State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4952**	NAICS Code:	**221320**	SPDES Number:	**NY0020168**
Discharge Class (CL):	**07**			DEC Number:	**1-4728-00247/00001**
Toxic Class (TX):	**N**			Effective Date (EDP):	**EDP**
Major-Sub Drainage Basin:	**17 - 01**			Expiration Date (ExDP):	**ExDP**
Water Index Number:	**GSB**	Item No.:	**925-82**	Modification Dates (EDPM):	**-**
Compact Area:	**-**				

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:	**Village of Ocean Beach**	Attention:	**Kevin Schelling**		
Street:	**PO Box 457**				
City:	**Ocean Beach**	State:	**NY**	Zip Code:	**11770**
Email:	**kschelling@villageofoceanbeach.org**	Phone:	**631-445-4589**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																	
Name:	**Ocean Beach Sewage Treatment Plant**																
Address / Location:	**Bay Walk & Surf View Walk**											County:	**Suffolk**				
City:	**Ocean Beach**						State:	**NY**				Zip Code:	**11770**				
Facility Location:		Latitude:	**40**	°	**38**	'	**57**	" N	& Longitude:	**73**	°	**9**	'	**17**	" W		
Primary Outfall No.:	**001**	Latitude:	**40**	°	**39**	'	**29**	" N	& Longitude:	**73**	°	**9**	'	**4**	" W		
Outfall Description:	**Treated Sanitary**	Receiving Water:	**Great South Bay**						Class:	**SA**		Standard:	**-**				

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:
BWP Permit Coordinator
RWE
RPA
EPA Region II
NYSEFC

Permit Administrator:	
Address:	50 Circle Road, Stony Brook, NY 11790
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 DEC 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 NYSDEC'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	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year	Great South Bay	EDPM	EXDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	0.50	MGD	-	-	Continuous	Meter	-	X	-
pH	Daily Minimum	6.5	SU	-	-	1 / Day	Grab	-	X	(2)
	Daily Maximum	8.5	SU	-	-					
BOD_5	Monthly Average	30	mg/L	130	lbs/d	2 / Month	6-hr. Comp.	X	X	(1)
	7-Day Average	45	mg/L	190	lbs/d	2 / Month	6-hr. Comp.	-	X	(1)
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	130	lbs/d	2 / Month	6-hr. Comp.	X	X	(1)
	7-Day Average	45	mg/L	190	lbs/d	2 / Month	6-hr. Comp.	-	X	(1)
Settleable Solids	Daily Maximum	0.3	mL/L	-	-	1 / Day	Grab	-	X	(2)
Total Nitrogen (as N)	Monthly Average	1.90	mg/L	3.04	lbs/d	1 / Quarter	6-hr. Comp.	-	X	(2)
Nitrite (as N)	Monthly Average	Monitor	mg/L	-	-	1 / Quarter	6-hr. Comp.	-	X	(2)
Nitrate (as N)	Monthly Average	Monitor	mg/L	-	-	1 / Quarter	6-hr. Comp.	-	X	(2)
Total Kjeldahl Nitrogen (TKN) (as N)	Monthly Average	Monitor	mg/L	-	-	1 / Quarter	6-hr. Comp.	-	X	(2)
Temperature	Daily Maximum	Monitor	ºF	-	-	1 / Day	Grab	-	X	(2)
Total Copper	Daily Maximum	0.114	mg/L	-	lbs/d	1 / Quarter	Grab	-	X	(5)
ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Ammonia (as N)	Daily Maximum	4.0	mg/L	-	-	1 / Month	Grab	-	X	(6)

EFFLUENT DISINFECTION Required All Year		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL	-	-	2 / Month	Grab	-	X	(2,3,4)
	7-Day Geometric Mean	400	No./ 100 mL	-	-	2 / Month	Grab	-	X	(2,3,4)
Coliform, Total	Monthly Medium	700	No./ 100 mL	-	-	2 / Month	Grab	-	X	(2,3,4)
Chlorine, Total Residual	Daily Maximum	0.16	mg/L	-	-	1 / Day	Grab	-	X	(5)
Enterococci	30-Day Geometric Mean	35	No./ 100 mL	-	-	1 / Month	Grab	-	X	(5)
	Daily Maximum	Monitor	No./ 100 mL	-	-	1 / Month	Grab	-	X	-

FOOTNOTES:

See footnotes on Page 7.

PERMIT LIMITS, LEVELS AND MONITORING (continued)

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluorobutanoic Acid (PFBA) CAS No. 375-22-4	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoropentanoic Acid (PFPeA) CAS No. 2706-90-3	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorohexanoic Acid (PFHxA) CAS No.307-24-4	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoroheptanoic Acid (PFHpA) CAS No. 375-85-9	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorooctanoic Acid (PFOA) CAS No. 335-67-1	Daily Maximum	-	-	10	ng/l	1/quarter	Grab	-	X	(7)
Perfluoro-nonanoic Acid (PFNA) CAS No. 375-95-1	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoro-decanoic Acid (PFDA) CAS No. 335-76-2	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoroundecanoic Acid (PFUnA) CAS No. 2058-94-8	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorododecanoic Acid (PFDoA) CAS No. 307-55-1	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorotridecanoic Acid (PFTiA) CAS No. 72629-94-8	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorotetradecanoic Acid (PFTeA) CAS No. 376-06-7	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorobutanesulfonic Acid (PFBS) CAS No. 375-73-5	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoropentanesulfonic Acid (PFPeS) CAS No. 2706-91-4	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorohexanesulfonic Acid (PFHxS) CAS No. 355-46-4	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoroheptanesulfonic Acid (PFHpS) CAS No. 375-92-8	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorooctanesulfonic Acid (PFOS) CAS No. 1763-23-1	Daily Maximum	-	-	10	ng/l	1/quarter	Grab	-	X	(7)
Perfluorononanesulfonic Acid (PFNS) CAS No. 68259-12-1	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorodecanesulfonic Acid (PFDS) CAS No. 335-77-3	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorododecanesulfonic Acid (PFDoS) CAS No. 79780-39-5	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluorooctanesulfonamide (FOSA) CAS No. 754-91-6	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA) CAS No. 2355-31-9	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA) CAS No. 2991-50-6	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS) CAS No. 757124-72-4	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (6:2 FTS) CAS No. 27619-97-2	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (8:2 FTS) CAS No. 39108-34-4	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA) CAS No. 4151-50-2	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) CAS No. 31506-32-8	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) CAS No. 24448-09-7	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) CAS No. 1691-99-2	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS) CAS No. 756426-58-1	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA or GenX) CAS No. 13252-13-6	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) CAS No. 763051-92-9	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA) CAS No. 919005-14-4	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
3-Perfluoropropyl Propanoic Acid (3:3FTCA) CAS No. 356-02-5	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) CAS No. 914637-49-3	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
3-Perfluoroheptyl Propanoic Acid (7:3FTCA) CAS No. 812-70-4	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA) CAS No. 151772-58-6	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoro-4-Methoxybutanoic Acid (PFMBA) CAS No. 863090-89-5	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoro-3-Methoxypropanoic Acid (PFMPA) CAS No. 377-73-1	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA) CAS No. 113507-82-7	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab	-	X	-

FOOTNOTES:

See footnotes on Page 7.

PERMIT LIMITS, LEVELS AND MONITORING (continued)

FOOTNOTES:

1. Effluent shall not exceed 35% of influent concentration values for BOD_5 & TSS during the period of May 1 through October 31.
2. Samples shall be taken during the periods of normally high flows.
3. Additional sampling to assure adequacy and consistency of disinfection for the protection of shellfish harvesting; each April
   and August. Permittee shall analyze Fecal and Total coliform grab samples:
   a. Taken twice on each of seven consecutive days.
   b. Report the above results in an addendum to the applicable Discharge Monitoring Report.
   c. Include the above results in applicable Discharge Monitoring Report calculations.
4. Additional Coliform Limitations and Requirements:
   a. The multiple tube fermentation procedure (MPN) is the only approved fecal and total coliform testing procedure.
   b. Facilities may regularly sample in a more frequent schedule than the minimum required by this permit.
   c. For facilities sampling-less than ten (10) times per month, the estimated 90th percentile of total coliform readings shall
      not exceed an MPN of 3,300/100 ml for the 3 tube per decimal dilution MPN test, nor an MPN of 2,300/100 for the 5
      tube per decimal dilution MPN test. The estimated 90th percentile is calculated using the Guideline in the National
      Shellfish Sanitation Program Manual of Operations, 1989 revision, Page APF-3 of the method found at www.cfsan.fda.gov/~ear/nss2-42g.html.
   d. For facilities sampling ten (10) or more times per month, no more than 10 percent of the total coliform readings shall
      exceed an MPN of 3,300/100 ml for the 3 tube per decimal dilution MPN test, nor an MPN of 2,300/l00ml for the 5
      tube per decimal dilution MPN test.
5. This is a final effluent limitation. See Schedule of Compliance for any applicable interim effluent limitations.
6. Action Levels: If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for Ammonia (as N). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive days and analyzed. Results shall be expressed in both mass and concentration. If levels higher than the action levels are confirmed, the permittee shall evaluate the treatment system operation and identify and employ actions to reduce concentrations present in the discharge. The permit may also be reopened by the DEC for consideration of revised action levels or effluent limits. Action level monitoring results and the effectiveness of the actions taken shall be summarized and submitted with the DMR data.
7. Emerging Contaminants Action Levels: Upon each exceedance of the Action Level(s) for PFOA and/or PFOS, perform one (1) confirmatory sample within seven (7) days for the parameter(s) exceeded. If confirmed exceedance, notify DEC at emergingcontaminantsdow@dec.ny.gov and initiate minimization program and continuous reporting as outlined in the Schedule of Additional Submittals. If minimization program initiated, sampling can continue on a quarterly basis with no confirmatory sampling required. All PFAS compound sampling shall use EPA Method 1633.

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On August 8, 2024, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements[1] as described in detail below:

    a. Conditional Exclusion Certification - A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years to the Regional Water Engineer and to the Bureau of Water Permits certifying that the facility is neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:

    - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)[2] communities and/or 2) Type II sanitary sewer overflow (SSO)[3] facilities;
    - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
    - Internal or tributary waste stream samples exceed the GLCA effluent limitation **AND** the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
    - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
    - Outfalls which contain legacy mercury contamination;
    - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)[4] that may discharge mercury;
    - The facility accepts hauled wastes; or,
    - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.

    b. Control Strategy - The control strategy must contain the following minimum elements:

    i. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.

    ii. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

[1] Neither monitoring nor outreach is required for facilities meeting the criteria for MMP Type IV, but monitoring and/or outreach can be included in the permittee's control strategy.
[2] CSO permits are included under the 05 and 07 permit classifications.
[3] These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.
[4] CIUs include those listed under Federal Regulation in 40 CFR Part 400.

MERCURY MINIMIZATION PROGRAM (MMP) – Type IV (Continued)

c. **Status Report** - An **annual** status report must be developed and maintained on site, in accordance with the Schedule of Additional Submittals, summarizing:

   i. Review of criteria to determine if the facility has a potential mercury source;
      a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated permit modification;
   ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
   iii. Actions planned, pursuant to the control strategy, for the upcoming year.

   The permittee must maintain a file with all MMP documentation. The file must be available for review by DEC representatives and copies must be provided upon request in accordance with 6 NYCRR 750-2.1(i) and 750-2.5(c)(4).

3. MMP Modification - The MMP must be modified whenever:
   a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
   b. A letter from the Department identifies inadequacies in the MMP.

   The DEC may use information in the annual status reports, in accordance with 2.c of this MMP, to determine if the permit limitations and MMP Type is appropriate for the facility.

DEFINITIONS:

Potential mercury source – a source identified by the permittee that may reasonably be expected to have total mercury contained in the discharge. Some potential mercury sources include switches, fluorescent lightbulbs, cleaners, degreasers, thermometers, batteries, hauled wastes, universities, hospitals, laboratories, landfills, Brownfield sites, or raw material storage.

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) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. 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.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[5]
001	**PRELIMINARY ENGINEERING REPORT** The permittee shall submit an approvable[6] Preliminary Engineering Report (PER) that meets the requirements of the EFC/DEC Engineering Report Outline (https://www.dec.ny.gov/permits/6054.html). The report shall describe treatment alternatives or other control mechanisms (i.e., pretreatment program / Sewer Use Law) that may be used to comply with the final effluent limitation(s) for Total Nitrogen, Total Copper, and Total Residual Chlorine.	EDP + 12 Months
001	**INTERIM PROGRESS REPORT** The permittee shall provide a status update for the *Design Documents*.	EDP + 21 Months
001	**DESIGN DOCUMENTS** The permittee shall submit approvable[6] Design Documents including a Basis of Design Report (BODR), Plans, Specifications, and Construction Schedule for the selected alternative that will ensure compliance with final effluent limitation(s) for Total Nitrogen, Total Copper, and Total Residual Chlorine.	EDP + 24 Months
001	**INTERIM PROGRESS REPORT** The permittee shall provide a status update for *Complete Construction*.	EDP + 33 Months EDP + 42 Months EDP + 51 Months
001	**COMPLETE CONSTRUCTION** The permittee shall provide a Construction Completion Certification[7] to the DEC that the disposal system has been fully completed in accordance with the approved Design Documents.	EDP + 54 Months
001	**COMMENCE OPERATION** Following receipt of DEC acceptance of the Construction Completion Certification, the permittee shall comply with the final effluent limitation(s) described in this permit for Total Nitrogen, Total Copper, and Total Residual Chlorine.	Upon Department Acceptance
001	**BACTERIAL ASSESSMENT STUDY (BAS)** The permittee shall conduct a three-year BAS to determine the applicable monitoring requirements or effluent limitations for enterococci bacteria consistent with the applicable standards adopted by the state under 6 NYCRR 703.4 (Enterococci standards). The BAS must evaluate the facility's effluent Enterococci performance and compliance with the Enterococci standards in the ambient receiving water. The BAS may consider locations at the edge of both the acute and chronic mixing zone boundary. Sampling events shall be under normal dry-weather operating conditions (i.e., no measurable rainfall in the 48 hours preceding). **BAS WORKPLAN** The permittee shall submit an approvable BAS Workplan that includes both a sampling plan and a quality assurance project plan (QAPP) for the BAS. The BAS Workplan must identify the sampling parameters, sampling location(s), frequency, and procedure for evaluating compliance with the Enterococci standards.	EDP + 1 year

[5] 6 NYCRR 750-1.14 (a)

Outfall(s)	Compliance Action	Compliance Date[5]
	SCHEDULE OF COMPLIANCE STATUS REPORTS Submit interim status reports on the progress related to the BAS.	NYSDEC approval of BAS Workplan + 6 months, and every 6 months thereafter, until completion of the BAS
	BAS COMMENCEMENT The permittee shall commence the three-year BAS in accordance with the approved BAS Workplan and QAPP.	BAS Workplan + 60 days
	BAS REPORT The permittee shall submit an approvable BAS report that includes the results of the BAS and an assessment of attainment of the Enterococci standard in the receiving water at the sampling locations.	Completion of the BAS + 6 months
	Upon review and approval of BAS report, DEC will notify the permittee in writing whether the Enterococci standard is met based upon the reported sampling and microbial source tracking data. In the same notification: a) If the Enterococci standard is met, DEC will also provide the applicable monitoring requirements or effluent limitations. DEC will propose a modification of the permit to include the applicable monitoring requirements or effluent limitations. b) If the Enterococci standard is not met, DEC will also provide the applicable effluent limitations. DEC will propose a modification of the permit to include the applicable effluent limitations and a schedule of compliance to meet this effluent limitation. The permittee will also conduct an Engineering Analysis, as outlined below, of potential alternatives necessary to comply with the applicable effluent limitations.	Receipt of the BAS + 6 months
	<u>ENGINEERING ANALYSIS</u> The Engineering Analysis must evaluate potential alternatives necessary to comply with the applicable effluent limitations. The Engineering Analysis shall also identify the recommended alternative(s) and provide a schedule for implementation of the recommended alternative(s). The permittee shall submit the information in an approvable report to NYSDEC. Upon approval of the report for the Engineering Analysis, all schedules for implementation, design, and construction shall become enforceable under this permit. If treatment system upgrades are determined to be necessary, the permittee shall also: c) Include a schedule for development of Basis of Design Report; d) Submit an approvable Basis of Design Report. The Basis of Design Report will provide the schedule of development of approvable final plans and specifications, as well as a schedule of construction; and Construct the treatment system described in the approved report, plans, and specifications and achieve compliance with the applicable effluent limitations.	NYSDEC Notification + 48 months In accordance with the approved schedule
Unless noted otherwise, the above actions are one-time requirements.		

SCHEDULE OF COMPLIANCE (continued)

OUTFALL	PARAMETER	INTERIM EFFLUENT LIMIT					MONITORING REQUIREMENTS				Notes
		Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
001	Enterococci	30-Day Geometric Mean	Monitor	No./100mL	-	-	2 / Month	Grab	-	X	1
001	Total Copper	Daily Maximum	Monitor	mg/l	-	-	1 / Quarter	Grab	-	X	2
001	Total Nitrogen	Monthly Avg.	Monitor	mg/L	Monitor	lbs/yr	1 / Quarter	6-hr. Comp.	-	X	2
001	Total Residual Chlorine	Daily Maximum	0.2	mg/L	-	-	1 / Day	Grab	-	X	2
Notes:	1. Interim limits expire upon written DEC approval and notification at the completion of the BAS Report. 2. Interim limits expire upon commencement of operation of the upgraded wastewater treatment system and receipt of written acceptance from the DEC.										

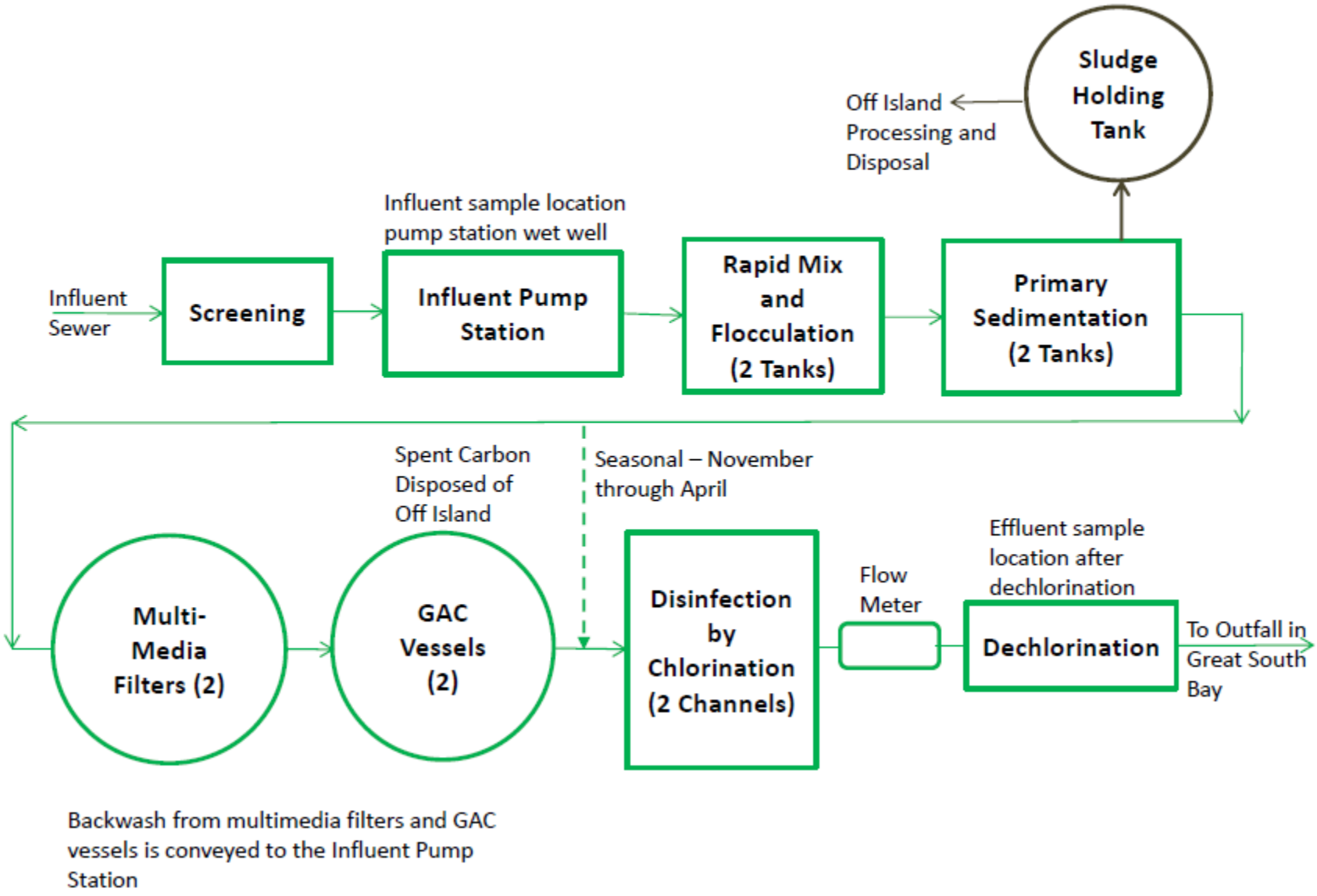
b) The permittee shall submit a Report of Non-Compliance Event form with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. Any details which tend to explain or mitigate an instance of non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

c) The permittee shall submit copies of any document required by the above schedule of compliance to the DEC Regional Water Engineer and to the Bureau of Water Permits.

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 I 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)(94) & 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	6 NYCRR 750-2.5, 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)
9.	Additional conditions applicable to a POTW	6 NYCRR 750-2.9

F. Planned Changes

1. The permittee shall give notice to the DEC as soon as possible of planned physical alterations or additions to the permitted facility when:

   a. The alteration or addition to the permitted facility may meet any of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject either to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

In addition to the DEC, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

GENERAL REQUIREMENTS (continued)

2. Notification Requirement for POTWs
   All POTWs shall provide adequate notice to the Department and the USEPA of the following:

   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
   b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
   c. For the purposes of this paragraph, adequate notice shall include information on:
      i. the quality and quantity of effluent introduced into the POTW, and
      ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

   POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866

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

H. SPDES Permit Program Fee
   The permittee shall pay to the Department 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.

I. 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 outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, 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 in writing 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 that 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: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the DEC or its designated agent.

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

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/8461.html. **Hardcopy paper DMRs will only be accepted if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

Attach the monthly "Wastewater Facility Operation Report" (form 92-15-7) and any required DMR attachments electronically to the DMR or with the hardcopy submittal.

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 Phone: (518) 402-8111

Department of Environmental Conservation
Regional Water Manager, Region 1
50 Circle Road, Stony Brook, New York, 11790-3409 Phone: (631) 444-0405

D. Bypass and Sewage Pollutant Right to Know Reporting: In accordance with the Sewage Pollutant Right to Know Act (ECL § 17-0826-a), Publicly Owned Treatment Works (POTWs) are required to notify DEC and Department of Health within two hours of discovery of an untreated or partially treated sewage discharge and to notify the public and adjoining municipalities within four hours of discovery. Information regarding reporting and other requirements of this program may be found on the DEC's website. In addition, POTWs are required to provide a five-day incident report and supplemental information to the DEC in accordance with Part 750-2.7(d) by utilizing the Division of Water Report of Noncompliance Event form unless waived by DEC on a case-by-case basis.

E. 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:

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
001	EMERGING CONTAMINANT (EC) MINIMIZATION PROGRAM The permittee shall initiate track down of potential sources by utilizing the "Emerging Contaminants Investigation Checklist for POTWs" available at Emerging Contaminants In NY's Waters - NYSDEC. The permittee shall continue track down of potential sources and submit reports summarizing: a. All EC monitoring results taken to date; b. A list of known and potential EC sources; c. All actions taken to reduce EC contaminants; and Proposed next steps, including a monitoring plan to identify/confirm EC sources, and ensure continued progress towards minimization/eliminating contaminants.	Confirmation of initial Action Level exceedance 12 months after initiating track down and every 6 months thereafter until effluent falls below action levels for at least 12 months or until further notified by the Department
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	December DMR (January 28th)
001	ANNUAL FLOW CERTIFICATION The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(C)(4). The form shall be attached to the February DMR or submitted through nForm.	February DMR (March 28th)
001	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status. As part of the certification the permittee will be required to sample the effluent and measure <12 ng/L.	July 31, 2029, and every 5 years thereafter
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	***Maintained Onsite***

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

F. 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.

G. 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.

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

I. 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.

J. 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
Village of Ocean Beach
Ocean Beach Sewage Treatment Plant
NY0020168

Contents

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Ocean Beach Sewage Treatment Plant. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Effluent Limit Changes:
  - Modified sample frequency for ammonia, TKN, Nitrite, and Nitrate to be 6-hr composite samples, consistent with TOGS 1.3.3
  - The effluent limit for Total Nitrogen was modified from monitor to 1.90-mg/l or 3.04-lb/d (monthly average) in accordance with the Long Island Effluent Law (NYS ECL Article 17-0809)
  - A new Total Copper effluent limit of 0.114-mg/l (daily maximum) has been added to this permit.
  - Action Level Footnote to clarify sampling requirements for the Ammonia Action Level of 4.0-mg/l was added
  - The sampling frequencies for Fecal Coliform and Total Coliform limits were updated to 2 / month in order to be consistent with the minimum recommended sample frequencies as stated in TOGS 1.3.3.
  - The effluent limit for Total Residual Chlorine was modified from 0.20-mg/l (daily maximum) to 0.16-mg/l (daily maximum).
  - New action levels for PFOA and PFOS have been added and additional quarterly monitoring has been added to the permit for an additional thirty-eight (38) PFAS compounds
- Type IV Mercury Minimization Plan requirements have been added to this permit
- The Schedule of Compliance has been added to include
  - A Bacterial Assessment Study (BAS) for Enterococci and allow for additional time to develop a workplan, conduct sampling, carry out studies, and install upgrades necessary to meet the new final effluent limitations for Enterococci.
- Schedule of Additional Submittals has been added and includes requirements for the submission of the following items;
  - Water Treatment Chemical (WTC) Annual Report to be submitted with the December DMR
  - Annual Flow Certification to be submitted with the February DMR
  - Mercury Minimization Plan Conditional Exclusion Certification to be submitted once every five years
  - Mercury Minimization Plan Annual Status Report to be completed by the permittee annually and maintained onsite at the facility.

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

9/1/2015 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 9/1/2015. The 2015 permit, along with all subsequent modifications, has formed the basis of this permit.

5/1/2019 Permit was modified to include an updated pH parameter, an updated permit format, definitions, and general conditions, and an addition of multi-media filters (sand) in the flow diagram.

8/31/2020 The SPDES permit expired.

2/27/2024 The Village of Ocean Beach submitted a new NY-2A permit application to renew the expired permit.

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

Facility Information

This facility is a publicly owned treatment works that receives flow from domestic users, with effluent consisting of treated sanitary wastewater. The collection system consists of separate sewers. The facility does not have any significant industrial users (SIUs).

The current 0.50 MGD treatment plant consists of:

- Preliminary Treatment: Screening
- Primary Treatment: Primary Sedimentation
- Tertiary Treatment: Seasonal Multi-Media Filters
- Disinfection: Chlorine/Dechlorination

Sludge is hauled to landfill.

The primary outfall (Outfall 001) is sanitary wastewater.

The facility does not have any planned improvements.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
Village of Ocean Beach	NY0020168	Separate

Site Overview

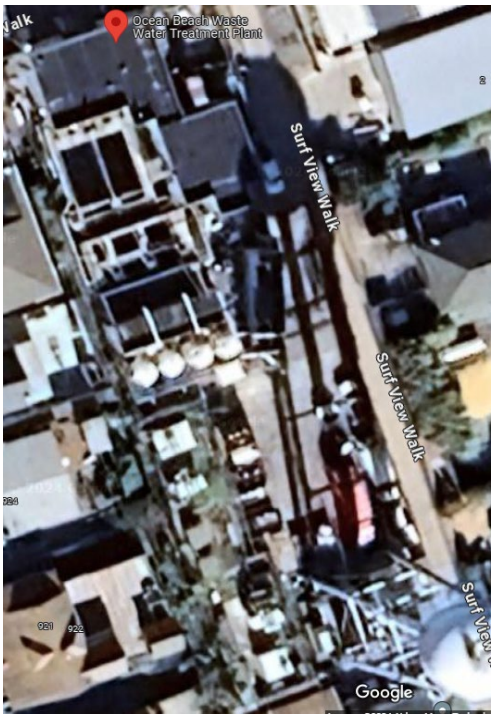


Figure 1: Aerial view of the facility.

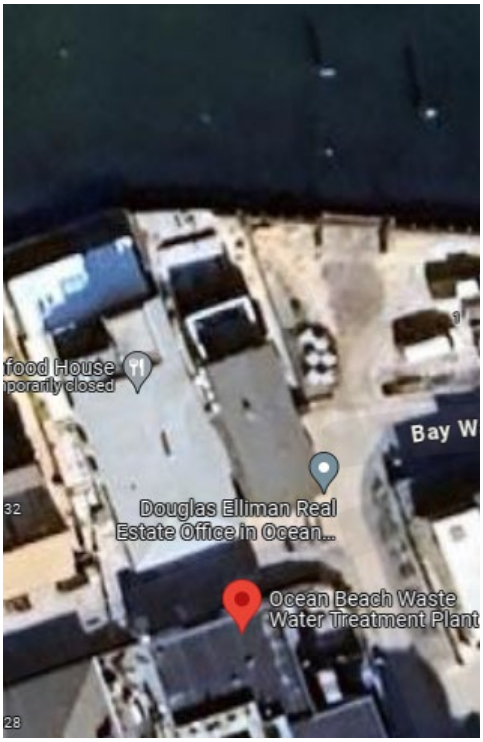


Figure 2: Outfall 001 (SA) Great South Bay

Enforcement History

On November 27, 2023, the Village and Department executed an Order on Consent No. R1-20231017-183 (2023 Order), which allowed the Village's POTW to continue to discharge under the terms of the expired SPDES permit.

Compliance and enforcement information can be found on the EPA's Enforcement and Compliance History Online (ECHO) website.

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 4/5/2021 to 4/5/2024.

Additional Site-Specific Concerns

The facility is located in a sole source aquifer. As required by ECL 17-0828, the permittee submitted a completed *Application Supplement B: Discharges within Sole Source Aquifers* form identifying the following water purveyors within a three-mile radius of the facility:

- Village of Ocean Beach – P.O. Box 457, Ocean Beach, NY 11770
- Saltaire Water District – P.O. Box 5551, Bay Shore, NY 11706
- Suffolk County Water Authority – 4060 Sunrise Highway, Oakdale, NY 11769

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated Sanitary Sewage	Atlantic Ocean, Class SA

See the Outfall and Receiving Water Summary Table and Appendix for additional information.

Critical Receiving Water Data & Mixing Zone

The treated wastewater discharge is to the Great South Bay via 242 feet long submerged outfall with a diameter of 10-inches. The outfall is equipped with two risers with T-diffusers, 20 feet apart. The water depth is approximately 9 feet.

Based upon the information provided by the permittee in 2002, CORMIX model was updated and ran under the lowest tidal and average velocities for determining acute and chronic/HEW dilutions. The updated Cormix model produced different dilution ratios and these are incorporated into the factsheet.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	12:1	93:1	93:1	CORMIX Model

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.

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT), Best Available Technology Economically Achievable (BAT), and New Source Performance Standards (NSPS) limitations are based on Effluent Limitation Guidelines developed by USEPA for specific industries[1]. For this facility there are no promulgated effluent guidelines. Appendix Link

Whole Effluent Toxicity (WET) Testing

None of the seven criteria that are indicative of potential toxicity are applicable to this facility; therefore, WET testing is not included in the permit. Appendix Link

Anti-backsliding

The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding.

Appendix Link

[1] As promulgated under 40 CFR Parts 405 - 471

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)[2] determination. 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 being continued from the previous permit.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement is being continued from the previous permit.

Mercury[3]

The multiple discharge variance (MDV) for mercury provides the framework for DEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. Appendix Link

The facility is not located in the Great Lakes Basin and does not have a mercury source. On 8/8/2024, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and does not include mercury effluent limitations. The Schedule of Additional Submittals includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L. This requirement is new.

Schedule of Compliance

A Schedule of Compliance is included[4] for the following items (Appendix Link):

- Submittal of a Bacterial Assessment Study (BAS) for **Enterococcus.** The BAS will assist the Department in developing future applicable monitoring requirements or effluent limitations for Enterococcus consistent with the applicable Enterococcus standards adopted by the state under 6 NYCRR 703.4. The permittee will also submit a BAS report to the Department, including sampling data, detailing the findings of the BAS.
- Submission of a Preliminary Engineering Report, Design Documents, and construction of upgrades as determined to be necessary to comply with final total residual chlorine, total nitrogen, and total copper limits.

Emerging Contaminant Monitoring

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 product as well as in manufacturing processes for decades. These contaminants 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

[2] As prescribed by 6 NYCRR Part 617
[3] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.
[4] Pursuant to 6 NYCRR 750-1.14

information on emerging contaminants, please see the DEC Division of Water web page: https://www.dec.ny.gov/chemical/127939.html.

Based on the available data, water quality-based effluent limitations for PFOA and PFOS have been specified with monitoring required for the remaining 38 PFAS compounds pursuant to 6 NYCRR Part 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.

Based on the available data, no additional monitoring is required for 1,4-D. See the pollutant summary table below.

The DEC will consider this information and progress made to track down and reduce or eliminate the source of the identified pollutants in determining if a permit modification is needed.

Schedule of Additional Submittals

A schedule of additional submittals has been included for the following (Appendix Link):

- Water Treatment Chemical (WTC) Annual Report to be submitted with the December DMR
- Annual Flow Certification to be submitted with the February DMR
- Mercury Minimization Plan Conditional Exclusion Certification to be submitted once every five years
- Mercury Minimization Plan Annual Status Report to be completed by the permittee annually and maintained onsite at the facility.
- Emerging Contaminant Minimization Program

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	Salinity (ppt)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	40° 39' 29" N	73° 9' 4" W	Great South Bay	SA	GSB PWL: 1701-0040	1701	30.46	Tidal water			0.50	12:1	93:1	93:1

POLLUTANT SUMMARY TABLE: Outfall 001

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Screening, Rapid Mix and Flocculation, Primary Settling, Seasonal Multi-Media Filters, Seasonal Activated Carbon, Chlorination/De-Chlorination, Discharge to Great South Bay													
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 for WQBEL		
General Notes: Existing discharge data from 04/05/2021 to 04/05/2024 was obtained from Discharge Monitoring Reports and the application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Monthly Avg	0.50	0.15 Actual Average	35/0	**0.50**	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	TBEL
	The flow limit is set at the design flow of the wastewater treatment facility.														
pH	SU	Minimum	6.5	6.7 Actual Min	35/0	**6.5**	Existing Permit Limits	-	-	6.5 – 8.5	Range	-	703.3	-	TBEL
		Maximum	8.5	6.8 Actual Max	35/0	**8.5**									
	Due to high dilution and buffering capacity of the estuarine marine water, an effluent limitation equal to the TBEL is protective of the WQS.														
5-day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg	30	4.16	33/2	**30**	TOGS 1.3.3	-	Dissolved Oxygen: 4.8 Average 3.0 Minimum			-	703.3	-	TBEL
		7 Day Avg	45	6.51	33/2	**45**	TOGS 1.3.3					-			
	lbs/d	Monthly Avg	130	6.30	35/0	**130**	*Calculated*					-			
		7 Day Avg	190	10.45	35/0	**190**	*Calculated*					-			
	% Rem	Minimum	65	94.8	18/0	**65**	TOGS 1.3.3					-			
	Consistent with 40 CFR Part 133.102 and TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Due to high dilution and buffering capacity of the estuarine marine water, an effluent limitation equal to the TBEL is protective of the WQS.														

[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)

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Screening, Rapid Mix and Flocculation, Primary Settling, Seasonal Multi-Media Filters, Seasonal Activated Carbon, Chlorination/De-Chlorination, Discharge to Great South Bay													
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 for WQBEL		
Total Suspended Solids (TSS)	mg/L	Monthly Avg	30	6.15	35/0	**30**	TOGS 1.3.3	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		7 Day Avg	45	8.99	35/0	**45**	TOGS 1.3.3								
	lbs/d	Monthly Avg	130	8.84	35/0	**130**	*Calculated*								
		7 Day Avg	190	13.10	35/0	**190**	*Calculated*								
	% Rem	Minimum	65	92.9	18/0	**65**	TOGS 1.3.3								
	Consistent with 40 CFR Part 133.102 and TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Due to high dilution and buffering capacity of the estuarine marine water, an effluent limitation equal to the TBEL is protective of the WQS.														
Settleable Solids	mL/L	Daily Max	0.3	0	32/3	**0.3**	TOGS 1.3.3	-	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 1.3.3, the effluent limitation is equal to the TBEL of 0.3 mL/L for POTWs providing secondary treatment without filtration. Due to high dilution the TBEL is protective of WQS.														
Nitrogen, Ammonia	mg/L	Daily Max	4.0 ACTION LEVEL	2.14	35/0	**4.0 (ACTION LEVEL)**	Existing Permit	-	3.186	3.186	A(A)	38.2	703.5	-	Action Level
	Reporting for Ammonia has been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224. The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 8.2, a summer temperature of 25°C and salinity of 30.46 ppt. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E. Since the reported value (4.0 mg/l-Action Level) is less than the WQBEL (38.2 mg/l), the action level for ammonia will remain in the permit.														
Total Nitrogen	mg/L	Monthly Avg	1.90	1.90	20/0	**1.90**	TOGS 1.3.1	-	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				703.2	-	**TBEL**
	lb/d	Monthly Avg	3.04	2.65	20/0	**3.04**	TOGS 1.3.1								
	Consistent with ECL 17-0809 and TOGS 1.3.1 SDPES permits issued in Nassau or Suffolk counties where such discharges will impact marine waters within ten years or less shall contain applicable effluent limitations with special emphasis on reducing nitrogen pollution based on TBELs. TBEL's reflect a 95% lognormal based on 5 years of effluent total nitrogen data.														
Nitrite	mg/L	Monthly Avg	Monitor	0.05	11/1	-	-	-	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**

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Screening, Rapid Mix and Flocculation, Primary Settling, Seasonal Multi-Media Filters, Seasonal Activated Carbon, Chlorination/De-Chlorination, Discharge to Great South Bay														
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 for WQBEL		
Nitrate	mg/L	Monthly Avg	Monitor	0.05	11/1	-	-	-	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**
Kjeldahl Nitrogen	mg/L	Monthly Avg	Monitor	1.63	12/0	-	-	-	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				-	-	**Monitor**
Temperature	deg F	Daily Max	Monitor	51.35	35/0	-	-	-	-				-	-	**Monitor**
Coliform, Fecal	#/100 ml	30d Geo Mean	200	1.8	30/5	**200**	TOGS 1.3.3	-	The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	400	1.8	30/5	**400**	TOGS 1.3.3	-							
	Consistent with TOGS 1.3.3, effluent disinfection is required year-round due to the class of the receiving waterbody. Fecal coliform effluent limitations equal to the TBEL are specified.														
Coliform, Total	#/100 ml	Monthly Median	700	1.8	30/5	**700**	Existing Permit Limit	-	The median most probable number (MPN) value in any series of representative samples shall not be in excess of 70.				703.4	-	TBEL
	Consistent with 6 NYCRR Part 703.4 and TOGS 1.3.3, effluent disinfection is required year-round due to the class of the receiving waterbody and Total coliform effluent limitations equal to the TBEL are specified.														
Total Residual Chlorine (TRC)	mg/L	Daily Max	0.2	0.2	35/0	0.2	Existing Permit Limit	-	0.013	0.013	A(A)	**0.16 Daily Max.**	703.3	-	WQBEL
	Effluent disinfection is currently required year-round and will remain a permit requirement. The WQBEL was calculated by multiplying the WQS by the acute dilution ratio. The calculated WQBEL is less than the TBEL and therefore an effluent limitation equal to the WQBEL is appropriate.														
Enterococcus	#/100 ml	30d Geometric Mean	-	-	-	Monitor	6 NYCRR 750-1.13	-	-	**35**	Narrative: The geometric mean of samples collected over any consecutive 30-day period shall not exceed 35, and no more than 10 percent of the samples collected in the same 30-day period shall exceed 130.		6NYCRR 703.4 TOGS 1.3.3. 6NYCRR 703.5 6NYCRR 750-1.25(c) 40CFR132	-	WQBEL
		Daily Maximum	-	-	-	**Monitor**	6 NYCRR 750-1.13	-	-	-				-	TBEL
	The Beaches Environmental Assessment and Coastal Health Act of 2000 (BEACH Act) criterion standards for Enterococcus were adopted by NY and became effective November 1, 2019. A final WQBEL set equal to the 30-day Geometric Mean water quality standard has been included in the permit. A Bacterial Assessment Study (BAS) is proposed for developing future applicable monitoring requirements or effluent limitations for Enterococcus.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Screening, Rapid Mix and Flocculation, Primary Settling, Seasonal Multi-Media Filters, Seasonal Activated Carbon, Chlorination/De-Chlorination, Discharge to Great South Bay													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[5]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Additional Pollutants Detected															
Total Copper	mg/L	Daily Max	-	0.23	20/0	-	-	-	0.0079	0.0079 Dissolved	A(A)	**0.114 Daily Max.**	703.3	-	WQBEL
	mg/L	Daily Avg	-	0.058	20/0	-	-	-	-	-	-	-	-	-	No Limit
	The WQ limit was developed by multiply WQ STD, dilution and translator (1.205-USEPA). Acute limit is incorporated herein since it is more stringent than the chronic limit. A translator converts a dissolved form of the copper to the total form of copper.														
Total Phosphorous (as P)	mg/L	-	-	0.22	1/0	-	-	-	-	-	-	-	-		**No Limit**
	No WQ evaluation is performed due lack of WQ standard for estuarine marine waters.														
Total Mercury	ng/L	-	-	8.4	1/0	-	-	-	-	0.7	H(FC)	50	GLCA	-	**DOW 1.3.10**
	In accordance with TOGS 1.3.10; this facility is not located in the Great Lakes Basin and does not have a mercury source. The facility submitted a Conditional Exclusion Certification for Exclusion from Mercury Permit Limitations dated August 8, 2024. The permittee answered no to all questions on the Conditional Exclusion Certification and provided sample results of less than 12-ng/l; therefore, **a Type IV Mercury Minimization Plan is appropriate and has been implemented into this Permit**.														

Outfall 001 EMERGING CONTAMINANTS

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[6]	# 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. Effluent 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
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-pentanoic Acid (PFPeA)	ng/L	Daily Max	-	3	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-hexanoic Acid (PFHxA)	ng/L	Daily Max	-	3.3	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-heptanoic Acid (PFHpA)	ng/L	Daily Max	-	1.4	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-octanoic Acid (PFOA)	ng/L	Daily Max	-	4.1 Actual Max	1/0	**10** Action Level	BPJ MCL	-	-	6.7	H(WS)	-	TOGS 1.1.1	-	Action Level
	The projected instream concentration was calculated using the maximum measured effluent concentration of 4.1 ng/l, 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 no reasonable potential to cause or contribute to a water quality violation. However, due to the presence of PFOA and the need to protect downstream waters, an action level has been established at the NYSDOH Maximum Contaminant Level (MCL) for finished drinking water (10 ng/L). Discharges above the MCL would indicate the potential presence of a controllable source and the need to implement track down measures. See the Emerging Contaminant section for more information.														
Perfluoro-nonanoic Acid (PFNA)	ng/L	Daily Max	-	1.3	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	Monitoring has been added to support establishment of future standards or TBELs.														

[6] 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[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-undecanoic Acid (PFUnA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-tridecanoic Acid (PFTiA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-butanesulfonic Acid (PFBS)	ng/L	Daily Max	-	1.2	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-octanesulfonic Acid (PFOS)	ng/L	Daily Max	-	4.3 Actual Max	1/0	**10** Action Level	BPJ MCL	-	-	2.7	H(WS)	-	TOGS 1.1.1	-	Action Level
	The projected instream concentration was calculated using the maximum measured effluent concentration of 4.3 ng/l, 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 no reasonable potential to cause or contribute to a water quality violation. However, due to the presence of PFOS and the need to protect downstream waters, an action level has been established at the NYSDOH Maximum Contaminant Level (MCL) for finished drinking water (10 ng/L). Discharges above the MCL would indicate the potential presence of a controllable source and the need to implement track down measures. See the Emerging Contaminant section for more information.														

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[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-nonanesulfonic Acid (PFNS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-decanesulfonic Acid (PFDS)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	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
	Monitoring has been added to support establishment of future standards or TBELs.														
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	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
	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
	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
	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[6]	# 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-amide (NEtFOSA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	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
	Monitoring has been added to support establishment of future standards or TBELs.														
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	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
	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
	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[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	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
	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
	Monitoring has been added to support establishment of future standards or TBELs.														
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	ng/L	Daily Max	-	ND	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	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
	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
	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
	Monitoring has been added to support establishment of future standards or TBELs.														
1,4-Dioxane	µg/L	Daily Max	-	ND	0/1	-	-	-	-	7,000	H(WS)	-	TOGS 1.1.1	-	**No Limitation**
	Based on available data, no additional monitoring is required at this time.														

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)
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.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[7] and USEPA interpretation[8] anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

[7] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[8] U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

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 Department 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.

Technology-based Effluent Limitations (TBELs)

CWA sections 301(b)(1)(B) and 304(d)(1), 40 CFR 133.102, ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls, known as secondary treatment. These and other requirements are summarized in TOGS 1.3.3. Where the TBEL is more stringent than the WQBEL, the TBEL is applied as a limit in accordance with TOGS 1.3.3. Equivalent secondary treatment, as defined in 40 CFR 133.105, allow for effluent limitations of the more stringent of the consistently achievable concentrations or monthly/weekly averages of 45/65 mg/L, and the minimum monthly average of at least 65% removal. Consistently achievable concentrations are defined in 40 CFR 133.101(f) as the 95th percentile value for the 30-day (monthly) average effluent quality achieved by the facility in a period of two years. The achievable 7-day (weekly) average value is equal to 1.5 times the 30-day average value calculated

above. Equivalent secondary treatment applies to those facilities where the principal treatment process is either a trickling filter or a waste stabilization pond; the treatment works provides significant biological treatment of municipal wastewater; and, the effluent concentrations consistently achievable through proper operation and maintenance of the facility cannot meet traditional secondary treatment requirements. There are no federal technology-based standards for toxic pollutants from POTWs. A statistical analysis of existing effluent data, as described in TOGS 1.2.1, may be used to establish other performance-based TBELs.

Technology-based Effluent Limitations (TBELS) for Discharges to Groundwater

TBELS aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls for POTWs discharging to surface waters, known as secondary treatment. The applicable regulations are specified in 40 CFR 133.102 and 6 NYCRR 750-1.11. These and other requirements are summarized in TOGS 1.3.3 and below:

- Secondary treatment requirements of 40 CFR Part 133 will typically not be included unless the facility discharges to a surface water prior to entering the groundwater or if, in the permit writer's judgement, limitations are necessary to prevent nuisance conditions or enhance plant operation.
- Since nitrogen is a component of all domestic wastewater, permits for facilities discharging 30,000 GPD or greater include effluent limitations for Nitrate of 20 mg/L (as N). Groundwater discharges in Nassau and Suffolk Counties are required to achieve an effluent standard for Total Nitrogen of 10 mg/L (as N).
- Disinfection will typically not be required for discharges to groundwater unless local public health concerns exist due to exposure or contact with effluent. When this occurs, disinfection requirements and effluent limitations for chlorine residual are developed in accordance with TOGS 1.3.3.

Technology-based Effluent Limitations (TBELS) for Industrial Facilities to Groundwater

TBELS aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. Requirements for discharges from industrial facilities to groundwater are summarized in TOGS 1.2.1. In accordance with TOGS 1.2.1, for facilities discharging to groundwater:

- Discharges will typically be limited to the more stringent of the groundwater effluent standards in 6 NYCRR 703.6 or the applicable treatment technology listed in TOGS 1.2.1 Attachment (C).
- Discharges from industrial facilities which contain nitrogen or nitrogen compounds include effluent limitations for Nitrate of 20 mg/L (as N). Groundwater discharges in Nassau and Suffolk Counties are required to achieve an effluent standard for Total Nitrogen of 10 mg/L (as N).
- Disinfection will typically not be required for discharges to groundwater unless local public health concerns exist due to exposure or contact with effluent.

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 Parts 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 Part 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.

Water Quality-Based Effluent Limitations (WQBELs) for Discharges to Groundwater

The procedure for developing WQBELs includes identifying the pollutants present in the discharge(s), identifying water quality criteria applicable to these pollutants, determining if WQBELs are necessary (reasonable potential), and calculating the WQBELs. For groundwater discharges, if the expected concentration of the pollutant of concern in the receiving water may exceed the ambient groundwater quality standard or guidance value, then there is reasonable potential that the discharge may cause or contribute to a violation of the water quality, and a WQBEL for the pollutant is required.

WQBELs for groundwater discharges are based on the groundwater effluent limits set forth in 6 NYCRR Part 703 (Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations) except as noted in 6 NYCRR 702.21. TOGS 1.1.1 provides a listing of groundwater effluent limitations for substances having an ambient water quality standard or guidance value. Groundwater effluent limitations are applied at the point of discharge to the groundwater distribution system.

For land treatment systems with no accessible final sampling points, such as constructed wetland treatment systems or buried sand filters, permit limitations for groundwater discharges are typically based on ambient groundwater quality standards or guidance values applied at representative down gradient monitoring well(s). Limitations at the downgradient sampling point are set at the Class GA ambient groundwater standards, rather than at the groundwater effluent limits promulgated under 6 NYCRR 703.6, as compliance is determined based upon the concentrations present in the downgradient groundwater monitoring well at the groundwater interface.

Class GA standards are established for the protection of sources of drinking water designated as Health (Water Source) or H(WS) in TOGS 1.1.1. As such, effluent limitations based on aquatic life criteria and WET testing requirements are not applicable to groundwater discharges.

Whole Effluent Toxicity (WET) Testing:

WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. TOGS 1.3.1 includes guidance for determining when aquatic toxicity

testing should be included in SPDES permits. The authority to require toxicity testing is in 6NYCRR 702.9. TOGS 1.3.2 describes the procedures which should be followed when determining whether to include toxicity testing in a SPDES permit and how to implement a toxicity testing program. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.
3. There is the presence of substances for which WQBELs are below analytical detectability.
4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
5. There are observed detrimental effects on the receiving water biota.
6. Previous WET testing indicated a problem.
7. POTWs which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs <1 MGD which are managing industrial pretreatment programs.

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.

Requirements for Combined Sewer Overflows (CSOs)

Pollution from combined sewer overflows is controlled with implementation of SPDES permit conditions in accordance with the Division of Water CSO Control strategy (TOGS 1.6.3) and the USEPA CSO Control Policy issued April 11, 1994.

CWA Section 402(q) requires that each permit for a discharge from a municipal combined storm and sanitary sewer shall conform to EPA's Combined Sewer Overflow Control Policy.[1] The CSO Control Policy identifies specific requirements for Phase I and Phase II permits. Phase I permits must include requirements for the implementation of the Nine Minimum Controls (NMCs) and development of the Long-Term CSO Control Plan (LTCP).

[1] Available at https://www.epa.gov/sites/production/files/2015-10/documents/owm0111.pdf

The 15 CSO Best Management Practices (BMPs) required by NYS under TOGS 1.6.2 are equivalent to the "Nine Minimum Control Measures" required under the USEPA National Combined Sewer Overflow policy (33 USC section 1342(q)). BMPs are technology-based requirements developed in accordance with best professional judgement. These are largely non-structural measures which are designed to maximize pollutant capture and removal from the combined sewer system and the POTW as a whole.

Phase II permits must include requirements to implement the technology-based controls including the NMCs determined on a BPJ basis, as well as requirements which ensure that the selected CSO controls are implemented, operated, and maintained as described in the long-term CSO control plan (LTCP). These requirements are critical to meeting the objectives of the Policy, including to bring all CSO discharge points into compliance with the technology-based and water quality-based requirements of the CWA, and to minimize the water quality, aquatic biota, and human health impacts from CSOs.

Additionally, the 1994 CSO Control Policy requires permits include a requirement for CSO communities who have developed an approved LTCP to reassess overflows to sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable. The reassessment should be based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstance that influence economic achievability.

Other Conditions

Mercury

The multiple discharge variance (MDV) for mercury was developed 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; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). The DEC has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

All surface water SPDES permittees are eligible for authorization by the MDV provided they meet the requirements specified in DOW 1.3.10.

Schedules of Compliance

Schedules of compliance are included in accordance with 40 CFR Part 132 Attachment F, Procedure 9, 40 CFR 122.47 and 6 NYCRR 750-1.14. Schedules of compliance are intended to, in the shortest reasonable time, achieve compliance with applicable effluent standards and limitations, water quality standards, and other applicable requirements. Where the time for compliance is more than nine months, the schedule of compliance must include interim requirements and dates for their achievement. If the time necessary to complete the interim milestones is more than nine months, and not readily divisible into stages for completion, progress reports must be required.

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.

Best Management Practices (BMP) for Industrial Facilities

BMP plans are authorized for inclusion in NPDES permits pursuant to Sections 304(e) and 402 (a)(1) of the Clean Water Act, and 6 NYCRR 750-1.14(f). The regulations pertaining to BMPs are promulgated under 40 CFR Part 125, Subpart K. These regulations specifically address surface water discharges.

Pollutant Minimization Programs

Pollutant Minimization Programs are included when a pollutant is being discharged from the facility at detectable levels and the ML for the most sensitive method is greater than the calculated WQBEL. These programs typically include an on-going potential source identification, evaluation, and prioritization program to demonstrate progress towards meeting the goal of the WQBEL. Pollutant Minimization Plan requirements are based on 40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1.

Mini Industrial Pretreatment Program

Pretreatment requirements are intended to protect a WWTP from receiving pollutants that cause pass through or interference to the operations of the POTW receiving such wastes. When necessary, the DEC, in accordance with TOGS 1.3.3. and through issued SPDES permits, requires WWTPs to develop and implement mini or partial pretreatment programs. These requirements are consistent with regulations in 6 NYCRR §750-2.9(b)(1), ECL 17-0811, ECL 17-0825, and 40 CFR §403.5.

As part of the mini pretreatment program, a WWTP must identify industrial users; determine whether legal authority controls (e.g. sewer use laws) are adequate; require, issue, and enforce industrial user permits; and, implement the program.