NPDES Permit No. IL0077836

Notice No. GY:24081201.GY

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:

Village of Wonder Lake
4444 Thompson Road
Wonder Lake, Illinois 60097

Name and Address of Facility:

Wonder Lake Water Reclamation Facility
6305B McCullom Lake Road
Wonder Lake, Illinois 60097
(McHenry 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 Getie Yilma 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 Village of Wonder Lake.

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, Dutch Creek is 0 cfs.

The design average flow (DAF) for the existing phase IB facility is 0.25 million gallons per day (MGD) and the design maximum flow (DMF) for the existing phase IB facility is 0.88 MGD. Treatment consists of screening, activated sludge, UV disinfection, aerobic digestion and land application of sludge.

The design average flow (DAF) for proposed phase II facility is 2.0 million gallons per day (MGD) and the design maximum flow (DMF) for the proposed phase II facility is 6.0 MGD. Treatment consists of screening, activated sludge, tertiary filtration, UV disinfection, aerobic digestion and land application of sludge.

This Reissued Permit does not increase the facility's DAF, DMF, concentration limits, and/or load limits. However, the following are the proposed changes to the existing NPDES Permit:

1. The construction of the proposed plant will be implemented on interim phases. Therefore, an additional phase, Phase IB, has been included based on the Facilities Plan approved by the Agency on January 17, 2023. Phase IB has a design average flow (DAF) of 0.25 MGD and a design maximum flow (DMF) of 0.88 MGD. The previous permit includes a final design average flow of 2.0 MGD (Phase 2) which has been carried forward in the draft permit. No increase in flow or pollutant loading is proposed beyond what was previously permitted.

Application is made for the proposed discharge(s) which is located in McHenry County, Illinois. The facility (phase I and phase II) and the discharge, which are included in the existing permit, have not been constructed.

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

Discharge Number	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Dutch Creek	42° 22′ 38″ North	88° 18′ 34″ West	General Use	Not Rated

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

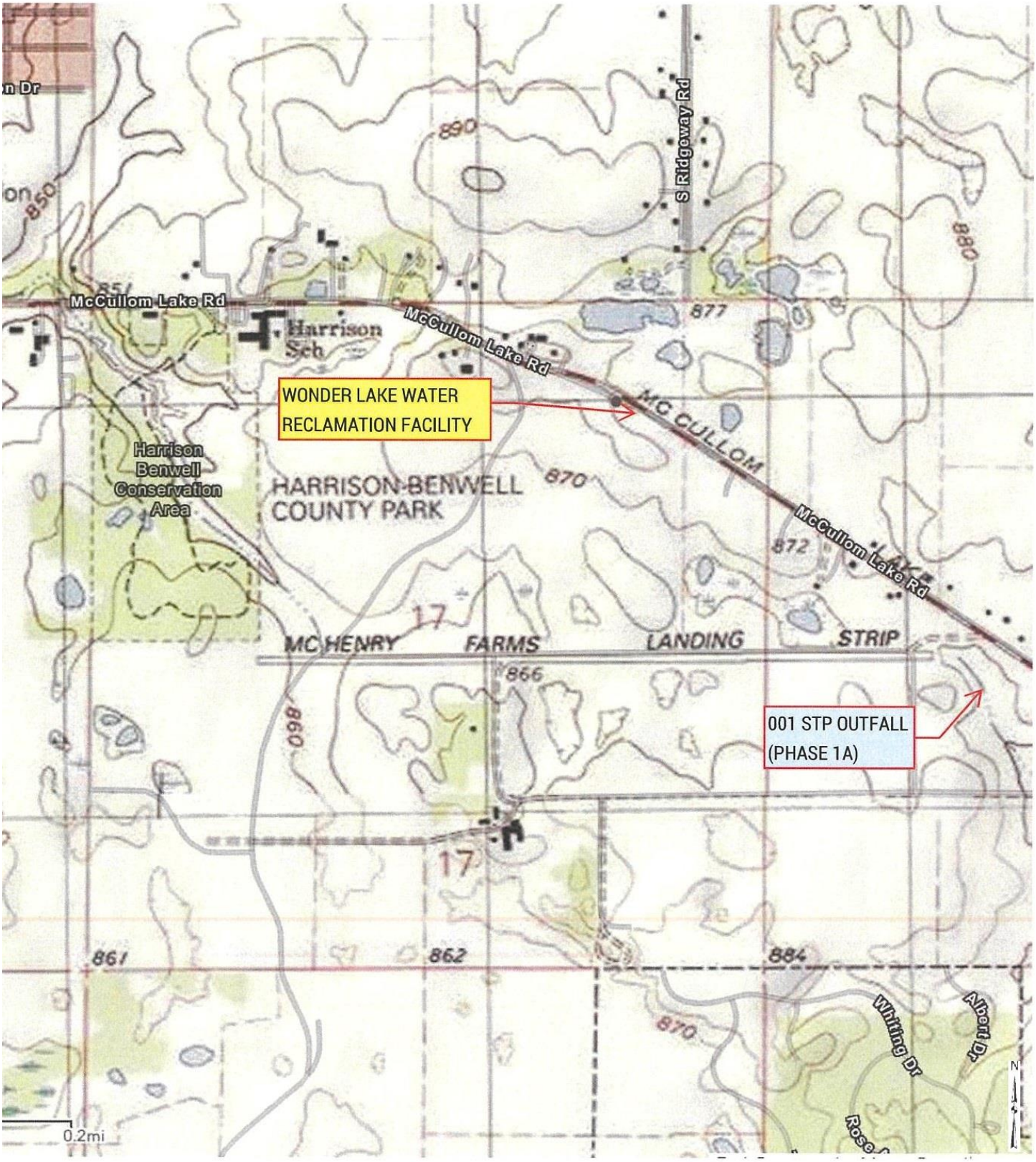
The stream segment(s) (waterbody segment IL_DTN) receiving the discharge from outfall(s) 001 is not on the 2020/2022 303 (d) list of impaired waters.

The next stream segment Fox River, (waterbody segment code IL_DT-23), is on the 303(d) list of impaired waters.

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

Potential Causes	Uses Impaired
Alteration of stream-side or littoral vegetative cover (non-pollutant), aquatic algae (non- pollutant), cause unknown and other flow regime alterations (non- pollutant)	Aquatic Life
Mercury, aldrin, dieldrin, endrin, heptachlor, mirex, and polychlorinated biphenyls (PCBs)	Fish consumption

A phosphorus related impairment means that the downstream waterbody or segment is listed by the Agency as impaired due to dissolved oxygen and/or offensive condition (algae and/or aquatic plant growth) impairments that is related to excessive phosphorus levels. 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 have a phosphorus related impairment. 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


S Ridgeway Rd
McCullom Lake Rd
Harrison Sch
McCullom Lake Rd
WONDER LAKE WATER RECLAMATION FACILITY
MC CULLOM
McCullom Lake Rd
Harrison Benwell Conservation Area
HARRISON-BENWELL COUNTY PARK
MC HENRY FARMS LANDING STRIP
001 STP OUTFALL (PHASE 1A)
Whiting Dr
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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 Existing (Phase 1B)

Load limits computed based on a design average flow (DAF) of 0.25 MGD (design maximum flow (DMF) of 0.88 MGD).

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

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			
Parameter	Annual Average	Monthly Average	Daily Maximum	Annual Average	Monthly Average	Daily Maximum	Regulation
$CBOD_5$**	10 (37)	21 (73)	42 (147)	5	10	20	35 IAC 304.120 40 CFR 133.102
Suspended Solids**	10 (37)	25 (88)	50 (176)	5	12	24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual						0.05	35 IAC 302.208

	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
Ammonia Nitrogen (as N):							
March-May/Sept.-Oct.	3.1 (11)	7.9 (28)	9.8 (35)	1.5	3.8	4.7	35 IAC 355 and 35 IAC 302
June-August	2.1 (7.3)	5.2 (18)	12 (41)	1.0	2.5	5.6	
Nov.-Feb.	5.0 (18)	--	7.5 (26)	2.4	--	3.6	
Total Phosphorus (as P)	2.1 (7.3)			1.0			35 IAC 304.123
Total Nitrogen (as N)	17 (59)			8.0			35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen							
March-July				N.A.	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

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

**BOD_5 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 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 (Phase 1)

Load limits computed based on a design average flow (DAF) of 1.0 MGD (design maximum flow (DMF) of 3.0 MGD).

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

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			
Parameter	Annual Average	Monthly Average	Daily Maximum	Annual Average	Monthly Average	Daily Maximum	Regulation
$CBOD_5$**	42 (125)	83 (250)	167 (500)	5	10	20	35 IAC 304.120 40 CFR 133.102
Suspended Solids**	42 (125)	100 (300)	200 (600)	5	12	24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual						0.05	35 IAC 302.208
PFAS***			Monitor Only			Monitor Only	35 IAC 309.146
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
Ammonia Nitrogen (as N):							
March-May/Sept.-Oct.	13 (38)	32 (95)	39 (118)	1.5	3.8	4.7	35 IAC 355 and 35 IAC 302
June-August	8.3 (25)	21 (63)	47 (140)	1.0	2.5	5.6	
Nov.-Feb.	20 (60)	--	30 (90)	2.4	--	3.6	
Total Phosphorus (as P)	8.3 (25)			1.0			35 IAC 304.123
Total Nitrogen (as N)	67 (200)			8.0			35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen							
March-July				N.A.	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

*Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L)
**BOD_5 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.
***See Special Condition 22.

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

Load limits computed based on a design average flow (DAF) of 2.0 MGD (design maximum flow (DMF) of 6.0 MGD).

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

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L			
Parameter	Annual Average	Monthly Average	Daily Maximum	Annual Average	Monthly Average	Daily Maximum	Regulation
$CBOD_5$**	83 (250)	167 (500)	334 (1001)	5	10	20	35 IAC 304.120 40 CFR 133.102
Suspended Solids**	83 (250)	200 (600)	400 (1201)	5	12	24	35 IAC 304.120 40 CFR 133.102
pH	Shall be in the range of 6 to 9 Standard Units						35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)						35 IAC 304.121
Chlorine Residual						0.05	35 IAC 302.208
PFAS ***			Monitor Only			Monitor Only	35 IAC 309.146

	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	
Ammonia Nitrogen (as N):							
March-May/Sept.-Oct.	25 (75)	63 (190)	78 (235)	1.5	3.8	4.7	35 IAC 355 and 35 IAC 302
June-August	17 (50)	42 (125)	93 (280)	1.0	2.5	5.6	
Nov.-Feb.	40 (120)	--	60 (180)	2.4	--	3.6	
Total Phosphorus (as P)	17 (50)			1.0			35 IAC 304.123
Total Nitrogen (as N)	133(400)			8.0			35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen							
March-July				N.A.	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

*Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L)
**BOD_5 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.
***See Special Condition 22.

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. A requirement to monitor and a limit of 0.05 mg/L for residual chlorine when it is used for Phase IB and 0.038 mg/L for Phase I and Phase II.

10. 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. (Not applicable to Phase IB)

11. Submission of annual fiscal data.

12. A requirement for biomonitoring of the effluent. (Not applicable to Phase IB)

13. Submission of semi annual reports indicating the quantities of sludge generated and disposed.

14. Effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or an alternate water quality study.

15. Total Nitrogen Monitoring.

16. Monitoring for total phosphorus, dissolved phosphorus, nitrate/nitrite, total kjeldahl nitrogen (TKN), ammonia, total nitrogen (calculated), alkalinity and temperature once a month.

17. Phosphorus Discharge Optimization Plan. (Not applicable to Phase IB)

18. NARP Impairment Related. m

19. Compliance with a 0.5 mg/L Total Phosphorus limit by January 1, 2030. (Not applicable to Phase IB)

20. Notify the IEPA upon completion and start of operation of the new treatment plant.

21. A requirement to monitor the proposed constructed wetland at the facility.

22. PFAS Testing and Reporting. (Not applicable to Phase IB)

23. PFAS Reduction Program. (Not applicable to Phase IB)

NPDES Permit No. IL0077836

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:

Village of Wonder Lake
4444 Thompson Road
Wonder Lake, Illinois 60097

Facility Name and Address:

Wonder Lake Water Reclamation Facility
6305B McCullom Lake Road
Wonder Lake, Illinois 60097
(McHenry County)

Receiving Waters: Dutch Creek

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

BDF:GY:24081201.GY

NPDES Permit No. IL0077836

Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall Existing (Phase 1B)

Load limits computed based on a design average flow (DAF) of 0.25 MGD (design maximum flow (DMF) of 0.88 MGD).

From the effective date of this Permit until the operation of the Phase I expansion or expiration date, whichever comes first, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L				
Parameter	Annual Average	Monthly Average	Daily Maximum	Annual Average	Monthly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
$CBOD_5$** (1)	10 (37)	21 (73)	42 (147)	5	10	20	3 Days/Week	Composite
Suspended Solids (1)	10 (37)	25 (88)	50 (176)	5	12	24	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						0.05	****	Grab
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Ammonia Nitrogen (as N):								
March-May/Sept.-Oct.	3.1 (11)	7.9 (28)	9.8 (35)	1.5	3.8	4.7	3 Days/Week	Composite
June-August	2.1 (7.3)	5.2 (18)	12 (41)	1.0	2.5	5.6	3 Days/Week	Composite
Nov.-Feb.	5.0 (18)	--	7.5 (26)	2.4	--	3.6	3 Days/Week	Composite
Total Phosphorus (as P)	2.1 (7.3)			1.0			3 Days/Week	Composite
Total Nitrogen (as N) ***	17 (59)			8.0			3 Days/Week	Composite
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
Dissolved Oxygen								
March-July				N.A.	6.0	5.0	3 Days/Week	Grab
August-February				5.5	4.0	3.5	3 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.
**Carbonaceous BOD_5 ($CBOD_5$) testing shall be in accordance with 40 CFR 136.
***See Special Condition 15.
**** See Special Condition 9.
***** See Special Condition 22.

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Effluent Limitations, Monitoring, and Reporting

FINAL

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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.

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

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

Total Nitrogen shall be reported on the DMR as a monthly average and daily maximum value. Total Nitrogen is the sum total of kjeldahl nitrogen (TKN), nitrate and nitrite.

(1)BOD_5 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 $CBOD_5$ concentration to determine the effluent BOD_5 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.

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Effluent Limitations, Monitoring, and Reporting

FINAL

Discharge Number(s) and Name(s): 001 STP Outfall (Phase 1)

Load limits computed based on a design average flow (DAF) of 1.0 MGD (design maximum flow (DMF) of 3.0 MGD).

From the startup of operation of Phase I expansion until the operation of the Phase II expansion or expiration date, whichever comes first, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L				
Parameter	Annual Average	Monthly Average	Daily Maximum	Annual Average	Monthly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
$CBOD_5$** (1)	42 (125)	83 (250)	167 (500)	5	10	20	3 Days/Week	Composite
Suspended Solids (1)	42 (125)	100 (300)	200 (600)	5	12	24	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	****	Grab
PFAS			*****			*****	*****	*****
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Ammonia Nitrogen (as N):								
March-May/Sept.-Oct.	13 (38)	32 (95)	39 (118)	1.5	3.8	4.7	3 Days/Week	Composite
June-August	8.3 (25)	21 (63)	47 (140)	1.0	2.5	5.6	3 Days/Week	Composite
Nov.-Feb.	20(60)	--	30 (90)	2.4	--	3.6	3 Days/Week	Composite
Total Phosphorus (as P)	8.3 (25)			1.0			3 Days/Week	Composite
Total Nitrogen (as N) ***	67 (200)			8.0			3 Days/Week	Composite
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
Dissolved Oxygen								
March-July				N.A.	6.0	5.0	3 Days/Week	Grab
August-February				5.5	4.0	3.5	3 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.
**Carbonaceous BOD_5 ($CBOD_5$) testing shall be in accordance with 40 CFR 136.
***See Special Condition 15.
**** See Special Condition 9.
***** See Special Condition 22.

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Effluent Limitations, Monitoring, and Reporting

FINAL

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Discharge Number(s) and Name(s): 001 STP Outfall (Phase 1)

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.

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

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

Total Nitrogen shall be reported on the DMR as a monthly average and daily maximum value. Total Nitrogen is the sum total of kjeldahl nitrogen (TKN), nitrate and nitrite.

(1) BOD_5 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 $CBOD_5$ concentration to determine the effluent BOD_5 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.

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Effluent Limitations, Monitoring, and Reporting

FINAL

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

Load limits computed based on a design average flow (DAF) 2.0 MGD (design maximum flow (DMF) of 6.0 MGD).

From the startup of the operation of the Phase II expansion until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*			CONCENTRATION LIMITS mg/L				
Parameter	Annual Average	Monthly Average	Daily Maximum	Annual Average	Monthly Average	Daily Maximum	Sample Frequency	Sample Type
Flow (MGD)							Continuous	
$CBOD_5$**[(1)]	83 (250)	167 (500)	334 (1001)	5	10	20	3 Days/Week	Composite
Suspended Solids [(1)]	83 (250)	200 (600)	400 (1201)	5	12	24	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	****	Grab
PFAS				*****		*****	*****	*****
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum		
Ammonia Nitrogen (as N):								
March-May/Sept.-Oct.	25 (75)	63 (190)	78 (235)	1.5	3.8	4.7	3 Days/Week	Composite
June-August	17 (50)	42 (125)	93 (280)	1.0	2.5	5.6	3 Days/Week	Composite
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Total Phosphorus (as P)	17 (50)			1.0			3 Days/Week	Composite
Total Nitrogen (as N)***	133 (400)			8.0			3 Days/Week	Composite
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum		
Dissolved Oxygen								
March-July				N.A.	6.0	5.0	3 Days/Week	Grab
August-February				5.5	4.0	3.5	3 Days/Week	Grab

*Load limits based on design maximum flow shall apply only when flow exceeds design average flow.
**Carbonaceous BOD_5 ($CBOD_5$) testing shall be in accordance with 40 CFR 136.
*** See Special Condition 15.
**** See Special Condition 9.
*****See Special Condition 22.
Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

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Effluent Limitations, Monitoring, and Reporting

FINAL

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

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.

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

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

Total Nitrogen shall be reported on the DMR as a monthly average and daily maximum value. Total Nitrogen is the sum total of kjeldahl nitrogen (TKN), nitrate and nitrite.

(1)BOD_5 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 $CBOD_5$ concentration to determine the effluent BOD_5 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.

NPDES Permit No. IL0077836

Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD5	3 Days/Week	Composite
Suspended Solids	3 Days/Week	Composite
Total Nitrogen (as N)*	3 Days/Week	Composite
Total Phosphorus (as P) *	3 Days/Week	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.

BOD_5 and Suspended Solids shall be reported on the DMR as a monthly average concentration.

*Total Nitrogen and Total Phosphorus shall be reported on the DMR as a monthly average

Biosolids shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
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 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 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 at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 9. Fecal Coliform limits for Discharge Number 001. are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

For Discharge No. 001, any use of chlorine to control slime growths, odors or as an operational control, etc. shall not exceed the limit of 0.05 mg/L (daily maximum) total residual chlorine in the effluent for Phase IB; and 0.038 mg/L (daily maximum) total residual chlorine in the effluent for Phase I and Phase II. Sampling is required on a daily grab basis during the chlorination process. Reporting shall be submitted on the DMR's on a monthly basis.

SPECIAL CONDITION 10. (Not applicable to Phase IB) The Permittee shall conduct semi-annual monitoring of Outfall 001 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:

STORET CODE	PARAMETER	Minimum reporting limit
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.
****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 Part 122 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 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 written notice with an original signature must be mailed 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

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 twenty-four (24) months of the effective date of this Permit to the following addresses:

Special Conditions

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

And:

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 11. 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 12. (Not applicable to Phase IB) The Permittee shall conduct biomonitoring of the effluent from Discharge Number(s) Outfall 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 Ed.) EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:

   1. Fish 96-hour static LC_{50} Bioassay using fathead minnows (*Pimephales promelas*).

   2. Invertebrate 48-hour static LC_{50} 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 18^{th}, 15^{th}, 12^{th}, and 9^{th} 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 the laboratory. Reports are due to the IEPA no later than the 16^{th}, 13^{th}, 10^{th}, and 7^{th} 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.

Special Conditions

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 13. 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:

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 14. 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 15. The Permittee shall operate the facilities designed for biological nutrient removal (BNR). Monitoring for Total Nitrogen is required to document the actual total nitrogen effluent concentration. The Permittee shall monitor the effluent for total nitrogen three days per week. The monitoring shall be a composite sample and the results reported as a daily maximum on the Permittee’s Discharge Monitoring Forms.

The Total Nitrogen effluent limits shall become effective one year after the completion and start of the new treatment plant. The Agency will evaluate the data collected and modify the permit if necessary in accordance with Special Condition 1 of the NPDES permit.

SPECIAL CONDITION 16. The Permittee shall monitor the wastewater effluent for Total Phosphorus, Dissolved Phosphorus, Nitrate/Nitrite, Total Kjeldahl Nitrogen (TKN), Ammonia, Total Nitrogen (calculated), Alkalinity and Temperature at least once a month beginning on the effective date of this permit. The Permittee shall monitor the wastewater influent for Total Phosphorus at least once a month. The results shall be submitted on electronic Discharge Monitoring Report Forms (NetDMRs) to IEPA unless otherwise specified by the IEPA.

Special Conditions

SPECIAL CONDITION 17. (Not applicable to Phase IB) The Permittee shall develop and submit to the Agency a Phosphorus Discharge Optimization Plan within 24months of the effective date of this permit. The plan shall include a schedule for the implementation of these optimization measures. Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year beginning 12 months from effective date of the permit. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The plan and the annual progress reports can be submitted to EPA.PrmtSpecCondtns@Illinois.gov with "IL0077836 Special Condition 17" as the subject of the email. 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.

SPECIAL CONDITION 18. 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 and the relevant facility (such as quantity of discharge flow and nutrient load relative to the stream flow).

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 recommends the Permittee be a part of a watershed group that forms or group that develops a Nutrient Assessment Reduction Plan (NARP).

SPECIAL CONDITION 19. (Not applicable to Phase IB) An effluent limit of 0.5 mg/L Total Phosphorus 12-month rolling geometric mean (calculated monthly) (hereinafter Limit) will be applicable to the Permittee beginning January 1, 2030. The Agency may modify the permit if:

A. The Permittee demonstrates that the Limit is not technologically feasible; or
B. The Permittee demonstrates 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:
   1. Interim Economic Guidance for Water Quality Standards, March 1995, EPA-823-95-002;
   2. Combined Sewer Overflows – Guidance for Financial Capability Assessment and Schedule Development, February 1997, EPA-832—97-004;
   3. Financial Capability Assessment Framework for Municipal Clean Water Act Requirements, November 24, 2014; or
C. If the Implementation Plan determines that a greater phosphorus reduction is necessary and achievable before January 1, 2030, then the Permittee shall meet the phosphorus limit identified in the Implementation Plan in accordance with the schedule set out therein; or
D. If the Limit is demonstrated not to be technologically or economically feasible by January 1, 2030, but is feasible within a longer timeline, then the Limit shall be met as soon as feasible; or
E. If the Limit is demonstrated not to be technologically or economically achievable by the Permittee, then an effluent limit that is achievable by the Permittee must be met as soon as feasible and shall not exceed 0.6 mg/L Total Phosphorus 12-month rolling geometric mean (calculated monthly).

The Agency will modify or reissue the NPDES permit as necessary. Any permit modification or renewal will be public noticed and made available for public review and comment prior to issuance of any permit modification or renewal. No date deadline extension or effluent limitation modification will be effective until it is included in a modified or reissued NPDES permit.

Special Conditions

SPECIAL CONDITION 20. The Permittee shall notify the IEPA in writing once the construction of the new treatment plant is completed. A letter stating the date of completion shall be sent to the following address within fourteen (14) days of the new treatment plant becoming operational:

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 21. The permittee is planning to employ a constructed wetland at this facility. The permittee shall monitor the effluent prior to any constructed wetlands for compliance with the effluent limitations.

SPECIAL CONDITION 22. (Not applicable to Phase IB) PFAS Testing and Reporting

1. PFAS Sample Frequency and Type of Sample.

Sampling Point	Sample Frequency	Sample Type	Report
Effluent	Quarterly*	Grab***	ng/L
Influent	Quarterly*	Grab***	ng/L
Biosolids	Semiannually**	Grab	µg/kg

*Quarterly sampling – Quarterly sampling shall begin 3 months after operational attainment of the expanded facility and notification to the Agency (Special Condition #20). 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.

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.

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.

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.

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.

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	PFTrDA	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
Perfluoropentansulfonic 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
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	PF007	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	PF007	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	PF005	20	5.0

SPECIAL CONDITION 22. PFAS Reduction Program (applicable for Phase I and II):

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 operational attainment of the expanded facility and notification to the Agency (Special Condition #20). 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 operational attainment of the expanded facility and notification to the Agency (Special Condition #20), 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 operational attainment of the expanded facility and notification to the Agency (Special Condition #20). 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

Village of Wonder Lake
4444 Thompson Road
Wonder Lake, Illinois 60097

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4444 Thompson Road
Wonder Lake, Illinois 60097

Village of Wonder Lake
4444 Thompson Road
Wonder Lake, Illinois 60097

U.S. Army Corp of Engineers
Chicago District
Attn: Regulatory Branch
231 South LaSalle Street, Suite 1500
Chicago, Illinois 60604

Municipal Clerk
Village of Wonder Lake
4444 Thompson Road
Wonder Lake, Illinois 60097

Edward Karecki
U.S. Fish and Wildlife Service
Chicago Field Office
230 S Dearborn St., Suite 3300
Chicago, IL 60604

U. S. Environmental Protection Agency
Attention: Kevin Pierard, Chief
NPDES Programs Branch, Region V
77 West Jackson Boulevard, MC: WN-15J
Chicago, Illinois 60604

U. S. Environmental Protection Agency
Attention: Kevin Pierard, Chief
NPDES Programs Branch, Region V
77 West Jackson Boulevard, MC: WN-15J
Chicago, Illinois 60604

U. S. Environmental Protection Agency
Attention: Kevin Pierard, Chief
NPDES Programs Branch, Region V
77 West Jackson Boulevard, MC: WN-15J
Chicago, Illinois 60604

Chicago Metropolitan Agency for Planning
233 South Wacker Drive
Chicago, Illinois 60606

Chicago Metropolitan Agency for Planning
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10045 W Lincoln Hwy
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