform

Uses Impaired

Fish consumption

Aquatic life

Primary contact use

The stream segment, Waterbody Segment P-25, receiving the discharge from outfall 001 is on the 303(d) list of impaired waters. Stream segment P-06 is 15.96 miles in length.

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

Potential Causes

Aldrin, dieldrin, endrin, heptachlor, mercury, mirex, polychlorinated biphenyls and toxaphene

Uses Impaired

Fish consumption

NARP

Prior to issuance of the City of South Beloit STP's permit dated September 3, 2019, the Agency determined that the Permittee's treatment plant effluent discharge is located upstream of a waterbody or stream segment impaired due to dissolved oxygen and/or offensive condition (algae and/or aquatic plant growth) impairments that is related to excessive phosphorus levels. In addition, a risk of eutrophication in the downstream waterbody was determined to exist based on past Agency stream monitoring. This determination was made upon reviewing available information concerning the characteristics of the relevant waterbody/segment and the relevant facility. 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.

Special Condition 23 of the City of South Beloit STP's previous permit required the City of South Beloit STP's to address the impairment and risk of eutrophication in the downstream waterbody by developing or contributing to a Nutrient Assessment Reduction Plan (NARP). The NARP requirements included:

1. **NARP Development & Submission:**
 - Submit the NARP to the Agency by December 31, 2023.
 - The NARP must be based on sound scientific rationale and supported by data.
 - The Permittee can develop the NARP independently or collaborate with a watershed group.
2. **Collaboration:**
 - The Permittee must work with watershed stakeholders to find cost-effective solutions.
 - If stakeholders do not cooperate, the Permittee must independently develop and submit a NARP.
3. **Target Levels & Strategies:**
 - The NARP must address phosphorus reductions and other measures to mitigate eutrophication.
 - It can adopt recommendations from the Nutrient Science Advisory Committee or develop site-specific targets.
 - The NARP may conclude phosphorus reductions are unnecessary if supported by data.
4. **Implementation Schedule:**
 - The NARP must include a schedule for implementing measures, with clear timelines.
5. **Water Quality Trading:**
 - The NARP may incorporate water quality trading, provided it does not violate water quality standards.
6. **Permit Modification:**
 - Within 90 days of completing the NARP, the Permittee must request a permit modification to include identified phosphorus reduction measures.
7. **Compliance:**
 - If no NARP is developed, the Agency will impose effluent limits to ensure compliance with water quality standards.
 - Limits will be determined based on existing data or on a case-by-case basis if a NARP is absent.

Summary of South Beloit NARP

In response to the NARP requirement, a NARP was developed by the Rock River Watershed Study Group (RRWG) The RRWG developed a NARP to address phosphorus-related impairments in the Rock and Kishwaukee Rivers. The collaboration includes 13 Publicly Owned Treatment Works (POTWs) along with the City of Rockford and Winnebago County, working together to comply with the NPDES NARP requirements. Sixteen major POTWs are discharging to the RRWG Study Area waterways. The City of South Beloit STP is part of this watershed group.

The RRWG study area spans over 3,800 square miles and includes more than 5,000 miles of rivers and streams within the Rock and Kishwaukee watersheds. The NARP analyzes the sources of total phosphorus (TP) from both point and nonpoint sources, as well as upstream contributions from Wisconsin. To better understand nutrient characteristics, the RRWG used watershed and instream models, utilizing data collected in 2023 and 2024.

The modeling results indicated that upstream inflows from the Rock River in Wisconsin had a more significant impact on TP loading in the RRWG study area compared to its point and non-point sources. Several phosphorus management scenario models were evaluated to reduce the impairment of water quality in the watershed:

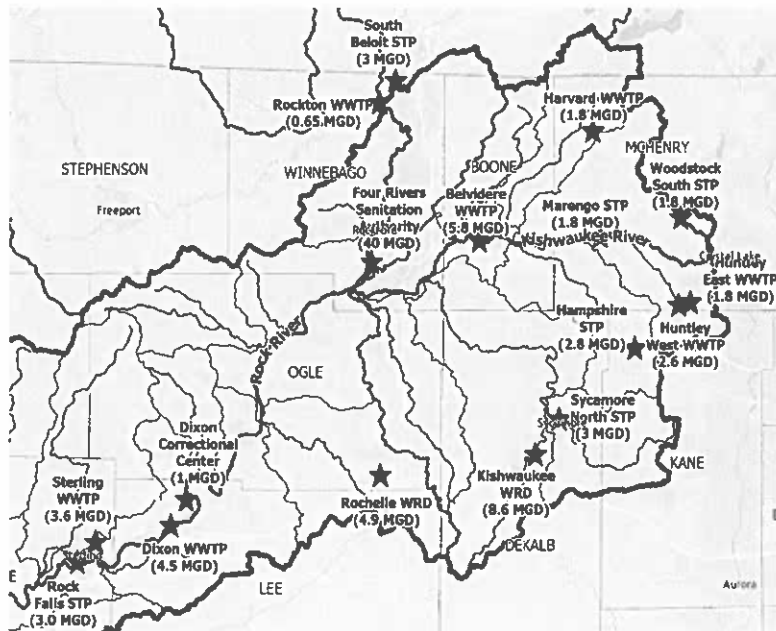
- Capping POTW Effluent Concentration: Reducing phosphorus concentrations in POTW effluent TP to 0.5 mg/L significantly lowered downstream eutrophication risks, while the effect of reducing effluent TP further to 0.1 mg/L was negligible.
- Upstream TP Reductions: Reducing TP from upstream sources in Wisconsin had a positive effect on improving water quality.
- Nonpoint Source Reductions: Reducing nonpoint source phosphorus would require more effort and resources.

The modeling demonstrated that meeting an effluent TP concentration of 0.1 mg/L would not provide much benefit in overall TP reduction. A balanced approach targeting phosphorus reductions from all sources, including upstream inflows, POTWs, and nonpoint sources, is critical to improving water quality and addressing eutrophication. Including continuous monitoring, public outreach and stakeholder engagement are needed.

The NARP outlines an implementation schedule, facility upgrades and ongoing coordination with state and local agencies.

NARP Overview: Addressing Nutrient-Related Water Quality Impairments

The RRWG is a combination of 13 POTWs including the City of Rockford and Winnebago County. The study area spans from the headwaters of the Kishwaukee River in Woodstock to its confluence with the Rock River, and from the Rock River at the state line with Wisconsin to its intersection with Erie Road. Land area is significantly agricultural use (73%) with a mix of developed areas (13%) and deciduous forests (5%). The watershed area includes 16 major POTWs discharging to the Rock River, the Kishwaukee River and tributaries. These POTWs discharge wastewater with design flows ranging from 1 to 40 million gallons per day (MGD).



Several studies and management plans have been conducted. The Wisconsin Department of Natural Resources (WDNR) developed a Total Maximum Daily Load (TMDL) for TP and total suspended solids (TSS) in the Wisconsin Rock River watershed. This TMDL addresses reducing pollutants from point sources, nonpoint sources, including agricultural and stormwater runoff. The Illinois Rock River/Pierce Lake and Kyte River TMDLs address fecal coliform, TSS, and TP. Sources of loading are stormwater runoff, combined sewer overflows, failing septic systems, agricultural runoff, lawn fertilizers and livestock operations. In 2006, The Illinois EPA assessed the Rock River Basin and identified the need to reduce nutrient inputs from both urban and agricultural sources.

Water Quality Status

Eutrophication Risk Criteria:

- pH > 9
- Median chlorophyll-a > 26 µg/L
- pH > 8.35 and dissolved oxygen (DO) saturation > 110% for at least 2 days.

From 2016 to 2021, Illinois EPA sampled the Kishwaukee River with discrete monitoring and continuous monitoring. Locations along both

the Kishwaukee and Rock Rivers were at risk of eutrophication. Specifically, there were 4 days when pH was above the threshold and 8 days when DO saturation was above its threshold throughout both rivers, identifying both point and nonpoint sources.

Nutrient sources evaluated over a 3 month period in 2019 revealed that phosphorus loading increased by 223,770 lbs (102 tons). The distribution of phosphorus sources was about equal:

- 25% from RRWG member discharges.
- 23% from the Rock River from Wisconsin.
- 28% from the Pecatonica River.
- 24% from nonpoint-source discharges within Illinois.

Existing Annual Load:

- The estimated TP load for the entire NARP study area is 223,770 lbs for the 3-month study period (July–September 2023).
RRWG member discharges: 25%
Upstream sources (Rock River from Wisconsin and Pecatonica River): 51%
Nonpoint sources within the Rock River and Kishwaukee watersheds: 24%.
- The NARP reports South Beloit's 2023 effluent TP values: average 0.74 mg/L, minimum 0.15 mg/L, and maximum 8.49 mg/L.
- South Beloit's TP effluent from DMRs (1 sample/month reported as daily maximum):
2023 average: 2.03 mg/L (geometric mean: 1.17 mg/L)
2024 average: 0.60 mg/L (geometric mean: 0.56 mg/L).

Waste Water Treatment Plant (WWTP) Phosphorus Reduction Status

RRWG members' permits collectively require submittal of a Feasibility Study within 18-36 months of permit issuance and submittal of a Phosphorus Discharge Optimization Plan within 18-36 months of permit issuance. They also require submittal of annual Phosphorus Discharge Optimization Plan progress reports by March 31 annually and development of a NARP and meeting a limit of 0.5 mg/L TP based on a 12-month rolling geometric mean (calculated monthly) by January 1, 2030, or December 31, 2035. The permittees in the RRWG are at different stages in evaluating and implementing TP effluent removal. Treatment processes in place vary, as do feasibility study recommended outcomes. Based on the 2023 effluent data, the total discharged TP load from the 16 watershed facilities averaged approximately 1,082 pounds per day. Cost estimates were provided for each facility to achieve both 0.5 mg/L and 0.1 mg/L.

Overview of Data Collection and Analysis Phases

Initially planned for 2022, data collection was postponed due to high flow conditions, which prevented proper monitoring. The data collection began in 2023 but there were issues with data quality during the validation process. As a result, a follow-up monitoring phase was conducted in 2024. A linked numerical model was developed for the NARP. It includes a watershed model and an instream model. The instream model addresses both hydrology and water quality. The main purpose of modeling is to find the relationship between the various phosphorus sources and subsequent impairments.

The linked numeric model was subdivided for analysis to be called the main stem Rock River model and the Kishwaukee River model. The Rock River model extends from the Illinois/Wisconsin border to its confluence with the Mississippi River. The Kishwaukee River model extends from upstream Marengo STP to its confluence with the Rock River. Overall, based on comparison of measured vs. simulated water quality parameters, the linked numeric model was deemed adequately calibrated to produce accurate watershed management scenarios.

Based on six scenarios, the key findings for the Rock River model are summarized below:

- #1: Both the upstream loads (the Rock River flowing from Wisconsin and Pecatonica River which is North of the Rock River and Kishwaukee River confluence) and point source loads play important roles in reducing risk of eutrophication (ROE). Capping upstream TP concentrations to 0.1 mg/L has a greater impact at reducing ROE in the upstream section of the river, while capping WWTP effluent TP concentrations to 0.5 mg/L has a greater impact at reducing ROE towards the downstream section of the river.
- #2: WWTP effluent TP reductions beyond 0.5 mg/L have minimal impact on ROE. Limiting WWTP effluent TP concentrations to 0.1 mg/L would present technological challenges and impose substantial financial burden on the facilities.
- #3: Nonpoint source TP reduction alone slightly reduces sestonic chlorophyll *a* and TP but the impacts are minimal.

- #4: A combination of load reduction from the WWTPs, non-point sources, and upstream sources can achieve higher ROE reductions in the Rock River compared to load reductions from the WWTPs alone. However, even when applying the most comprehensive load reduction strategy, ROE is still present in Rock River due to the high level of algae coming from upstream.

Based on the same four scenarios lacking upstream load data, the key findings for the Kishwaukee River model are summarized below:

- #1: In general, the ROE in the Kishwaukee River is much lower compared to that in the Rock River.
- #2: Point sources do not seem to be the main contributor to ROE in the Kishwaukee River.
- #3: Non-point source TP reduction has a greater impact on reducing ROE in the Kishwaukee River than limiting WWTP effluent TP concentration to 0.1 mg/L.

Implementation Plan and Schedule

RRWG meetings will continue monthly to bi-monthly. After NARP submission to Illinois EPA, RRWG will meet within 6 months to develop a flexible schedule to guide plant improvements and other initiatives. Post-2035, the group will focus on analyzing stream conditions to measure the effectiveness of plant improvements. The RRWG will maintain coordination with Wisconsin, especially since the upstream sources significantly affect Illinois water quality. The RRWG will collaborate with stakeholders for watershed planning, specifically to identify projects, potential funding sources (e.g., Illinois EPA Section 319h), and necessary improvements for the watershed.

POTWs will prepare for a phosphorus effluent limit of 0.5 mg/L between January 1, 2030, and December 31, 2035. Coordination will be necessary with stakeholders from Wisconsin. Collaborations with agricultural stakeholders will focus on implementing best management practices (BMPs) to reduce phosphorus runoff. Multiple MS4 facilities are now involved and must identify ways to reduce phosphorus through stormwater BMPs.

Continuous monitoring will be enhanced using newly purchased monitoring sonde equipment.

RRWG members will primarily rely on their annual budgets to meet their NPDES permit requirements. The RRWG will investigate the availability of grants to fund specific water quality projects, especially those related to phosphorus reduction.

Prior to 2030, efforts will focus on wastewater treatment plant upgrades and ongoing coordination among RRWG members. After 2035, water quality data will be further analyzed.

Outreach will include educating stakeholders about the importance of local water resources and regulatory requirements. Outreach will include the general public, stakeholders, community collaborators and public officials. Also, there will be collaboration with the Kishwaukee River Ecosystem Partnership and other watershed groups.

Information will be shared via meetings, the RRWG website, and presentations to relevant community groups, ensuring that the public is informed and engaged in the phosphorus reduction process.

Agency Conclusion

South Beloit's NARP outlines past and future action items to address the risk of eutrophication within the Rock River as part of the Rock River Watershed Group, including future effluent total phosphorus concentration limits of 0.5 mg/L, stakeholder engagement, watershed collaboration, modeling, and monitoring.

The Illinois EPA recommends that the RRWG provide the Illinois EPA with an updated plan following their next meeting anticipated to occur approximately six months after submittal of this NARP. The RRWG should continue instream monitoring. Collaboration with upstream point and non-point sources is necessary to achieve long term risk of eutrophication reductions. Collaboration with watershed agriculture and MS4 non-point sources is also needed for long term risk of eutrophication reductions. Regular public outreach efforts are necessary to inform and educate the public and stakeholders of overall efforts in improving water quality in the RRWG.

The Rock River Watershed Group indicated point-source reductions below 0.5 mg/L are not necessary at this time to address the risk of eutrophication. South Beloit is committed to meeting 0.5 mg/L Total Phosphorus 12 month rolling geometric mean by 2030 in accordance with Special Condition 22 of the previous permit. And it is recommended for South Beloit to consider total nitrogen reductions by continuing optimization efforts with their current facility.

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. If future risk of eutrophication analyses identifies an increase in exceedances of risk of

eutrophication thresholds, future NARP requirements may be necessary. This was determined by analyzing Illinois EPA monitoring data from 2012 through 2016, taken at downstream station PW-01 on the Rock River, indicating there was a median chlorophyll a of 27 µg/L with pH greater than 8.35 standard units and dissolved-oxygen saturation greater than 110%. Compared to previous risk of eutrophication data from 2012 through 2016, the exceedances of risk of eutrophication thresholds have gone down when compared to the 2020 and 2021 data.

Based on the information provided in the NARP, the applicable requirements of a NARP were sufficiently met and the findings of the NARP shall be implemented. Through Illinois EPA surface water monitoring and assessment program, if there is a future TP impairment, future DO impairment indicative of excess algae, or future violation of water quality standards due to nutrients by the effluent, there would be justification to continue research to identify an instream target threshold and further characterize non-point source reductions. It is recommended the permittee provide annual updates on NARP implementation – collaboration with other members in the Rock River Watershed Group and other nutrient sources within the watershed, informational meetings held, and feedback received, summary of monitoring program, and any overall revisions to the NARP.

Per-and Polyfluoroalkyl Substances

To address Per-and polyfluoroalkyl substances (PFAS) under the NPDES permit program the Illinois Environmental Protection Agency (Illinois EPA), 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.

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 001 and 002 and Special Conditions 25 and 26 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): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 3.0 MGD (design maximum flow (DMF) of 7.43 MGD).

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

Parameter	LOAD LIMITS lbs/day DAF (DMF) ¹			CONCENTRATION LIMITS mg/L			Regulation	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
CBOD ₅ ²	500 (1239)	1000 (2479)		20	40		35 IAC 304.120 40 CFR 133.102	
Suspended Solids ²	626 (1549)	1125 (2789)		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 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:								
March-May/Sept.-Oct.	38 (93)		80 (198)	1.5		3.2	35 IAC 355 and 35 IAC 302	
June-August	30 (74)	78 (192)	89 (217)	1.2	3.1	3.5		
Nov.-Feb.	100 (248)		118 (291)	4.0		4.7		
Total Phosphorus (as P)	25 (62)			1.0			35 IAC 304.123	
Total Nitrogen (as N)						Monitor Only	35 IAC 309.146	
PFAS ³			3			3	35 IAC 309.146	
PFAS Sum ³			3			3	35 IAC 309.146	
Copper				Monitor Only			35 IAC 309.146	
Zinc				Monitor Only			35 IAC 309.146	

¹Load Limits are calculated by using the formula: $8.34 \times (\text{Design Average and/or Maximum Flow in MGD}) \times (\text{Applicable Concentration in mg/L})$.

²BOD₅ and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85%.

³ PFAS are required to be sampled in the influent, effluent, and biosolids as a PFAS reduction initiative. Best Management Practices (BMP) shall be developed for certain targeted industrial facilities who discharge to this POTW.

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): 002 STP Alternate Outfall for High River Levels

Load limits computed based on a design average flow (DAF) of 3.0 MGD (design maximum flow (DMF) of 7.43 MGD).

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

Parameter	LOAD LIMITS (lbs/day)			CONCENTRATION LIMITS (mg/L)			Regulation	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
CBOD ₅ ²	500 (1239)	1000 (2479)		20	40		35 IAC 304.120 40 CFR 133.102	
Suspended Solids ²	626 (1549)	1126 (2789)		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 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:								
March-May/Sept.-Oct.	38 (93)		80 (198)	1.5		3.2	35 IAC 355 and 35 IAC 302	
June-August	30 (74)	78 (192)	88 (217)	1.2	3.1	3.5		
Nov.-Feb.	100 (248)		118 (291)	4.0		4.7		
Total Phosphorus (as P)	25 (62)			1.0			35 IAC 304.123	
Total Nitrogen (as N)						Monitor Only	35 IAC 309.146	
Copper				Monitor Only			35 IAC 309.146	
Zinc				Monitor Only			35 IAC 309.146	
PFAS ³			3			3	35 IAC 309.146	
PFAS Sum ³			3			3	35 IAC 309.146	

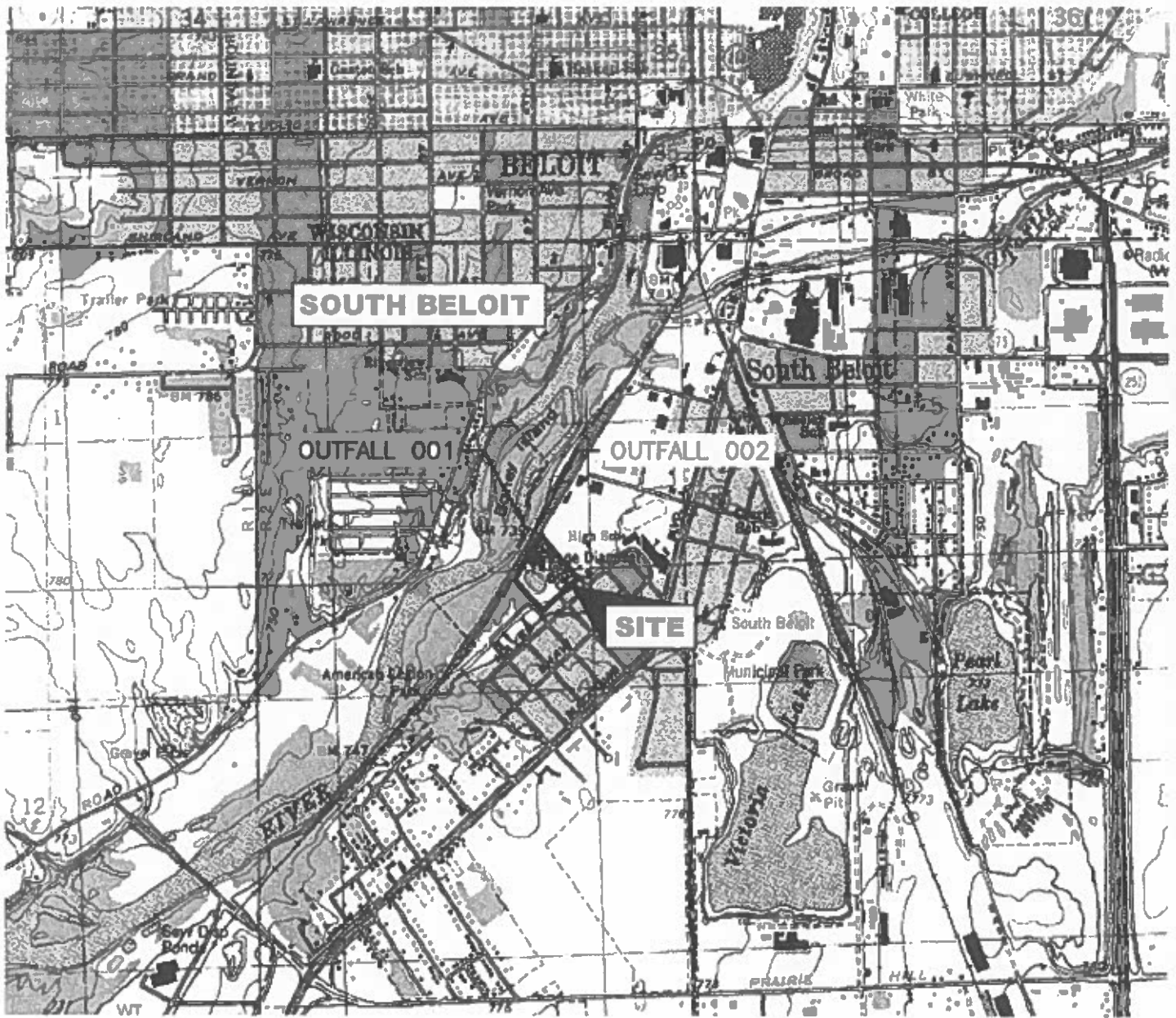
¹ Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).

² 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%.

³ PFAS are required to be sampled in the influent, effluent, and biosolids as a PFAS reduction initiative. Best Management Practices (BMP) shall be developed for certain targeted industrial facilities who discharge to this POTW.

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 Illinois EPA 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. Six Consecutive month monitoring of Copper and Zinc.
12. 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.
13. Burden reduction.
14. Submission of annual fiscal data.
15. The Permittee is required to perform biomonitoring tests in the 18th, 15th, 12th and 9th months prior to the expiration date of the permit, and to submit the results of such tests to the Illinois EPA within one week of receiving the results from the laboratory.
16. Submission of semi annual reports indicating the quantities of sludge generated and disposed.
17. Reopening of this Permit to include revised effluent limitations based on a Total Daily Load (TMDL) or other water quality study.
18. Capacity, Management, Operations and Maintenance (CMOM) requirements.
19. Reasonable Potential Analysis and Mixing Study Plan.
20. Mixing Zone Evaluation.
21. Total Nitrogen monitoring.
22. Meet Phosphorous Limit of 0.5 mg/L in 2030.
23. Nutrient Assessment Reduction Plan Requirements.
24. Maintain Phosphorus Discharge Optimization Plan.
25. PFAS Testing and Reporting.
26. PFAS Reduction Program.
27. Metals Translator.
28. A requirement to monitor a limit of 0.038 mg/L for residual chlorine when it is used.



USER ID;

OUTFALL OF001: LAT. 42° 29' 09"
LONG. 89° 02' 45"

OUTFALL OF002: LAT. 42° 29' 11"
LONG. 89° 02' 49"



FIGURE 1
OUTFALL LOCATION
SOUTH BELOIT STP
100 PERRY AVENUE
SOUTH BELOIT, IL 61080

NPDES Permit No. IL0021156

Illinois Environmental Protection Agency

Division of Water Pollution Control

2520 West Iles

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 South Beloit
519 Blackhawk Blvd.
South Beloit, Illinois 61080

Facility Name and Address:

City of South Beloit - STP
100 Perry Avenue
South Beloit, Illinois 61080
(Winnebago County)

Receiving Waters: Rock 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 standard conditions and attachments herein.

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

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

DEL:LAT:2505150

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 3.0 MGD (design maximum flow (DMF) of 7.43 MGD).

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

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

Parameter	LOAD LIMITS lbs/day			CONCENTRATION LIMITS mg/L			Sample Frequency	Sample Type	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum			
Flow (MGD)							Continuous		
CBOD ₅ ^{2,5}	500 (1239)	1001 (2479)		20	40		2 Days/Week	Composite	
Suspended Solids ⁵	626 (1549)	1126 (2789)		25	45		2 Days/Week	Composite	
pH	Shall be in the range of 6 to 9 Standard Units							2 Days/Week	Grab
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)							2 Days/Week	Grab
Chlorine Residual ³						0.038	³	Grab	
Ammonia Nitrogen: as (N)									
March-May/Sept.-Oct.	38 (93)		80 (198)	1.5		3.2		Composite	
June-August	30 (74)	78 (192)	88 (217)	1.2	3.1	3.5	2 Days/Week	Composite	
Nov.-Feb.	100 (248)		118 (291)	4.0		4.7	2 Days/Week	Composite	
Total Phosphorus (as P) ⁸	25 (62)			1.0			2 Days/Week	Composite	
Total Nitrogen (as N) ⁴						Monitor Only	1 Day/Month	Composite	
Copper ⁶				Monitor Only			2 Days/Month	Composite	
Zinc ⁶				Monitor Only			2 Days/Month	Composite	
PFAS ⁷			?			?	?	?	
PFAS Sum ⁷			?			?	?	?	

¹ Load limits based on design maximum flow shall apply only when flow exceeds design average flow.² Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.³ See Special Condition 28.⁴ See Special Condition 21.⁵ 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 Illinois EPA on DMRs but influent and effluent data

Effluent Limitations, Monitoring, and Reporting

FINAL

must be available, as required elsewhere in this permit, for Illinois EPA 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 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.

⁶See Special Condition 11.

⁷See Special Condition 25.

⁸See Special Condition 22.

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 shall be reported on DMR as daily maximum value.

Total Phosphorus shall be reported on the DMR as monthly average value.

Total nitrogen shall be reported on the DMR as a daily maximum value. Total Nitrogen is the sum of total of total Kjeldahl nitrogen and nitrate-nitrite.

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 002 Alternate STP Outfall for High River Levels

Load limits computed based on a design average flow (DAF) of 3.0 MGD (design maximum flow (DMF) of 7.43 MGD).

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

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	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum			
Flow (MGD)							Continuous		
CBOD ₅ ^{2,5}	500 (1239)	1001 (2479)		20	40		2 Days/Week	Composite	
Suspended Solids ⁵	626 (1549)	1126 (2789)		25	45		2 Days/Week	Composite	
pH	Shall be in the range of 6 to 9 Standard Units							2 Days/Week	Grab
Fecal Coliform ³	Daily Maximum shall not exceed 400 per 100 mL (May through October)							2 Days/Week	Grab
Chlorine Residual ³							0.038	³	Grab
Ammonia Nitrogen: as (N)									
March-May/Sept.-Oct.	38 (93)		80 (198)	1.5		3.2		Composite	
June-August	30 (74)	78 (192)	88 (217)	1.2	3.1	3.5	2 Days/Week	Composite	
Nov.-Feb.	100 (248)		118 (291)	4.0		4.7	2 Days/Week	Composite	
Total Phosphorus (as P) ⁴	25 (62)			1.0			2 Days/Week	Composite	
Total Nitrogen (as N) ⁴						Monitor Only	1 Day/Month	Composite	
PFAS ⁶			6			6	6	6	
PFAS Sum ⁶			6			6	6	6	
Copper ⁷				Monitor Only			2 Days/Month	Composite	
Zinc ⁷				Monitor Only			2 Days/Month	Composite	

¹ Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

² Carbonaceous BOD₅ (CBOD₅) testing shall be in accordance with 40 CFR 136.

³ See Special Condition 28.

⁴ See Special Condition 21.

⁵ 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 Illinois EPA on DMRs but influent and effluent data must be available, as required elsewhere in this permit, for Illinois EPA inspection and review. For measuring compliance with this requirement, 5

Effluent Limitations, Monitoring, and Reporting

FINAL

mg/L shall be added to the effluent CBOD₅ concentration to determine the effluent BOD₅ concentration. Percent removal is a percentage 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.

⁶ See Special Condition 25

⁷ See Special Condition 11.

⁸ See Special Condition 22.

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 shall be reported on DMR as daily maximum value.

Total Phosphorus shall be reported on the DMR as monthly average value.

Total nitrogen shall be reported on the DMR as a daily maximum value. Total Nitrogen is the sum of total of total Kjeldahl nitrogen and nitrate-nitrite.

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	2 Days/Week	Composite
Suspended Solids	2 Days/Week	Composite
Total Phosphorus (as P)	2 Days/Week	Composite
PFAS*	*	*
PFAS Sum*	*	*

* See Special Condition 25

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

Biosolids shall be monitored as follows:

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

*See Special Condition 25

Special Conditions

SPECIAL CONDITION 1. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The Illinois EPA 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 Illinois EPA 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 Illinois EPA 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) 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 Illinois EPA unless a waiver has been granted by the Agency. More information, including registration information for the NetDMR program, can be obtained on the Illinois EPA 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 Illinois EPA 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 Illinois EPA at the following address:

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

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41 (m) & (n) are applicable and are hereby incorporated by reference.

SPECIAL CONDITION 8. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 9. Consistent with permit modification procedures in 40 CFR 122.62 and 63, 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 Illinois EPA if necessary.

SPECIAL CONDITION 10. Fecal Coliform limits for Discharge Number 001 and 002 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 monitor the effluent for the following parameters twice a month for a period of six (6) consecutive months, beginning three (3) months from the effective date of this Permit. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling. The sample shall be a 24-hour effluent composite except as otherwise provided below and the results shall be submitted on Discharge Monitoring Report (DMR) electronic forms, and reported on the DMR as a monthly average. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

STORET

Special Conditions

<u>CODE</u>	<u>PARAMETER</u>	<u>Minimum reporting limit</u>
01042	Copper	0.005 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.

SPECIAL CONDITION 12. 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 specifically provided below and the results shall be submitted on Discharge Monitoring Report (DMR) electronic forms. 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
00722	Cyanide (grab)(available**** or amenable to chlorination)***	5.0 ug/L
00720	Cyanide (total) (grab)***	5.0 ug/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

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 more than the minimum reporting limit.

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

SPECIAL CONDITION 13. The Permittee has undergone a Monitoring Reduction review and the influent and effluent sample frequency has been reduced for BOD, CBOD₅, SS, pH and ammonia due to sustained compliance. The Illinois EPA may require that the influent and effluent sampling frequency for these parameters be increased without 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 Conditions

SPECIAL CONDITION 14. 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 Illinois EPA titled "Fiscal Report Form For NPDES Permittees".

SPECIAL CONDITION 15.

The Permittee shall conduct biomonitoring of the effluent from Discharge Number 001.

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 Illinois EPA. 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 "IL0021156 Special Condition 15" as the subject of the email within one week of receipt from the laboratory. Reports are due to the Illinois EPA 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 Illinois EPA 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 Illinois EPA 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 Illinois EPA 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 Illinois EPA 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 Illinois EPA 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 Illinois EPA its plan for toxicity reduction evaluation within ninety (90) days following notification by the Illinois EPA. The Permittee shall implement the plan within ninety (90) days or other such date as contained in a notification letter received from the Illinois EPA.

The Illinois EPA 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 Illinois EPA 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 16. 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 Illinois EPA inspection. The Permittee shall submit to the Illinois EPA, 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 Illinois EPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Special Conditions

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 Illinois EPA 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 23 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 the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the Illinois EPA.

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

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
2520 West Iles
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 17. 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 18. 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 Illinois EPA 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 Illinois EPA upon written request. The Permittee shall modify the Plan to incorporate any comments that it receives from Illinois EPA 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

Special Conditions

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;
 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 19. 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.

SPECIAL CONDITION 20. Mixing for ammonia was not granted for this discharge, since mixing is not necessary. Based on past DMR

Special Conditions

data, it appears that the facility can meet the ammonia water quality standards in the effluent without mixing. If mixing is determined to be needed, the permittee must demonstrate that the mixing zone requirements found at 35 Ill. Adm. Code 302.1025 (a) and (b) are met.

SPECIAL CONDITION 21. The Permittee shall notify the Illinois EPA in writing of any operational deficiencies and corrective measures to be taken if the treatment plant exceeds a monthly average concentration value 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
2520 West Iles Avenue
Post Office Box 19276
Springfield, Illinois 62794-9276

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

SPECIAL CONDITION 22.

An effluent limit of 0.5 mg/L Total Phosphorus 12 month rolling geometric mean (calculated monthly) will be applicable by the Permittee beginning January 1, 2030.

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 6 months thereafter |
| 2. Achieve compliance with the 0.5 mg/L Total Phosphorus 12-month rolling geometric mean (calculated monthly) | January 1, 2030 |

REPORTING

The Permittee shall submit progress reports electronically to EPA.PrmtSpecCondtns@illinois.gov with "IL0021156 Special Condition 22" as the subject of the email for the compliance schedule indicating: a) 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.

1. The Agency previously determined that the Permittee's treatment plant effluent is located upstream of a phosphorus related impaired segment. This determination was made upon reviewing available information concerning the characteristics of the relevant waterbody/segment and the relevant facility (such as quantity of discharge flow and nutrient load relative to the stream flow). The Permittee was required to develop a Nutrient Assessment Reduction Plan (NARP) to address the impaired segment and in response submitted a NARP in December 2024.
2. Public Information Meeting
 - a. The NARP findings previously submitted shall be presented to the general public at a public information meeting conducted by the Permittee within 9 months of the effective date of this Permit. The Permittee shall submit documentation that the NARP complies with the requirements of this Permit and that the public information meeting was held. Such documentation shall be submitted to the Agency within twelve (12) months of the effective date of this Permit and shall include a summary of all significant issues raised by the public, and the Permittee's response to each issue. Following the public meeting, the Permittee shall continue to implement the NARP and make any necessary revisions to address issues raised by the public.
3. Annual Progress Reports
 - a. Annual progress reports on the implementation and any revisions of the NARP shall be submitted electronically to EPA.PrmtSpecCondtns@illinois.gov with "Permit Number IL0021156 Special Condition 23" as the subject of the email and posted to the Permittee's website (if available) by December 31 of each year. The report shall include a summary of the previous year's progress as well as the expected action items in the year to come, including but not limited to (if applicable) NARP implementation, informational meetings held and feedback receive, summary of monitoring program, regionalization efforts, and any revisions to the NARP.

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4. Summary of NARP Compliance Dates

Progress reports	Annually by December 31 st each year
Conduct NARP Public Information Meeting	9 months from the effective date of this permit
Submit NARP Public Information Meeting Summary	12 months from the effective date of this permit

REPORTING

For each item listed above, the Permittee’s annual progress report shall include: a) 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. Separate notification to the Agency, for each item listed above, is not required to be submitted by the completion date.

5. Reopening and Modifying this Permit

- a. The Agency may initiate a modification for this Permit at any time to include requirements and compliance dates which have been submitted in writing by the Permittee, or other requirements and dates which are necessary to carry out the provisions of the Illinois Environmental Protection Act, the Clean Water Act, or regulations promulgated under those Acts. Public Notice of such modifications and opportunity for public hearing shall be provided.
- b. If information becomes available indicating that additional effluent limitations or conditions may be necessary to protect against eutrophication or other use impairments in the receiving waters, the Agency may revise this permit through modification or at renewal, the Agency will notify the Permittee in writing or through future permit renewals. Upon receiving such notification, the Permittee shall develop and implement a revised NARP for assuring that discharges from this Permit comply with the schedule for implementation of the measures.

SPECIAL CONDITION 24: 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 “IL0021156 Special Condition 24” 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.
 - 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.

1. SPECIAL CONDITION 25. PFAS Testing and Reporting

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

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Biosolids Semiannually** Grab ng/g

* 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.
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

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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					
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					

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N-methyl perfluorooctanesulfonamidoacetic 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 perfluorooctanesulfonamidoethanol	NEtFOSE	1691-99-2	51641	10 – 40	16 – 40
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 26. 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

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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) 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,
- 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.

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- 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 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

SPECIAL CONDITION 27. The Permittee may collect data in support of developing a site-specific metals translator for Copper and Zinc consistent with EPA Guidance. Data collection to support a site-specific metals translator must include Total and dissolved metal samples collected at least once per week for twelve weeks and must be collected from representative flow of the effluent and from within the receiving stream at a location downstream of the discharge indicative of complete mixing between the effluent and the receiving water. The Illinois EPA will review submitted sample data and may modify this Permit.

SPECIAL CONDITION 28. Any use of chlorine to control slime growths, odors or as an operational control, etc. shall not exceed the limit of 0.038 mg/L (daily maximum) total residual chlorine in the effluent. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the DMR's on a monthly basis.