State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**1623**	NAICS Code:	**237110**	SPDES Number:	**NY0313726**
Discharge Class (CL):	**01**			DEC Number:	**3-5528-00152/00004**
Toxic Class (TX):	**T**			Effective Date (EDP):	**TBD**
Major-Sub Drainage Basin:	**17 - 02**			Expiration Date (ExDP):	**TBD**
Water Index Number:	**ER-3-P 1063-12**	Item No.:	**935.6 - 45**	Modification Dates (EDPM):	
Compact Area:	**IEC**				

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. '1251 et.seq.)

PERMITTEE NAME AND ADDRESS					
Name:	**Yonkers Contracting Company, Inc**	Attention:	**Michael Shea**		
Street:	**969 Midland Avenue**				
City:	**Yonkers**	State:	**NY**	Zip Code:	**10704**
Email:	**mshea@yonkerscontractingco.com**	Phone:	**914-695-1847**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	**Rye Lake Water Filtration Plant**													
Address / Location:	**4441 Purchase Street**										County:	**Westchester**		
City:	**Purchase**						State:	**NY**			Zip Code:	**10577**		
Facility Location:		Latitude:	**41**	°	**03**	’	**54**	” N	& Longitude:	**73**	°	**43**	’	**01** ” W
Primary Outfall No.:	**001**	Latitude:	**41**	°	**03**	’	**54**	” N	& Longitude:	**73**	°	**43**	’	**02** ” W
Wastewater Description:	**Treated Groundwater**	Receiving Water:	**Tribs. of Kensico Reservoir**				NAICS:	**237110**	Class:	**A**		Standard:		**A(TS)**

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

Permit Administrator:	
Address:	21 South Putt Corners Road New Paltz, NY 12561
Signature	Date

Contents

DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the DEC.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Range	The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See DEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Treated Groundwater (Construction Dewatering)	Tribs. of Kensico Reservoir	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Daily Maximum	Monitor	MGD	-	-	Continuous	Meter		X	
pH	Daily Minimum	6.5	SU	-	-	2/Week	Grab		X	
	Daily Maximum	8.5	SU	-	-					
Total Suspended Solids (TSS)	Daily Maximum	15.0	mg/L	-	lbs/d	2/Week	Grab		X	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	-	lbs/d	2/Week	Grab		X	
Total Chromium	Daily Maximum	0.050	mg/L	-	-	2/Week	Grab		X	
Total Copper	Daily Maximum	0.025	mg/L	-	-	2/Week	Grab		X	
Total Lead	Daily Maximum	0.017	mg/L	-	-	2/Week	Grab		X	
Total Nickel	Daily Maximum	0.106	mg/L	-	-	2/Week	Grab		X	
Total Zinc	Daily Maximum	0.260	mg/L	-	-	2/Week	Grab		X	
Nitrate-nitrite	Daily Maximum	10.0	mg/L	-	-	2/Week	Grab		X	
Total Iron	Daily Maximum	0.300	mg/L	-	-	2/Week	Grab		X	
Total Magnesium	Daily Maximum	35.0	mg/L	-	-	2/Week	Grab		X	

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluorobutanoic Acid (PFBA) CAS No. 375-22-4 DMR Code: 51522	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluoropentanoic Acid (PFPeA) CAS No. 2706-90-3 DMR Code: 51623	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorohexanoic Acid (PFHxA) CAS No.307-24-4 DMR Code: 51624	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluoroheptanoic Acid (PFHpA) CAS No. 375-85-9 DMR Code: 51625	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorooctanoic Acid (PFOA) CAS No. 335-67-1 DMR Code: 51521	Daily Maximum	6.7	ng/L	-	-	1/month	Grab		X	1
Perfluoro-nonanoic Acid (PFNA) CAS No. 375-95-1 DMR Code: 51626	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluoro-decanoic Acid (PFDA) CAS No. 335-76-2 DMR Code: 51627	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluoroundecanoic Acid (PFUnA) CAS No. 2058-94-8 DMR Code: 51628	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorododecanoic Acid (PFDoA) CAS No. 307-55-1 DMR Code: 51629	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorotridecanoic Acid (PFTriA) CAS No. 72629-94-8 DMR Code: 51630	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorotetradecanoic Acid (PFTeA) CAS No. 376-06-7 DMR Code: 51631	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorobutanesulfonic Acid (PFBS) CAS No. 375-73-5 DMR Code: 52602	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluoropentanesulfonic Acid (PFPeS) CAS No. 2706-91-4 DMR Code: 52610	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorohexanesulfonic Acid (PFHxS) CAS No. 355-46-4 DMR Code: 52605	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluoroheptanesulfonic Acid (PFHpS) CAS No. 375-92-8 DMR Code: 52604	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorooctanesulfonic Acid (PFOS) CAS No. 1763-23-1 DMR Code: 52606	Daily Maximum	2.7	ng/L	-	-	1/month	Grab		X	1
Perfluorononanesulfonic Acid (PFNS) CAS No. 68259-12-1 DMR Code: 52611	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorodecanesulfonic Acid (PFDS) CAS No. 335-77-3 DMR Code: 52603	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorododecanesulfonic Acid (PFDoS) CAS No. 79780-39-5 DMR Code: 52632	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluorooctanesulfonamide (FOSA) CAS No. 754-91-6 DMR Code: 51525	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA) CAS No. 2355-31-9 DMR Code: 51644	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA) CAS No. 2991-50-6 DMR Code: 51643	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS) CAS No. 757124-72-4 DMR Code: 52607	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (6:2 FTS) CAS No. 27619-97-2 DMR Code: 52608	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (8:2 FTS) CAS No. 39108-34-4 DMR Code: 52609	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA) CAS No. 4151-50-2 DMR Code: 52642	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) CAS No. 31506-32-8 DMR Code: 52641	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) CAS No. 24448-09-7 DMR Code: 51642	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) CAS No. 1691-99-2 DMR Code: 51641	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS) CAS No. 756426-58-1 DMR Code: PF003	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA or GenX) CAS No. 13252-13-6 DMR Code: 52612	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) CAS No. 763051-92-9 DMR Code: PF004	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA) CAS No. 919005-14-4 DMR Code: 52636	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
3-Perfluoropropyl Propanoic Acid (3:3FTCA) CAS No. 356-02-5 DMR Code: PF001	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) CAS No. 914637-49-3 DMR Code: PF007	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
3-Perfluoroheptyl Propanoic Acid (7:3FTCA) CAS No. 812-70-4 DMR Code: PF005	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA) CAS No. 151772-58-6 DMR Code: 52626	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluoro-4-Methoxybutanoic Acid (PFMBA) CAS No. 863090-89-5 DMR Code: PF006	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluoro-3-Methoxypropanoic Acid (PFMPA) CAS No. 377-73-1 DMR Code: PF002	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1
Perfluoro(2-Ethoxyethane) Sulfonic Acid (PFEESA) CAS No. 113507-82-7 DMR Code: 52629	Daily Maximum	Monitor	ng/L	-	-	1/month	Grab		X	1

FOOTNOTES:

1. All PFAS compound sampling shall use EPA Method 1633/1633A. Note that "DMR code" corresponds to the 5-digit code displayed in the top left of each parameter line on the DMR page within NetDMR.

DISCHARGE NOTIFICATION REQUIREMENTS

(a) The permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit, unless the Permittee has obtained a waiver in accordance with the Discharge Notification Act (DNA). Such signs shall be installed before initiation of any new discharge location.

(b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water-related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty-four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No.: ____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address:

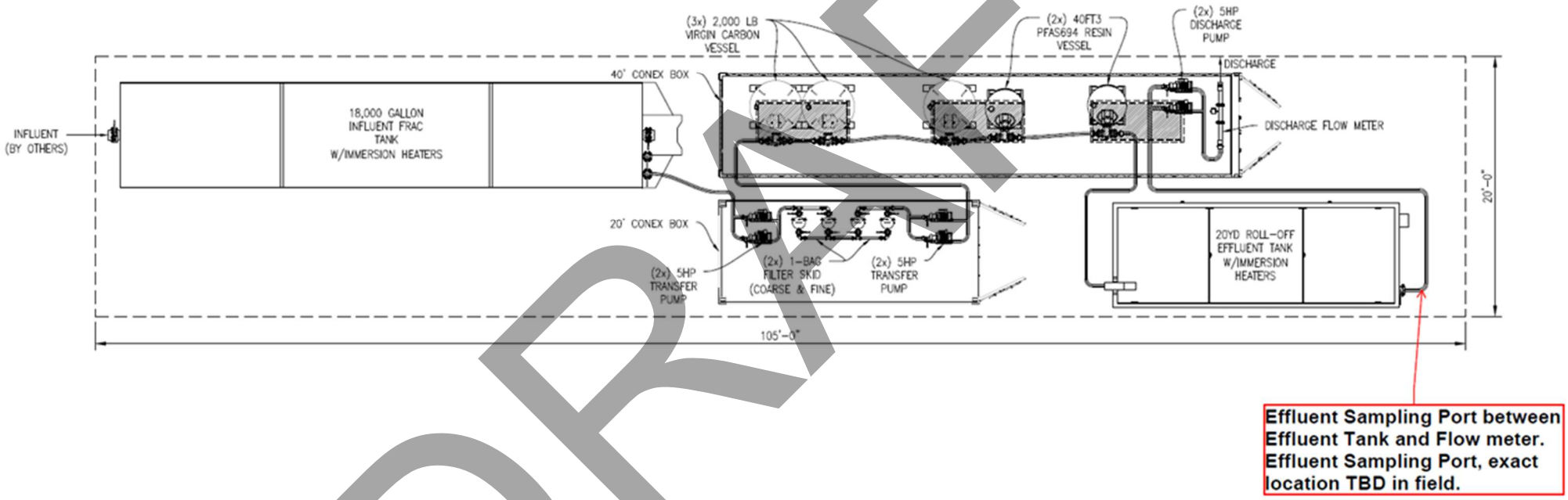
NYSDEC Division of Water Regional Phone: ( ) - ### -####

(e) The permittee shall provide for public review at the business office repository of the permittee or at the off-premises location of its choice, provided the custodian of the off-premise location grants written permission, (such off-premise location shall be the village, town, city or county clerk's office, local library or other location accessible by the public) all the Discharge Monitoring Reports (DMR) prepared by the permittee to demonstrate compliance with the SPDES permit conditions. A copy of each DMR shall be placed on file at such location at the same time it is sent to the department, or within 60 days of preparation for DMRs not required to be submitted to the Department. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.

(f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:



GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through H, as follows:

B. General Conditions

1.	Duty to comply	6 NYCRR 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR 750-1.16(a)
3.	Need to halt or reduce activity not a defense	6 NYCRR 750-2.1(g)
4.	Duty to mitigate	6 NYCRR 750-2.7(f)
5.	Permit actions	6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR 750-2.2(b)
7.	Duty to provide information	6 NYCRR 750-2.1(i)
8.	Inspection and entry	6 NYCRR 750-2.1(a) & 2.3

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR 750-2.8
2.	Bypass	6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR 750-1.2(a)(98) & 2.8(c)

D. Monitoring and Records

1.	Monitoring and records	6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d)
2.	Signatory requirements	6 NYCRR 750-1.8 & 2.5(b)

E. Reporting Requirements

1.	Reporting requirements for non-POTWs	6 NYCRR 750-2.5, 2.6, 2.7, &1.17
2.	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)

F. Sludge Management
The permittee shall comply with all applicable requirements of 6 NYCRR Part 360 series.

G. SPDES Permit Program Fee
The permittee shall pay to the DEC an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

H. Water Treatment Chemicals (WTCs)
New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed under the current permit. The use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the DEC.
2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the DEC's website at: SPDES Permitting of Water Treatment Chemicals.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The permittee shall retain the monitoring information required by this permit for a period of at least five years from the date of the sampling.

B. Discharge Monitoring Reports (DMRs): The permittee shall submit completed DMR forms for each 1 month reporting period in accordance with the DMR Manual available on DEC's website.

The permittee must submit DMRs electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at: How To Complete And Submit Discharge Monitoring Reports (DMRs) - NYSDEC. **Hardcopy paper DMRs will only be accepted if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

The first monitoring period begins on the effective date of this permit, and, unless otherwise required, the reports are due no later than the 28th day of the month following the end of each monitoring period.

C. Additional information required to be submitted by this permit shall be summarized and reported to the Regional Water Engineer and Bureau of Water Permits at the following addresses:

Department of Environmental Conservation
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505
Email: SPDESApp@dec.ny.gov
Phone: (518) 402-8111

Department of Environmental Conservation
Regional Water Engineer, Region 3
DOW.r3@dec.ny.gov
220 White Plains Road, Suite 110, Tarrytown, New York, 10591,
Email:
Phone: (914) 803-8157

D. Schedule of Additional Submittals:

The permittee shall submit the following information to the Regional Water Engineer and to the Bureau of Water Permits, unless otherwise instructed:

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	NOTIFICATION OF START DATE ("START-UP") The permittee shall provide the Department with the proposed start date for the treatment system. This date will be used to establish the start of compliance reporting. Notice can be provided via email to NetDMR@dec.ny.gov.	30 Days Prior to Start-up
001	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION The permittee must submit a mercury conditional exclusion certification every five years, certifying that the facility is neither a mercury source nor receives flow from a mercury source	01/05/2031 and every 5 years thereafter

Unless noted otherwise, the above actions are one-time requirements.

E. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

F. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

G. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

H. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

I. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

SPDES Permit Fact Sheet

Yonkers Contracting Company Rye Lake Water Filtration Plant Construction NY0313726

Summary of Permit Changes

A new State Pollutant Discharge Elimination System (SPDES) permit has been drafted to authorize the discharge of treated construction dewatering associated with the construction of the Rye Lake Water Filtration Plant.

This fact sheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information including the regulatory basis for the effluent limitations and other conditions are in the Appendix linked throughout this fact sheet.

Administrative History

1/5/2026 Yonkers Contracting Company submitted a NY-2C permit application.

The Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, contains information on the public notice process.

Facility Information

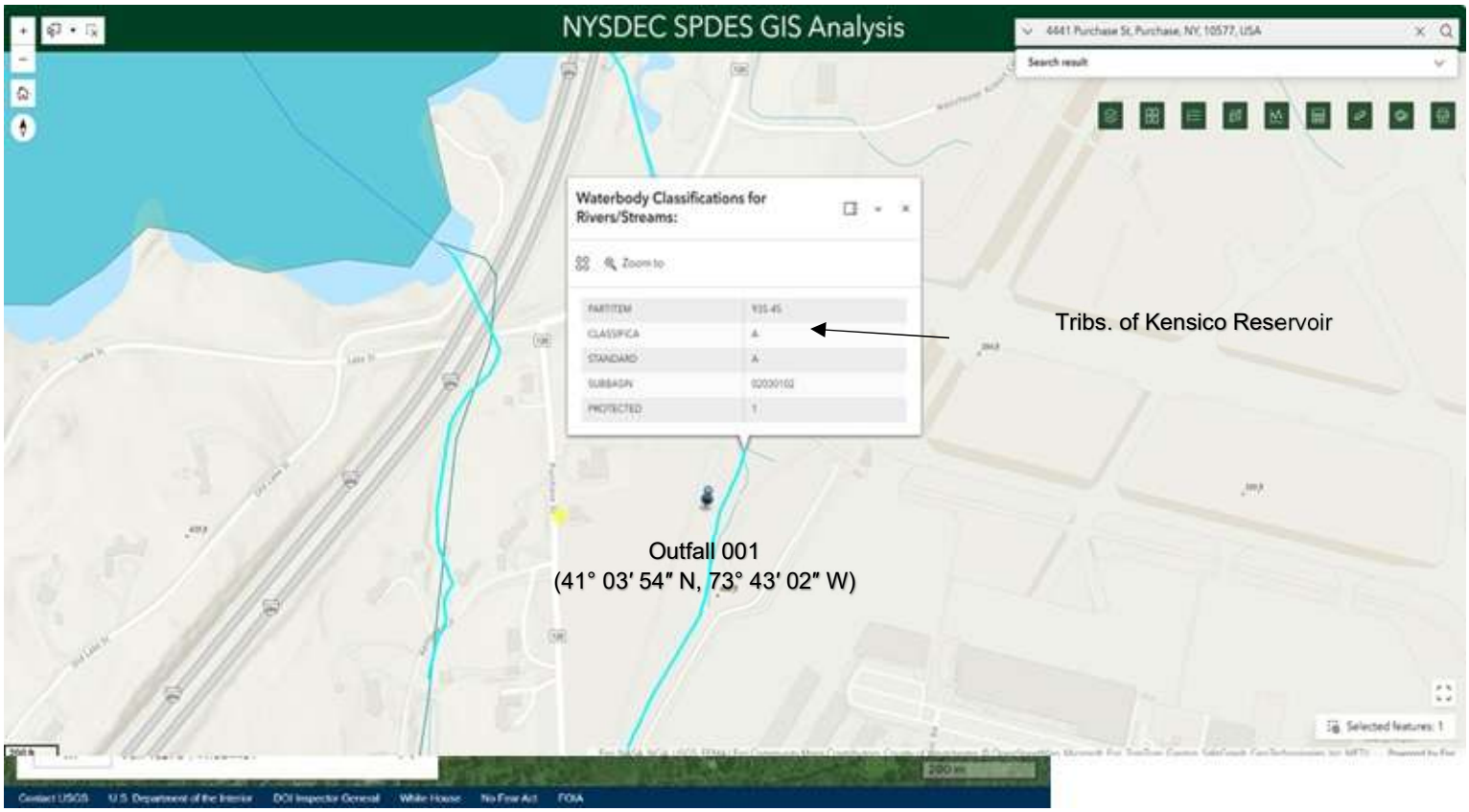
This permit authorizes the discharge of treated groundwater generated from construction dewatering activities required to support excavation during construction of the Rye Lake Water Filtration Plant under SIC Code 1623.

Groundwater generated from construction dewatering activities will be conveyed to a temporary treatment system with a design flow rate of approximately 100 gallons per minute (GPM) prior to discharge. The treatment system consists of the following components:

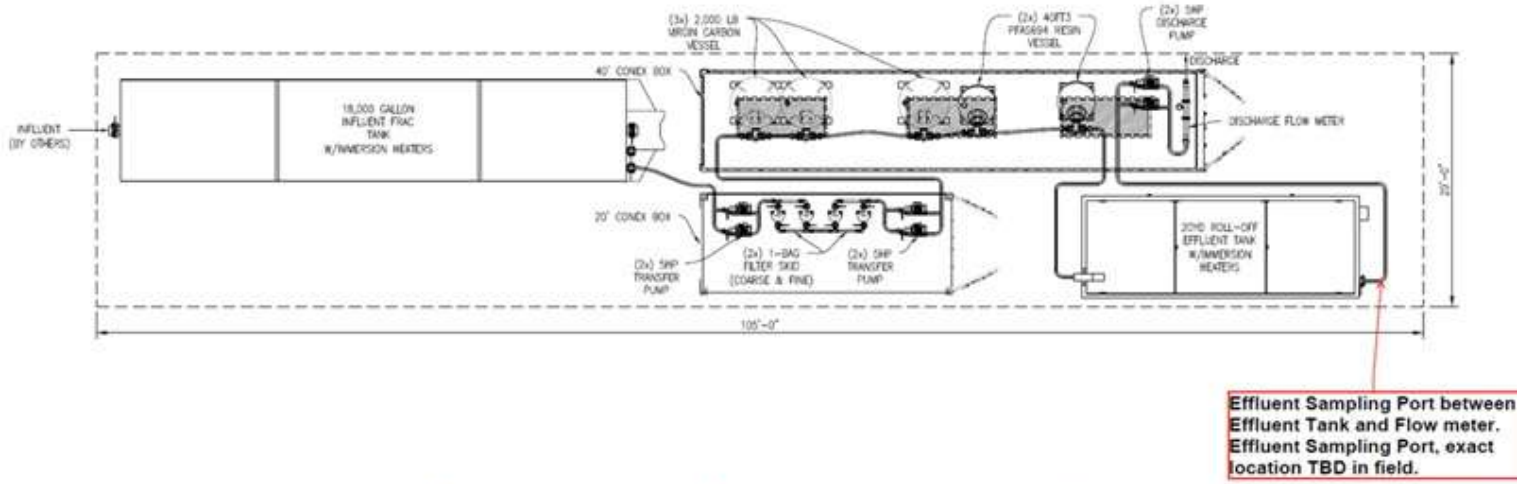
- One (1) 18,000-gallon influent frac tank (settling tank) with immersion heaters
- Two (2) 1-bag filter skids configured for coarse and fine filtration
- Three (3) 2,000-lb virgin carbon vessels
- Two (2) 40 ft³ PFAS694 resin ion-exchange vessels
- One (1) 20 cubic yard roll-off effluent tank equipped with immersion heaters

Discharge from the treatment system will be conveyed to a proposed onsite 24-inch storm sewer via a new manhole which will lead to Outfall 001. The outfall will include a riprap diffusion and flow-spreading system (to reduce erosion and dissipate discharge energy) and will discharge to a tributary of Kensico Reservoir.

Site Overview



Temporary Groundwater Treatment System Process Schematic



Existing Effluent Quality

This is a proposed discharge associated with construction dewatering activities and there is no existing discharge data to evaluate. Groundwater sampling data collected from onsite monitoring wells and submitted by the permittee with the application were used to represent the quality of groundwater that will be generated during construction dewatering activities. The sampled parameters are presented in the Pollutant Summary Table under Existing Discharge Data, along with the applicable effluent limitations. Appendix Link

Interstate Water Pollution Control Agencies

Outfall(s) 001 is located within the Interstate Environmental Commission (IEC) compact area . Appendix Link

Receiving Water Information

The facility proposes to discharge via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	1623	Treated Groundwater (Construction Dewatering)	Tribs. of Kensico Reservoir, Class A, Standard A(TS)

Impaired Waterbody Information

The Kensico Reservoir (PWL No. 1702-0059) was listed on the 1994 New York State Section 303(d) List of Impaired/TMDL Waters as impaired due to Phosphorus. On 6/1/2000, a TMDL was approved for Kensico Reservoir. The TMDL addresses Phosphorus impairment. Given the temporary nature of the discharge and the fact that this is groundwater that would be discharging to the Kensico Reservoir regardless, there would be no increase to the phosphorus loading in this section. Therefore, a TMDL-based effluent limit is not warranted.

Critical Receiving Water Data

Reach Description: This segment tributary of Kensico Reservoir (935-45) is Class A and flows to Rye Lake/Kensico Reservoir, Class AA 0.35 miles downstream of the outfall.

74, 1979. The 1Q10 flow was estimated as half the 7Q10 and the 30Q10 flow was estimated as 1.2 x 7Q10.

The low flows at the facility location were found from a drainage basin ratio analysis and are shown below.

7Q10 low-flow condition of the Tribs. of Kensico Reservoir was found to be 0.00235 CFS.

DRAINAGE BASIN RATIO	1Q10	7Q10	30Q10	
Gage Name	BLIND BROOK AT RYE NY			
Gage ID Number		1300000		
Low Flow at Gage (cfs)	0.2608	0.5216	0.9011	Streamstats Gage
Drainage Area at Gage (mi^2)	8.86	8.86	8.86	Streamstats
Drainage Area at Facility (mi^2)	0.04	0.04	0.04	Streamstats
Drainage Basin Ratio (facility / gage	0.0	0.0045	0.0045	
Calculated Flow at Facility (cfs)	0.00118	0.00235	0.00407	

Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) apply for flows <0.1 CFS, and the water quality standards have been applied as end-of-pipe limitations with no mixing or dilution.

Critical receiving water data are listed in the Pollutant Summary Table at the end of this fact sheet. Appendix Link

Permit Requirements

The technology based effluent limitations (TBELs), water quality-based effluent limitations (WQBELs), Existing Effluent Quality and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the Pollutant Summary Table.

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[1] determination.

NYSDEC Division of Fish and Wildlife have surveyed the portion of the tributary of Kensico Reservoir that the Rye Lake Water Filtration Plant Construction discharges to. Surveys of the fishery found that the waterbody supports trout spawning. NYSDEC Division of Water recognizes that the tributary of Kensico Reservoir has higher best uses than presently assigned and requires reclassification from Class A to Class A(TS). In accordance with antidegradation regulations, NYSDEC has an obligation to protect all best uses of the waterbody, even if they are not captured in the classification presently assigned. Therefore, this permit was developed using Class A(TS) water quality standards.
Appendix Link

Discharge Notification Act Requirements

In accordance with the Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters, unless a waiver is obtained. This requirement is new.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request.

Mercury

The DOW 1.3.10 Mercury – Multiple Discharge Variance (MDV), dated December 31, 2025, provides the framework for DEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. All of the following permit conditions are consistent with the MDV. Appendix Link

The facility is located outside of the Great Lakes Basin and is a SPDES Class 01. The permittee submitted a Conditional Exclusion Form on 01/05/2026, certifying the facility does not have a mercury source as listed in Part III.E. of the MDV. In addition, the proposed discharge is a short-term dewatering discharge (less than two years in duration). Consistent with DOW 1.3.10, Part IV: “An MMP is not necessary for most SPDES permit equivalents and short-term discharges since there will be insufficient time for the MMP to achieve a meaningful reduction in mercury.”

Accordingly, no Mercury Minimization Program is required for this discharge.

Emerging Contaminant Monitoring

Based on the available data, water quality-based effluent limitations for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) have been specified with monitoring required for the remaining 38 per- and polyfluoroalkyl substances (PFAS) compounds pursuant to 6 NYCRR 750-1.13(b). Monitoring requirements are also consistent with guidance released in EPA memos dated April 28, 2022, and December 5, 2022. Please see the Pollutant Summary Table below for more information.

Appendix Link

[1] As prescribed by 6 NYCRR Part 617

Schedule of Additional Submittals

Mercury Conditional Exclusion Certification

Consistent with DOW 1.3.10 and 6 NYCRR 750-1.14(f), the permittee shall maintain a valid Mercury Conditional Exclusion Certification. the permittee must submit the certification form, signed in accordance with 6 NYCRR 750-1.8, every five years certifying that the facility is neither a mercury source nor receives flow from a mercury source.

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/L)	1Q10 (CFS)	7Q10 (CFS)	30Q10 (CFS)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	41° 03' 54" N	73° 43' 02" W	Tribs. of Kensico Reservoir	Class A, Std A(TS)	ER-3-P 1063-12 PWL: 1702-0059	17/02	170[2]	Intermittent			0.144	1:1	1:1	1:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated Groundwater (Construction Dewatering) **Type of Treatment:** Equalization Tank, Bag Filtration (Coarse and Fine), Granular Activated Carbon (GAC) Treatment, PFAS Resin (Ion Exchange) Treatment														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: No existing discharge data is available for this proposed discharge. Groundwater sampling data collected from onsite monitoring wells and submitted with the application were used to represent the expected effluent quality. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent. The technology based effluent limitations (TBELs) were developed from TOGS 1.2.1 Att.C, for category J (miscellaneous) & B (LS&F) treatment systems.															
Flow Rate	MGD	Daily Max	-	0.144 Design Flow	-	Monitor	750-1.13	No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	-	8.0 One-time sample	1/0	6.0	TOGS 1.2.1	7.33[4]	-	6.5 – 8.5	Range	6.5 - 8.5	703.3	-	WQBEL
		Maximum	-			9.0									
	Given the available dilution, an effluent limitation equal to the WQS is appropriate.														
Total Suspended Solids (TSS)	mg/L	Daily Max	-	1100	1 /0	15	TOGS 1.2.1	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C														

[2] Ambient hardness was calculated from RIBs station RIBS 17-KENF_Ta-0.2, located ~1000 feet downstream, using 2 samples collected in 2021. This being a new discharge means downstream samples are representative of ambient conditions as the receiving water is not yet impacted by the outfall.

[3] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

[4] Ambient pH calculated from RIBs station RIBS 17-KENF_Ta-0.2, located ~1000 feet downstream, using 3 samples collected in 2021. This being a new discharge means downstream samples are representative of ambient conditions as the receiving water is not yet impacted by the outfall.

Outfall #	001	**Description of Wastewater:** Treated Groundwater (Construction Dewatering) **Type of Treatment:** Equalization Tank, Bag Filtration (Coarse and Fine), Granular Activated Carbon (GAC) Treatment, PFAS Resin (Ion Exchange) Treatment													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Nitrogen, Ammonia (as N)	mg/L	Monthly Avg	-	0.1	1/0	-	TOGS 1.2.1	0.037	0.62	0.9	A(C)	No Reasonable Potential	703.5	-	No Limitation
The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 7.5 and a summer temperature of 25 °C. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E.															
Total Phosphorus	mg/L	Monthly Avg	-	0.026	1/0	Monitor	BPJ	0.0607	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				703.2	-	Monitor
The dewatering project will take place within the Kensico Reservoir TMDL area. This is a temporary discharge of groundwater, as such only monitoring will be required for Phosphorus															
Total Mercury	ng/L	Daily Max	-	0.7	1/0	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
See Mercury section of this fact sheet.															
Additional Pollutants Detected															
Arsenic, total	mg/L	Daily Max	-	0.004	1/0	1.4	TOGS 1.2.1	Non-Detect	0.015	0.050	H(WS)	No reasonable potential	703.5	-	No Limitation
The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and a negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.7 was also applied to convert between the total and dissolved form in accordance with the TriBasin RIBs calculation. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL has been specified. Ambient upstream concentration was calculated from RIBs station RIBS 17-KENF_Ta-0.2, located ~0.35 miles downstream, using 2 samples collected in 2021.															
Beryllium, total	mg/L	Daily Max	-	0.002	1/0	0.82	TOGS 1.2.1	-	0.012	11	A(C)	No reasonable potential	703.5	-	No Limitation
The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL has been specified.															
Cadmium, total	mg/L	Daily Max	-	0.001	1/0	0.2	TOGS 1.2.1	Non-Detect	0.0027	.0032	A(C)	No reasonable potential	703.5	-	No Limitation
The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and a negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 2.3 was also applied to convert between the total and dissolved form in accordance with the TriBasin RIBs calculation. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified. Ambient upstream concentration was calculated from RIBs station RIBS 17-KENF_Ta-0.2, located ~0.35 miles downstream, using 2 samples collected in 2021.															

Outfall #	001	**Description of Wastewater:** Treated Groundwater (Construction Dewatering) **Type of Treatment:** Equalization Tank, Bag Filtration (Coarse and Fine), Granular Activated Carbon (GAC) Treatment, PFAS Resin (Ion Exchange) Treatment													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Chromium, total	mg/L	Daily Max	-	0.146	1/0	0.37	TOGS 1.2.1	-	0.286	0.050	H(WS)	0.050	703.5	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.163 was also applied to convert between the total and dissolved form in accordance with the TriBasin RIBs calculation. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified.														
Copper, total	mg/L	Daily Max	-	0.111	1/0	1.3	TOGS 1.2.1	-	0.382	0.014	A(C)	0.025	703.5	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.163 was also applied to convert between the total and dissolved form in accordance with the TriBasin RIBs calculation. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified.														
Lead, total	mg/L	Daily Max	-	0.007	1/0	0.28	TOGS 1.2.1	0.0004	0.017	0.0067	A(C)	0.017	703.5	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 2.5 was also applied to convert between the total and dissolved form in accordance with the TriBasin RIBs calculation. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified. Ambient upstream concentration was calculated from RIBs station RIBS 17-KENF_Ta-0.2, located ~0.35 miles downstream, using 2 samples collected in 2021.														
Nickel, total	mg/L	Daily Max	-	0.079	1/0	0.55	TOGS 1.2.1	-	0.377	0.081	A(C)	0.106	703.5	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.163 was also applied to convert between the total and dissolved form in accordance with the TriBasin RIBs calculation. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified.														
Zinc, total	mg/L	Daily Max	-	0.231	1/0	1.0	TOGS 1.2.1	0.003	0.716	0.130	A(C)	0.260	703.5	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 2 was also applied to convert between the total and dissolved form in accordance with the TriBasin RIBs calculation. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified. Ambient upstream concentration was calculated from RIBs station RIBS 17-KENF_Ta-0.2, located ~0.35 miles downstream, using 2 samples collected in 2021.														
Fluoride	mg/L	Daily Max	-	0.06	1/0	35.0	TOGS 1.2.1	-	0.372	1.50	H(WS)	No reasonable potential	703.5	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL has been specified.														

Outfall #	001	**Description of Wastewater:** Treated Groundwater (Construction Dewatering) **Type of Treatment:** Equalization Tank, Bag Filtration (Coarse and Fine), Granular Activated Carbon (GAC) Treatment, PFAS Resin (Ion Exchange) Treatment													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Nitrate-nitrite	mg/L	Daily Max	-	2.41	1/0	-	TOGS 1.2.1	0.199	14.9	10.0	H(WS)	10.0	703.5	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified. Ambient upstream concentration was calculated from RIBs station RIBS 17-KENF_Ta-0.2, located ~0.35 miles downstream, using 2 samples collected in 2021.														
Nitrogen, total organic (as N)	mg/L	Daily Max	-	0.4	1/0	-	TOGS 1.2.1	0.700	2.48	-	-	-	-	-	No Limitation
	There is no numeric WQS or numeric GV for translation of the narrative WQS for ammonia for Class A waterbodies. Therefore, no limitation or monitoring has been specified.														
Sulfate (as SO4)	mg/L	Daily Max	-	21.5	1/0	-	TOGS 1.2.1	-	133	250	H(WS)	No reasonable potential	703.5	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL has been specified.														
Aluminum, total	mg/L	Daily Max	-	0.894	1/0	6.1	TOGS 1.2.1	-	5.54	-	-	-	-	-	No Limitation
	There is no numeric WQS or numeric GV for translation of the narrative WQS for aluminum for Class A waterbodies. Therefore, no limitation or monitoring has been specified.														
Barium, total	mg/L	Daily Max	-	0.062	1/0	1.2	TOGS 1.2.1	-	0.384	1.00	H(WS)	No reasonable potential	703.5	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL has been specified.														
Iron, total	mg/L	Daily Max	-	1.02	1/0	1.2	TOGS 1.2.1	-	6.32	0.300	E(WS)	0.300	703.5	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified.														
Magnesium, total	mg/L	Daily Max	-	15	1/0	-	TOGS 1.2.1	15.2	93.0	35.0	H(WS)	35.0	703.5	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified. Ambient upstream concentration was calculated from RIBs station RIBS 17-KENF_Ta-0.2, located ~0.35 miles downstream, using 2 samples collected in 2021.														
Manganese, total	mg/L	Daily Max	-	0.019	1/0	0.3	TOGS 1.2.1	-	0.118	0.300	E(WS)	No reasonable potential	703.5	-	No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration, a multiplier of 6.2, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL has been specified.														

Outfall #	001	**Description of Wastewater:** Treated Groundwater (Construction Dewatering) **Type of Treatment:** Equalization Tank, Bag Filtration (Coarse and Fine), Granular Activated Carbon (GAC) Treatment, PFAS Resin (Ion Exchange) Treatment													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Titanium, total	mg/L	Daily Max	-	0.07	1/0	0.53	TOGS 1.2.1	-	0.434	-	-	-	-	-	No Limitation
	There is no numeric WQS or numeric GV for translation of the narrative WQS for titanium for Class A waterbodies. Therefore, no limitation or monitoring has been specified.														

Outfall 001

Emerging Contaminants: Outfall # 001																
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Notes: See Emerging Contaminant Monitoring section above. Influent samples were analyzed for the 40 PFAS compounds and 1,4-Dioxane.															
Perfluoro-butanoic Acid (PFBA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
Monitoring has been added to support establishment of future standards or TBELs.															
Perfluoro-pentanoic Acid (PFPeA)	ng/L	Daily Max	-	3.27	1/0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
Monitoring has been added to support establishment of future standards or TBELs.															
Perfluoro-hexanoic Acid (PFHxA)	ng/L	Daily Max	-	2.39	1/0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
Monitoring has been added to support establishment of future standards or TBELs.															
Perfluoro-heptanoic Acid (PFHpA)	ng/L	Daily Max	-	1.95	1/0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
Monitoring has been added to support establishment of future standards or TBELs.															
Perfluoro-octanoic Acid (PFOA)	ng/L	Daily Max	-	10.1 Actual Max	1/0	-	-	-	62.6	6.7	H(WS)	6.7	TOGS 1.1.1	-	WQBEL
The projected instream concentration was calculated using the maximum reported effluent concentration of 10.1 ng/L, a multiplier of 6.2, the HEW dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the guidance value indicates reasonable potential to cause or contribute to a water quality violation. A new effluent limitation equal to the WQBEL has been added to the permit.															
Perfluoro-nonanoic Acid (PFNA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
Monitoring has been added to support establishment of future standards or TBELs.															
Perfluoro-decanoic Acid (PFDA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
Monitoring has been added to support establishment of future standards or TBELs.															
Perfluoro-undecanoic Acid (PFUnA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
Monitoring has been added to support establishment of future standards or TBELs.															
Perfluoro-dodecanoic Acid (PFDoA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
Monitoring has been added to support establishment of future standards or TBELs.															

[5] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Emerging Contaminants: Outfall # 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-tridecanoic Acid (PFTriA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-tetradecanoic Acid (PFTeA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-butanesulfonic Acid (PFBS)	ng/L	Daily Max	-	4.09	1/0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	2.18	1/0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	15.8	1/0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-heptanesulfonic Acid (PFHpS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-octanesulfonic Acid (PFOS)	ng/L	Daily Max	-	7.89 Actual Max	1/0	-	-	-	48.9	2.7	H(WS)	2.7	TOGS 1.1.1	-	WQBEL
	The projected instream concentration was calculated using the maximum reported effluent concentration of 7.89 ng/L, a multiplier of 6.2, the HEW dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the guidance value indicates reasonable potential to cause or contribute to a water quality violation. A new effluent limitation equal to the WQBEL has been added to the permit.														
Perfluoro-nonanesulfonic Acid (PFNS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-decanesulfonic Acid (PFDS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-dodecane-sulfonic Acid (PFDoS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-octane-sulfonamide (FOSA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														

Emerging Contaminants: Outfall # 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
4:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
6:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
8:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														

Emerging Contaminants: Outfall # 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														

Emerging Contaminants: Outfall # 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-4-methoxy-butanoic Acid (PFMBA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-3-methoxy-propanoic Acid (PFMPA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro(2-ethoxyethane) sulfonic Acid (PFEESA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Monitoring has been added to support establishment of future standards or TBELs.														
1,4-Dioxane	µg/L	Daily Max	-	ND	0/1	-	-	-	-	0.35	H(WS)	-	TOGS 1.1.1	-	No Limitation
	1,4-Dioxane was not detected in the effluent. No limitation or monitoring is required.														

Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the fact sheet for multiple types of SPDES permits. Portions of this Appendix may not be applicable to this specific permit.

Regulatory References

The provisions of the permit are based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750 and include monitoring, recording, reporting, and compliance requirements, as well as general conditions applicable to all SPDES permits. Below are the most common citations for the requirements included in SPDES permits:

- Clean Water Act (CWA) 33 section USC 1251 to 1387
- Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

The following is a quick guide to the references used within the fact sheet:

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c) and 750-1.10(d), CWA sections 402(o), 303(d)(4), ECL 17-0809, 40 CFR 122.44(*l*)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a waste load allocation (WLA) of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed

to determine the existing capabilities of the wastewater treatment plants and to assure that WLAs are allocated equitably.

Interstate Water Pollution Control Agencies

Some POTWs may be subject to regulations of interstate basin/compact agencies including: Interstate Sanitation Commission (ISC), International Joint Commission (IJC), Delaware River Basin Commission (DRBC), Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC). Generally, basin commission requirements focus principally on water quality and not treatment technology. However, interstate/compact agency regulations for the ISC, IJC, DRBC and NYC Watershed contain explicit effluent limits which must be addressed during permit drafting. 6 NYCRR 750-2.1(d) requires SPDES permits for discharges that originate within the jurisdiction of an interstate water pollution control agency, to include any applicable effluent standards or water quality standards (WQS) promulgated by that interstate agency.

Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95th (monthly average) and 99th (daily maximum) percentiles of the lognormal distribution of existing effluent data. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The Pollutant Summary Table identifies the number of sample data points available.

Permit Requirements

Basis for Effluent Limitations

Sections 101, 301, 304, 308, 401, 402, and 405 of the CWA and Titles 5, 7, and 8 of Article 17 ECL, as well as their implementing federal and state regulations, and related guidance, provide the basis for the effluent limitations and other conditions in the permit.

When conducting a full technical review of an existing permit, the previous effluent limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing effluent limitations to determine if these should be continued, revised, or deleted. Generally, existing limitations are continued unless there are changed conditions at the facility, the facility demonstrates an ability to meet more stringent limitations, or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

Antidegradation Policy

New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, “Water Quality Antidegradation Policy” (September 9, 1985); and, (2) TOGS 1.3.9, “Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985) (undated).” The permit for the facility contains effluent limitations which ensure that the existing best usage of the receiving waters will be maintained. To further support the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

Effluent Limitations

In developing a permit, the DEC determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies or Best Management Practices (BMPs). CWA sections 301(b) and 402, ECL sections 17-0509, 17-0809 and 17-0811, and 6 NYCRR 750-1.11 require technology-based controls on effluents. TBELs are set based upon an evaluation of New Source Performance Standards (NSPS), Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and Best Professional Judgment (BPJ).

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

In many cases, BPT, BCT, BAT and NSPS limitations are based on effluent guidelines developed by USEPA for specific industries, as promulgated under 40 CFR Parts 405-471. Applicable guidelines, pollutants regulated by these guidelines, and the effluent limitation derivation for facilities subject to these guidelines is in the USEPA Effluent Limitation Guideline Calculations Table.

Best Professional Judgement (BPJ)

For substances that are not explicitly limited by regulations, the permit writer is authorized to use BPJ in developing TBELs. Consistent with section 402(a)(1) of the CWA, and NYS ECL section 17-0811, the DEC is authorized to issue a permit containing “any further limitations necessary to ensure compliance with water quality standards adopted pursuant to state law”. BPJ limitations may be set on a case-by-case basis using any reasonable method that takes into consideration the criteria set forth in 40 CFR 125.3. Applicable state regulations include 6 NYCRR 750-1.11. The BPJ limitation considers the existing technology present at the facility, the statistically calculated existing effluent quality for that parameter, and any unique or site-specific factors relating to the facility. Technology limitations generally achievable for various treatment technologies are included in TOGS 1.2.1, Attachment C. These limitations may be used for the listed parameters when the technology employed at the facility is listed.

Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Additionally, 6 NYCRR 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the DEC may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following:
“EPA Technical Support Document for Water Quality-Based Toxics Control” (March 1991); EPA Region VIII’s “Mixing Zones and Dilution Policy” (December 1994); NYSDEC TOGS 1.3.1, “Total Maximum Daily Loads and Water Quality-Based Effluent Limitations” (July 1996); “CORMIX v11.0” (2019).

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations

are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

The Reasonable Potential Analysis (RPA) is a statistical estimation process, outlined in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Appendix E. This process uses existing effluent quality data and statistical variation methodology to project the maximum amounts of pollutants that could be discharged by the facility. This projected instream concentration (PIC) is calculated using the appropriate ratio and compared to the water quality standard (WQS). When the RPA process determines the WQS may be exceeded, a WQBEL is required. The procedure for developing WQBELs includes the following steps:

1) identify the pollutants present in the discharge(s) based upon existing data, sampling data collected by the permittee as part of the permit application or a short-term high intensity monitoring program, or data gathered by the DEC;

2) identify water quality criteria applicable to these pollutants;

3) determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and,

4) calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

The DEC uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e. numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

For carbonaceous and nitrogenous oxygen demanding pollutants, the DEC uses a model which incorporates the Streeter-Phelps equation. The equation relates the decomposition of inorganic and organic materials along with oxygen reaeration rates to compute the downstream dissolved oxygen concentration for comparison to water quality standards.

The Division of Water has been using the TMDL approach in permit limit development for the control of toxic substances. Since the early 1980's, the loading capacity for specific pollutants has

been determined for each drainage basin. Water quality-limiting segments and pollutants have been identified, TMDLs, wasteload allocations and load allocations have been developed, and permits with water quality-based effluent limits have been issued. In accordance with TOGS 1.3.1, the Division of Water implements a Toxics Reduction Strategy which is committed to the application of the TMDL process using numeric, pollutant-specific water quality standards through the Watershed Approach. The Watershed Approach accounts for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments.

Minimum Level of Detection

Pursuant to 40 CFR 122.44(i)(1)(iv) and 6 NYCRR 750-2.5(d), SPDES permits must contain monitoring requirements using sufficiently sensitive test procedures approved under 40 CFR Part 136. A method is "sufficiently sensitive" when the method's minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant parameter; or the lowest ML of the analytical methods approved under 40 CFR Part 136. The ML represents the lowest level that can be measured within specified limitations of precision and accuracy during routine laboratory operations on most effluent matrices. When establishing effluent limitations for a specific parameter (based on technology or water quality requirements), it is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

Monitoring Requirements

CWA section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and reporting results on Discharge Monitoring Reports (DMRs). The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance and characterize the nature of the discharge of the monitored flow or pollutant. Variable effluent flows and pollutant levels may be required to be monitored at more frequent intervals than relatively constant effluent flow and pollutant levels (6 NYCRR 750-1.13). For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

Other Conditions

Mercury

Mercury is widespread in New York State (NYS) waters at levels above the most stringent dissolved mercury water quality standard (WQS) of 0.7 ng/L. SPDES permittees cannot comply with a Water Quality-Based Effluent Limitation (WQBEL) for mercury. Therefore, an MDV is appropriate, in accordance with 6 NYCRR 702.17(h), "to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed." The first MDV was issued in October 2010 and subsequently revised and reissued in 2015, 2020, and 2025. Each iteration of the MDV builds off the previous version supporting the State's effort to reduce mercury pollution and make reasonable progress toward achieving the WQBEL for mercury. This iteration of the MDV refines the content and application of the MDV for mercury.

The MDV does not change the WQS of 0.7 ng/L; it establishes a variance of the WQBEL which is based on the WQS. SPDES permits which include this variance comply with 40 CFR 122.44.

DOW 1.3.10 explains which surface water permittees are eligible for the MDV.

Emerging Contaminants

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial products as well as in manufacturing processes for decades. Based on available research, water quality assessments for 1,4-D will follow existing WQBEL development. PFOA and PFOS do not break down easily; therefore, their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these

contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: Emerging Contaminants In NY's Waters - NYSDEC.

Schedule(s) of Additional Submittals

Schedules of Additional Submittals are used to summarize the deliverables required by the permit not identified in a separate Schedule of Compliance.