



Department of
Environmental
Conservation

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	4952	NAICS Code:	221320	SPDES Number:	NY0026778
Discharge Class (CL):	05	DEC Number:	1-2822-00286/00001		
Toxic Class (TX):	T	Effective Date (EDP):	EDP		
Major-Sub Drainage Basin:	17 - 02	Expiration Date (ExDP):	ExDP		
Water Index Number:	MB portion	Item No.:	885 - 11	Modification Dates (EDPM):	
Compact Area:	IEC				

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

PERMITTEE NAME AND ADDRESS						
Name:	Port Washington Water Pollution Control District			Attention:	Windsor Kinney, Superintendent	
Street:	70 Harbor Road					
City:	Port Washington			State:	NY	Zip Code: 11050
Email:	wkinney@pwwpcd.us			Phone:	(516) 944 – 6100	

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL											
Name:	Port Washington Water Pollution Control Plant										
Address / Location:	70 Harbor Road						County:	Nassau			
City:	Port Washington				State:	NY	Zip Code:	11050			
Facility Location:	Latitude:	40 °	50 '	21 " N	& Longitude:	73 °	41 '	48 " W			
Primary Outfall No.:	001	Latitude:	40 °	50 '	7 " N	& Longitude:	73 °	43 '	10 " W		
Outfall Description:	Treated Sanitary	Receiving Water:	Manhasset Bay				Class:	SB	Standard:	SB	

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:

CO BWP - Permit Coordinator
CO BWC – SCIS
BWP – Permit Writer
RWE
RPA
EPA Region II
NYSEFC

Permit Administrator:	Sherri L. Aicher		
Address:	50 Circle Rd, Stony Brook, NY 11790		
Signature:		Date:	/ /

DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the Department.
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 unless otherwise specified	Manhasset Bay	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	4.0	MGD			Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU			2/day	Grab		X	
	Daily Maximum	9.0								
Temperature	Daily Maximum	Monitor	°F			2/day	Grab		X	
CBOD ₅	Monthly Average	25	mg/L	834	lbs/d	1/week	24-hr. Comp.	X	X	1
	7-Day Average	40	mg/L	1334	lbs/d	1/week	24-hr. Comp.		X	
BOD ₅	6 Hour Mean	50	mg/L						X	6
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	1001	lbs/d	1/week	24-hr. Comp.	X	X	1
	7-Day Average	45	mg/L	1501	lbs/d	1/week	24-hr. Comp.		X	
	6 Hour Mean	50	mg/L						X	6
Settleable Solids	Daily Maximum	0.3	mL/L			2/day	Grab		X	
Total Phosphorus (as P)	Daily Maximum	Monitor	mg/L			1/quarter	24-hr. Comp.	X	X	5
Orthophosphate (as P)	Daily Maximum	Monitor	mg/L			1/quarter	24-hr. Comp.	X	X	5
Total Mercury	Daily Maximum	50	ng/L			1/month	Grab	X	X	
Biennial Pollutant Scan						1/Two Years			X	2

EFFLUENT DISINFECTION		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Required All Year										
Coliform, Fecal	30-Day Geometric Mean	200	No./100 mL			1/week	Grab		X	7, 8
	7-Day Geometric Mean	400	No./100 mL			1/week	Grab		X	7, 8
	6 Hour Geometric Mean	800	No./100 mL				Grab		X	6
	Individual Sample	2400	No./100 mL				Grab		X	6
Coliform, Total	Monthly Median	700	No./100 mL			1/week	Grab		X	7, 8
Enterococci	30-Day Geometric Mean	35	No./100 mL			1/week	Grab		X	10
	Daily Maximum	Monitor	No./100 mL			1/week	Grab		X	
Chlorine, Total Residual	Daily Maximum	0.143	mg/L			2/day	Grab		X	3, 4

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			5.3	TUa	Quarterly	See footnote		X	5, 9
WET - Acute Vertebrate	See footnote			5.3	TUa	Quarterly	See footnote		X	5, 9
WET - Chronic Invertebrate	See footnote			19	TUc	Quarterly	See footnote		X	5, 9
WET - Chronic Vertebrate	See footnote			19	TUc	Quarterly	See footnote		X	5, 9

FOOTNOTES:

- Effluent shall not exceed 15% and 15% of influent concentration values for CBOD₅ & TSS respectively.
- Biennial Pollutant Scan: The permittee shall perform effluent sampling every two (2) years for all applicable pollutants identified in the NY-2A Application, Tables A - D. Sampling data shall be collected according to the guidance in the NY-2A application and maintained by the permittee. Monitoring results shall not be submitted on the DMR. Data shall be submitted with the next submission of the NY-2A form.
- This is a final effluent limitation. See Schedule of Compliance for any applicable interim effluent limitations.
- Sampling and reporting for total residual chlorine is only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.
- Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).
- This is an Interstate Environmental Commission (IEC) requirement. The permittee is not required to perform this sampling but shall be required to meet the permit limit at all times. EPA, DEC, or IEC may perform the sampling.
- The most probable number (MPN) method, by multiple fermentation tube technique, is the only approved fecal and total coliform testing procedure. No more than 10% of the samples shall exceed an MPN of 3300/100 mL for the 3 tube per decimal dilution MPN test, nor an MPN of 2300/100 mL for the 5 tube per decimal dilution MPN test.
- Each April and August, the permittee shall analyze grab samples (a) taken every 2 hours on one day to assure adequacy and consistency of disinfection; (b) taken twice on each of seven consecutive days to compute a seven-day geometric mean; and (c) report above results in an addendum to the applicable Discharge Monitoring Report.

9. Whole Effluent Toxicity (WET) Testing:

Testing Requirements – Acute and if directed Chronic WET testing is required. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be *Mysidopsis bahia* (mysid shrimp - invertebrate) and *Cyprinodon variegatus* (sheepshead minnow - vertebrate). Artificial salt water should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 17.7:1 for acute, and 19:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 4 and 9.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48-hr LC50) [note that Acute data is generated by both Acute and Chronic testing] and TUc = (100)/(7-day NOEC) or (100)/(7-day IC25) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48-hr LC50, 7-day NOEC and/or IC25 are all expressed in %

effluent. This must be done, including the Chronic prediction from the Acute data, for both species unless otherwise directed. For Chronic results, report the most sensitive endpoint (i.e. survival, growth and/or reproduction) corresponding to the lowest 7-day NOEC or IC25 and resulting highest TUC. For Acute results, report a TUa of 0.3 if there is no statistically significant mortality in 100% effluent as compared to the control. Report a TUa of 1.0 if there is statistically significant mortality in 100% effluent as compared to the control, but insufficient mortality to generate a 48-hr LC50. Also, in the absence of a 48-hr LC50, use 1.0 TUa for the Chronic prediction from the Acute data, and report a TUC of 10.0.

The complete test report including all bench sheets, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period with your WET DMR and to the WET@dec.ny.gov email address. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48-hr LC50 for Acute tests and/or TUC, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Identification/Reduction Evaluation (TI/RE) in accordance with Department guidance. Enforceable WET limits may also apply. The permittee shall be notified in writing by their Regional DEC office of additional requirements. The written notification shall include the reason(s) why such testing, TI/RE and/or limits are required.

10. This is a final effluent limitation. See Schedule of Compliance for any applicable interim effluent limitations.

PERMIT LIMITS, LEVELS, AND MONITORING

Long Island Sound Management Zone 10 (Great Neck District, Glen Cove, Oyster Bay, Port Washington, Belgrave, Village of Great Neck) The Final (100%) Water Quality Based Effluent Limits and Monitoring

Outfall No.	Limitations Apply:	Receiving Water	Effective	Expiring
001	All year	Long Island Sound Study Management Zone 10	August 1, 2014	ExDP

Parameter	Enforceable Effluent Limitations					Monitoring Requirements				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Total Nitrogen (LISS Zone 10 POTW Aggregate)	12 Month Rolling Average			959	lbs/day	1/month	Calculated		X	1, 2, 3, 4, 5
Total Nitrogen	12 Month Rolling Average			Monitor	lbs/day	1/month	Calculated		X	1, 3, 4, 5
Total Nitrogen (LISS Zone 10 POTW Aggregate)	Monthly Average			Monitor	lbs/day	1/month	Calculated		X	2, 3
Total Nitrogen	Monthly Average	Monitor	mg/l	Monitor	lbs/day	1/week	Calculated	X	X	3
Nitrogen, Ammonia (as NH ₃)	Monthly Average	Monitor	mg/l			1/week	24-hr comp.	X	X	
Nitrogen, TKN (as N)	Monthly Average	Monitor	mg/l			1/week	24-hr comp.	X	X	
Nitrate (NO ₃) as N	Monthly Average	Monitor	mg/l			1/week	24-hr comp.	X	X	
Nitrite (NO ₂) as N	Monthly Average	Monitor	mg/l			1/week	24-hr comp.	X	X	

FOOTNOTES FOR LONG ISLAND SOUND WATER QUALITY BASED EFFLUENT LIMITS AND MONITORING

- The Long Island Sound Study (LISS) Management Conference has adopted "Phase III Actions for Hypoxia Management." The States of New York and Connecticut have jointly established the "Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound" which was approved by the U.S. Environmental Protection Agency (EPA) on April 5, 2001. Appendix C of the TMDL establishes individual POTW and total CSO Waste Load Allocations (WLAs) for LISS Management Zones. The TMDL requires a reduction of 58.5% of total nitrogen from in-basin sources by August 1, 2014, in three phased increments occurring in 2004, 2009, and 2014. These are the final Water Quality Based Effluent Limits based on the Waste Load Allocations in the TMDL.
- LISS Management Zone 10 POTW Aggregate is defined as the sum of effluent discharges from Great Neck District (NY0026999), Glen Cove (NY0026620), Oyster Bay (NY0021822), Port Washington (NY0026778), and Belgrave (NY0026841).
- Total Nitrogen = Total Kjeldahl Nitrogen (TKN) + Nitrite (NO₂) + Nitrate (NO₃).
- The individual 12 month rolling average (12-MRA) is defined as the current monthly average value averaged with the eleven previous months for each facility in Zone 10. The individual 12-MRAs are then summed to calculate the Aggregate 12-MRA. The 12-MRA is enforced as a 30-day average limit, therefore any reported exceedance of the 12-MRA may be considered 30 days of violation. The permittees in Zone 10 shall calculate the Aggregate 12-MRA limit and the result shall be reported by each of the individual permittees on their own DMR. The permittee shall

provide the current monthly average value for total nitrogen to the other permittees in Zone 10 so that the aggregate 12-MRA may be developed and reported on each permittee's DMR.

5. If the aggregate 12-MRA limit for total nitrogen is exceeded, the individual waste load allocations shall be used, for purposes of compliance, to determine whether the permittee was the cause of the exceedance. The percent reductions in the "Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound" were used to calculate incremental and final waste load allocations for this permittee of 342 and 237 lbs/day for the periods of August 1, 2009 through July 31, 2014, and August 1, 2014 through the ExDP. However, due to negotiations during construction for the biological nitrogen plant upgrade, the final individual WLA of 237 lbs/day (12-MRA) shall be effective one year earlier, August 1, 2013, for purposes of compliance.

DRAFT

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on 4/25/2022, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and/or stormwater runoff. The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the "No Exposure Certification Form" found on the NYSDEC website.

MERCURY MINIMIZATION PROGRAM (MMP) - Type I

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below, to reduce mercury effluent levels with the goal of achieving the WQBEL of 0.7 ng/L.
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 as described in detail below:

- a. Monitoring - Monitoring at influent and other locations tributary to compliance points shall be performed using either USEPA Method 1631 or another sufficiently sensitive method, as approved under 40 CFR Part 136¹. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations.

Minimum required monitoring is as follows:

- i. Sewage Treatment Plant Influent and/or Effluent – The permittee must collect samples at the location(s) and frequency as specified in the SPDES permit limitations table.
 - ii. Key Locations and Potential Mercury Sources – The permit includes reduced monitoring requirements and does not require key location sampling. See section 2.a.iv below.
 - iii. Hauled Wastes – The permittee must establish procedures for the acceptance of hauled waste to ensure the hauled waste is not a potential mercury source. Loads which may exceed 500 ng/L,² must receive approval from the Department prior to acceptance.
 - iv. Decreased Monitoring Requirements - Facilities with EEQ at or below 12 ng/L are eligible for the following:
 - 1) Reduced requirements, through a permittee-initiated permit modification
 - a) Conduct influent monitoring, sampling quarterly, in lieu of monitoring within the collection system, such as at *key locations*; and
 - b) Conduct effluent compliance sampling quarterly.
 - 2) If a facility with reduced requirements reports discharges above 12 ng/L for two of four consecutive effluent samples, the Department may undertake a Department-initiated modification to remove the allowance of reduced requirements.
 - 3) Under the decreased permit requirements, the facility must continue to conduct a status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.
 - v. Additional monitoring must be completed as required elsewhere in this permit (e.g., locations tributary to compliance points).
- b. Control Strategy - The control strategy must contain the following minimum elements:
 - i. Pretreatment/Sewer Use Law - The permittee must review pretreatment program requirements and the Sewer Use Law (SUL) to ensure it is up-to-date and enforceable with applicable permit requirements and will support efforts to achieve a dissolved mercury concentration of 0.70 ng/L in the effluent.
 - ii. Monitoring and Inventory/Inspections -
 - 1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must enforce its sewer use law to track down and minimize these sources.
 - 2) The permittee must inventory and/or inspect users of its system as necessary to support the MMP.
 - a) Dental Facilities
 1. The permittee must maintain an inventory of each dental facility.

¹ Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10*.

²A level of 0.2 mg/L (200,000 ng/L) or more is considered hazardous per 40 CFR Part 261.11. 500 ng/L is used here to alert the permittee that there is an unusual concentration of mercury and that it will need to be managed appropriately.

MERCURY MINIMIZATION PROGRAM (MMP) - Type I (Continued)

2. The permittee must inspect each dental facility at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6 NYCRR 374.4. Alternatively, the permittee may develop and implement an outreach program,³ which informs users of their responsibilities, and collect the “Amalgam Waste Compliance Report for Dental Dischargers”⁴ form, as needed, to satisfy the inspection requirements. The permittee must conduct the outreach program at least once every five years and ensure the “Amalgam Waste Compliance Report for Dental Dischargers” are submitted by new users, as necessary. The outreach program could be supported by a subset of site inspections.
 3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)a) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
- b) *Other potential mercury sources*
1. The permittee must maintain an inventory of other *potential mercury sources*.
 2. The permittee must inspect other *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program which informs users of their responsibilities as *potential mercury sources*. The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
 3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)b) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
- iii. Systems with CSO & Type II SSO Outfalls – Permittees must prioritize *potential mercury sources* upstream of CSOs and Type II SSOs for mercury reduction activities and/or controlled-release discharge.
- iv. 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.
- v. 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.
- c. **Status Report** - An annual status report must be developed and maintained on site, in accordance with the [Schedule of Additional Submittals](#), summarizing:
- i. All MMP monitoring results for the previous reporting period;
 - ii. A list of known and *potential mercury sources* for Outfall 001
 - 1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification;
 - iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
 - iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
 - v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

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

³ For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.

⁴ The form, “Amalgam Waste Compliance Report for Dental Dischargers,” can be found here:
https://www.dec.ny.gov/docs/water_pdf/dentalform.pdf

MERCURY MINIMIZATION PROGRAM (MMP) - Type I (Continued)

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. Effluent discharges exceed the current permit limitation(s); or
 - c. A letter from the Department identifies inadequacies in the MMP.

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

DEFINITIONS:

Key location – a location within the collection/wastewater system (e.g. including but not limited to a specific manhole/access point, tributary sewer/wastewater connection, or user discharge point) identified by the permittee as a potential mercury source. The permittee may adjust key locations based upon sampling and/or best professional judgement.

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 discharge.
- (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:

<p>N.Y.S. PERMITTED DISCHARGE POINT</p> <p>SPDES PERMIT No.: NY_____</p> <p>OUTFALL No. : _____</p> <p>For information about this permitted discharge contact:</p> <p>Permittee Name: _____</p> <p>Permittee Contact: _____</p> <p>Permittee Phone: () - ### - #####</p> <p>OR:</p> <p>NYSDEC Division of Water Regional Office Address:</p> <p>NYSDEC Division of Water Regional Phone: () - ### - #####</p>
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- (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.

MINI INDUSTRIAL PRETREATMENT PROGRAM SCHEDULE

Bombay Kitchens is a Significant Industrial User of the permittee's municipal sewerage system. Therefore, the permittee shall comply with the following schedule:

Industrial Survey

Within one month of the effective date of this permit, the permittee shall submit completed Fast Report on Significant Industries forms for Bombay Kitchens.

Develop Procedures

Within two months of the submission of industrial survey results, the permittee shall submit documentation of procedures for obtaining and ensuring compliance with applicable standards. Such procedures shall include requirements and schedules for discharge permits, industrial self-monitoring, compliance monitoring of industries by the permittee, ongoing STP monitoring and an enforcement program. Such procedures shall be equivalent to procedures described or referenced in the document entitled Introduction to the National Pretreatment Program, USEPA, June, 2011, (https://www.epa.gov/npdes/pubs/pretreatment_program_intro_2011.pdf).

Local Sewer Use Law

Within two months of the submission of STP/industrial monitoring results, the permittee shall submit a draft local sewer use law equivalent to the DEC Model Sewer Use Law. Local limits for substance capable of causing SPDES permit violations, endangering municipal employees or limiting sludge disposal options must be included in the local law. Such limits shall be developed in accordance with document entitled Local Limits Development Guidance, US EPA, July 2004, EPA 833-R-04-002A (https://www.epa.gov/npdes/pubs/pretreatment_local_limits.pdf).

Within three months of approval by this Department, the permittee shall submit a copy of the enacted Law accompanied by proof of enactment.

Credit for Work Already Completed

Any of the above required tasks already completed by the permittee need not be repeated. If the permittee believes that a task or task(s) have been satisfactorily completed, documentation of the completed tasks should be submitted to NYSDEC for approval.

Implement Procedures

Within 9 months of enactment of its sewer use law, the permittee shall implement the procedures proposed under this schedule and approved by NYSDEC. At a minimum, the following activities shall be undertaken by the permittee:

1. Issue permits including limitations, monitoring requirements, and reporting requirements to its significant industrial users.
2. Enforce the local limits set forth in the POTW local sewer use law.
3. Carry out inspections and monitoring of significant industrial users to determine compliance with categorical standards and local limits.
4. Undertake enforcement actions in accordance with NYSDEC approved procedures.

Reporting Requirements

In accordance with the Schedule of Submittals, the permittee shall submit yearly Fast Report on Significant Industries forms (FROSI) for each SIU to NYSDEC. Every third year, on the same date, the permittee shall submit Industrial Chemical Survey (ICS) forms completed by all SIUs to NYSDEC. At the same time the permittee shall notify the NYSDEC of any proposed significant changes to its implementing procedures or local sewer use law.

All pretreatment reports shall be submitted to the offices listed on the monitoring, recording and reporting page of this permit.

Continuation

Unless noted otherwise, compliance actions required by the pretreatment mini schedule are one-time requirements. The permittee shall comply with the compliance actions to the satisfaction of the Department. When this permit is administratively renewed by NYSDEC letter entitled "**SPDES NOTICE/RENEWAL APPLICATION/PERMIT**", the permittee is not required to repeat the submissions. The due dates are independent from the effective date of the permit stated in the letter of "**SPDES NOTICE/RENEWAL APPLICATION/PERMIT**."

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Due Date
001	<p><u>TOTAL RESIDUAL CHLORINE CONCENTRATION EFFLUENT LIMITATION</u> The Total Residual Chlorine daily maximum effluent concentration limit of 0.143 mg/L will become effective EDP + 18 months.</p>	EDP + 18 months
001	<p><u>SCHEDULE OF COMPLIANCE STATUS REPORTS</u> Submit interim status reports on the progress related to meeting the specified final limits.</p>	EDP + 6 months and every 6 months thereafter
001	<p><u>BACTERIAL ASSESSMENT STUDY</u> 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 WPCD effluent Enterococci performance and compliance with the Enterococci standards in the ambient receiving water, considering locations at the edge of both the acute and chronic mixing zone boundary for WPCD discharge. Sampling events shall be under normal dry-weather operating conditions (i.e., no measurable rainfall in the 48 hours preceding).</p> <p><u>BAS WORKPLAN</u> 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, and will include an evaluation of microbial source tracking.</p> <p><u>SCHEDULE OF COMPLIANCE STATUS REPORTS</u> Submit interim status reports on the progress related to the BAS.</p> <p><u>BAS COMMENCEMENT</u> The permittee shall commence the three-year BAS in accordance with the approved BAS Workplan and QAPP.</p> <p><u>BAS REPORT</u> 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.</p> <p>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:</p> <p>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</p>	<p>EDP + 1 year</p> <p>NYSDEC approval of BAS Workplan + 6 months, and every 6 months thereafter, until completion of the BAS</p> <p>BAS Workplan + 60 days</p> <p>Completion of the BAS + 6 months</p> <p>Receipt of the BAS + 6 months</p>

	<p>or effluent limitations.</p> <p>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. The permittee will also conduct an Engineering Analysis, as outlined below, of potential alternatives necessary to comply with the applicable effluent limitations.</p> <p>ENGINEERING ANALYSIS 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.</p> <p>If treatment system upgrades are determined to be necessary, the permittee shall also:</p> <p>c) Include a schedule for development of Basis of Design Report;</p> <p>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</p> <p>e) Construct the treatment system described in the approved report, plans, and specifications and achieve compliance with the applicable effluent limitations.</p>	<p>NYSDEC Notification + 48 months</p> <p>In accordance with the approved schedule</p>
--	--	--

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

OUTFALL	PARAMETER	INTERIM EFFLUENT LIMIT					MONITORING REQUIREMENTS				Notes
		Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
									Inf.	Eff.	
001	Total Residual Chlorine	Daily Maximum	0.18	mg/L			2/day	Grab	-	X	1
001	Enterococci	30-Day Geometric Mean	Monitor	No./100mL			1/week	Grab	-	X	2
Notes:	1. Interim limits expire EDP + 18 months. 2. Interim limits expire TBD.										

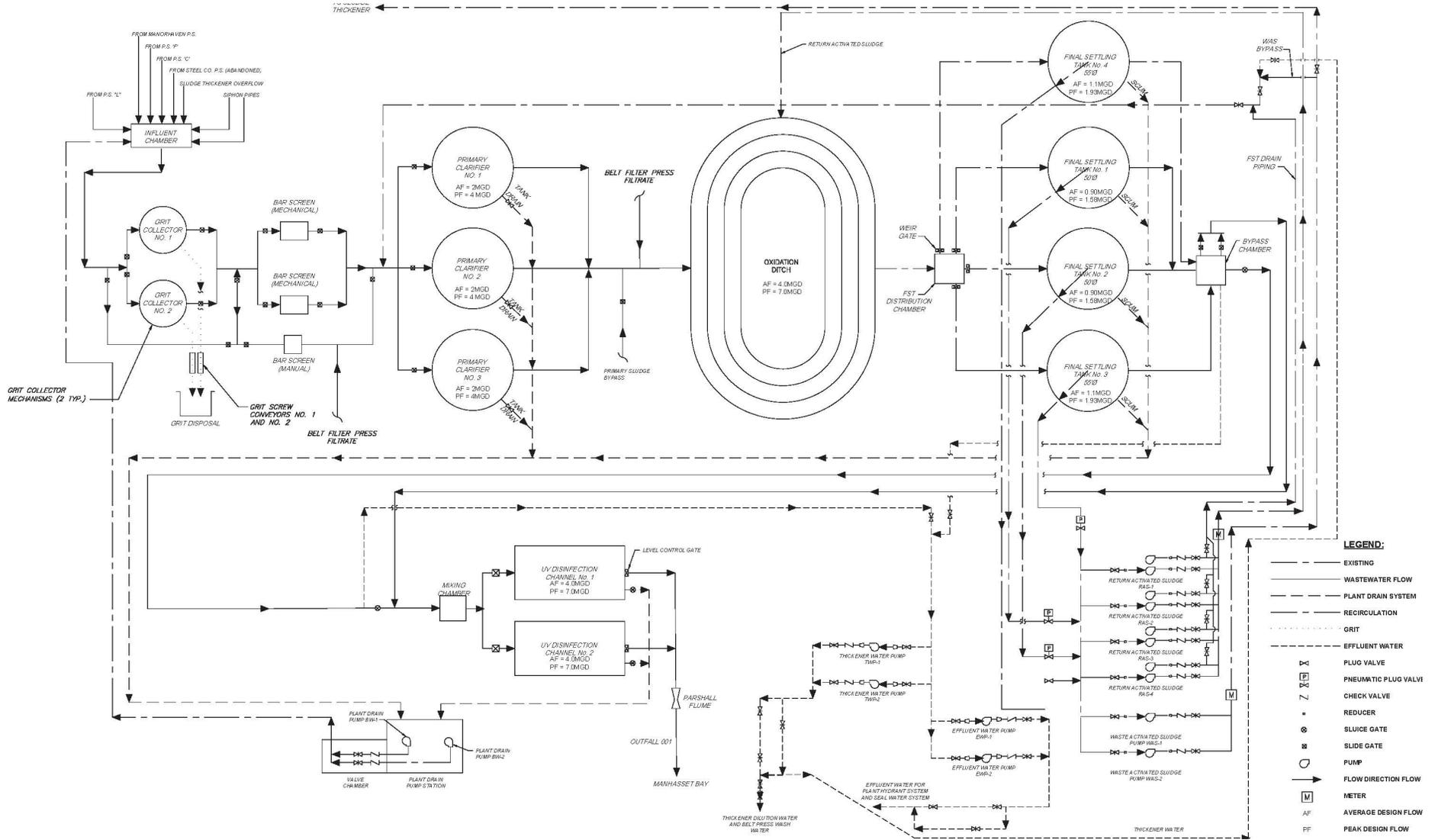
- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification 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 NYSDEC 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 location(s) specified below:

Influent: In the influent chamber

Effluent: After UV, but prior to discharge to Manhasset Bay



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 Department 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 Department, 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 Department, 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 Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department 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 Department. 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 Department.
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 Department'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 Department 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 Department's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at <https://www.dec.ny.gov/chemical/8461.html>. **Hardcopy paper DMRs will only be received at the address listed below, directed to the Bureau of Water Compliance, 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 RWE 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 Engineer, 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 Department'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	<u>WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM</u> 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.	
001	<u>ANNUAL FLOW CERTIFICATION</u> 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 28 th)

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	Required Action	Due Date
001	<u>BIENNIAL POLLUTANT SCAN</u> The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in footnote of the permit limits table.	Retain and submit with next NY-2A Application
001	<u>WHOLE EFFLUENT TOXICITY (WET) TESTING</u> WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period
001	<u>STORMWATER NO EXPOSURE CERTIFICATION</u> Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the NYSDEC website.	4/25/2027 + 5 Years, and every 5 years thereafter
001	<u>MERCURY MINIMIZATION PLAN</u> The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	Maintained Onsite EDP + 12 months, annually thereafter
001	<u>MINI PRETREATMENT PROGRAM – FROSI</u> Submit completed Fast Report on Significant Industries form (FROSI) for each SIU to the Department, or notification letter that no new significant industrial users have been added.	EDP + 1 month, yearly thereafter
001	<u>MINI PRETREATMENT PROGRAM – Industrial Chemical Survey (ICS) Forms</u> Submit Industrial Chemical Survey forms completed by all SIUs to the Department. Notify the Department of any proposed significant changes to its implementing procedures or local sewer use law.	EDP + 3 years and every three years thereafter

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 Port Washington Water Pollution Control District Port Washington Water Pollution Control Plant NY0026778

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Department of
Environmental
Conservation

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Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permit renewal with changes requested by the permittee has been drafted for the Port Washington Water Pollution Control Plant. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Updated permittee attention
- Updated pH from Range to Daily Minimum of 6.0 SU and Daily Maximum of 9.0 SU to be in line with DMR reporting
- Added Total Mercury effluent limit of 50 ng/L to comply with TOGS 1.3.10
- Added Biennial Pollutant Scan to permit limits table
- Added Enterococci Daily Max monitoring and 35 No./100mL 30-day Geo. Mean. final effluent limit
- Updated Total Residual Chlorine limit from 0.18 mg/L to 0.143 mg/L to reflect appropriate chronic dilution
- Added footnote for final effluent limitations, TRC sampling, quarterly sampling, and WET testing
- Removed special requirement for reporting both concentration and mass loading for parameters other than flow, pH, temperature, settleable solids, total coliform, and fecal coliform
- Removed Second Increment table for Long Island Sound Management Zone 10 section of permit
- Added Stormwater Pollution Prevention Requirements language to permit
- Revised Mercury Minimization Program for Low Priority POTWs to MMP Type I to comply with TOGS 1.3.10
- Added Mini Industrial Pretreatment Program Schedule to permit
- Added Schedule of Compliance for Total Residual Chlorine with an interim limit of 0.18 mg/L
- Added Bacterial Assessment Study to Schedule of Compliance for Enterococci with an interim 30-day Geometric Mean of Monitor No./100mL
- Updated site schematic in permit
- Added Schedule of Additional Submittals for Annual Flow Certification; Water Treatment Chemical (WTC) Annual Report Form; Annual Flow Certification; Biennial Pollutant Scan; Whole Effluent Toxicity (WET) Testing; Stormwater No Exposure Certification; Mercury Minimization Plan; Mini Pretreatment Program – FROSI; and Mini Pretreatment Program – Industrial Chemical Survey (ICS) Forms

This factsheet 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 factsheet.

Administrative History

4/1/2012 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 3/31/2017. The 2012 permit has formed the basis of this permit.

3/31/2017 The current permit was extended pursuant to SAPA¹.

¹ State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(f)

- 1/12/2021 The Port Washington Water Pollution Control District submitted a request to modify the permit to include a revised schematic that removes the sand filters from the process flow diagram as they have been taken out of service and are scheduled to be removed from the site.
- 11/5/2021 Department issued a NOIA to modify and renew the SPDES permit due to the facility's modification request.
- 4/25/2022 The Port Washington Water Pollution Control District submitted an NY-2A permit application.

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

Facility Information

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

The current 4.0 MGD treatment plant consists of:

- Preliminary Treatment: Screening, Grit Removal
- Primary Treatment: Primary Clarification
- Secondary Treatment: Return Activated Sludge, Oxidation Ditch
- Disinfection: UV

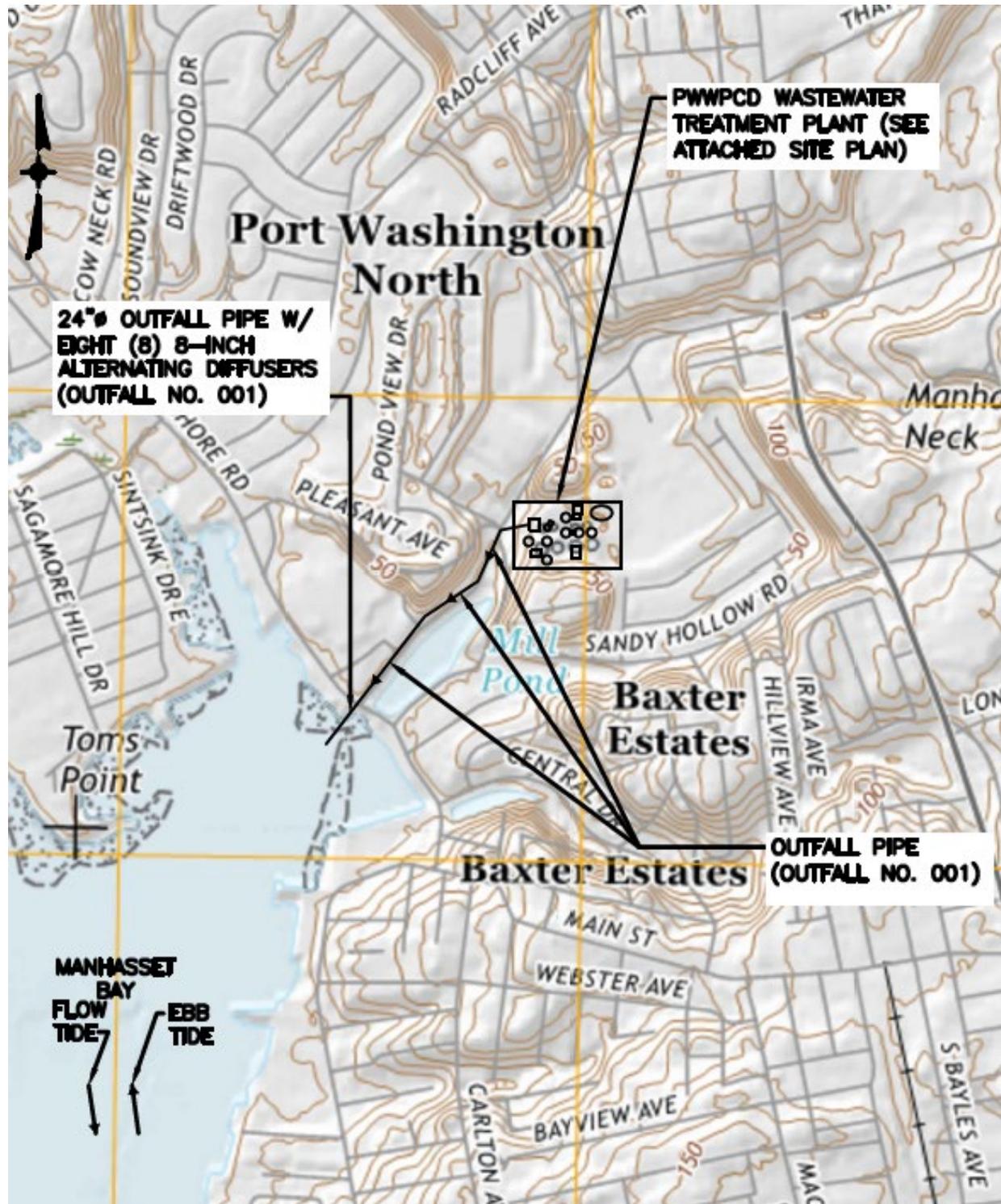
Sludge is thickened and dewatered with a belt filter press, then hauled, prepared, and disposed of by a third-party contractor.

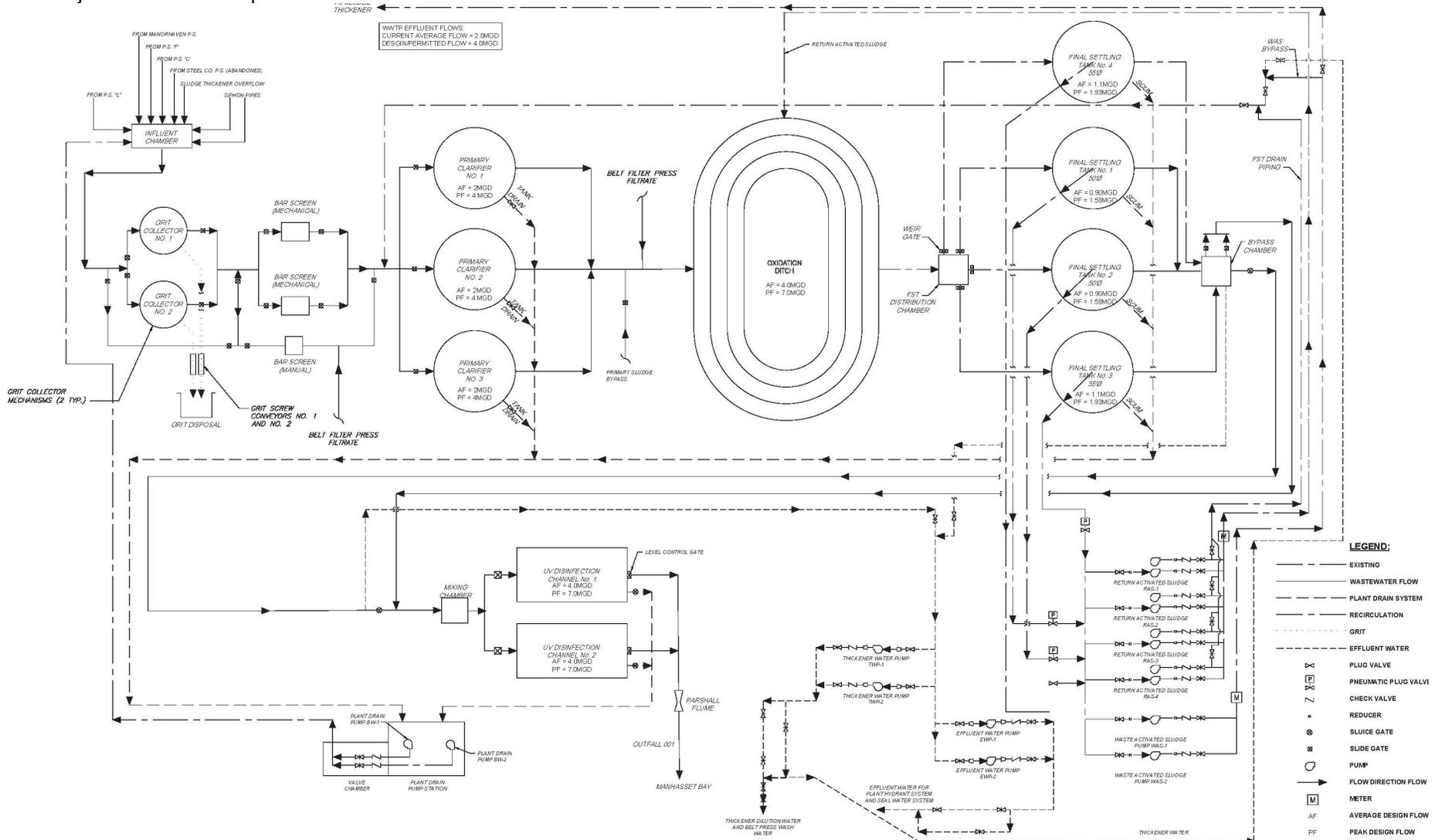
The primary outfall (Outfall 001) is a 24" diameter cast iron pipe installed below Manhasset Bay and ultimately discharges to Manhasset Bay via eight (8) 8-inch diameter ductile iron alternating diffuser pipes. The overall length of the outfall pipe is approximately 620 lineal-feet which includes an approximate 100-foot diffuser line.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
Port Washington Water Pollution Control District	NY0026778	Separate
Village of Manorhaven	-	Separate

Site Overview





Enforcement History

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 4/31/2017 to 3/31/2022. [Appendix Link](#)

Interstate Water Pollution Control Agencies

Outfall 001 is located within the Interstate Environmental Commission (IEC) compact area which places additional requirements in the SPDES permit. [Appendix Link](#)

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: Port Washington Water District, Roslyn Water District, Manhasset-Lakeville Water District, Village of Plandome, Village of Sands Point, Water Authority of Great Neck, NY American Water (Village of Sea Cliff), and City of Glen Cove.

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated Sanitary Sewage	Manhasset Bay, Class SB

Reach Description: Manhasset Bay (MB portion) consists of the waters northeast of the line running from Plum Point to the Port Washington Yacht Club dock. The segment of Manhasset Bay at the point of discharge is classified as SB (6 NYCRR 885.6 – Table I – Item 11).

See the [Outfall and Receiving Water Summary Table](#) and [Appendix](#) for additional information.

Impaired Waterbody Information

The Manhasset Bay segment (PWL No. 1702-0141) was listed on the 2018 [New York State Section 303\(d\) List](#) of Impaired/TMDL Waters. However, Port Washington Water Pollution Control Plant is listed under the 2001 “Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound,” approved by EPA which establishes individual POTW and total CSO waste load allocations (WLAs) for LISS Management Zones. Port Washington Water Pollution Control Plant falls under LISS Management Zone 10. As part of the TMDL, the discharges from the following outfalls are subject to the listed waste load allocations (WLAs) for the following parameters:

Outfall No.	Parameter	Wasteload Allocation
001	Nitrogen	237 lbs/day

Critical Receiving Water Data & Mixing Zone

Consistent with TOGS 1.3.1, the outfall information submitted in a previous application and a previous mixing zone form was used to develop a mixing zone model to establish dilution ratios for the water quality analysis. The prior CORMIX model determined a chronic dilution ratio of 19:1 and an acute dilution ratio of 17.7:1.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	17.7:1	19:1	19:1	CORMIX

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](#).

Whole Effluent Toxicity (WET) Testing

An evaluation of the discharge indicates the potential for toxicity based on the following criteria: [Appendix Link](#)

- Treatment plants which equal or exceed a discharge of 1MGD. (#7)

Consistent with TOGS 1.3.2, a reasonable potential analysis was performed using the existing WET data for this facility (see data below). It was determined that while the analysis indicated no potential for toxicity in the effluent, WET testing is required based on the criteria listed above and WET action levels are being continued in the permit. Given the dilution available and location outside of the Great Lakes basin, the permit requires acute and if necessary chronic WET testing. Samples will be collected quarterly during calendar years ending in 4 and 9. WET testing action levels of 5.3 TU_a and 19 TU_c have been included in the permit for each species. The acute action level for each species represent the acute dilution ratio times a factor of 0.3.

Test Date	¹ MSS 48H LC50 (%Effluent)	² MSS TU _a	³ TU _a Action Level	⁴ MSS Survival 100% Effluent	⁵ Acute Test Result	⁶ MSS RPD TU _a	⁷ Acute WET Limit Required	⁸ Predicted MSS TU _c	⁹ TU _c Action Level	¹⁰ Chronic Test Result	¹¹ MSS RPD TU _c	¹² Chronic WET Limit Required
02/19	> 100% (F)	< 0.3 (F)	5.3	95% (I)	Pass	< 0.8	No	< 10.0 (F)	19.0	Pass	< 26.0	***No
06/19	> 100% (F)	< 0.3 (F)	5.3	100% (F)	Pass	< 0.8	No	< 10.0 (F)	19.0	Pass	< 26.0	***No
09/19	> 100% (F)	< 0.3 (F)	5.3	100% (F)	Pass	< 0.8	No	< 10.0 (F)	19.0	Pass	< 26.0	***No
12/19	> 100% (F)	< 0.3 (F)	5.3	100% (F)	Pass	< 0.8	No	< 10.0 (F)	19.0	Pass	< 26.6	***No

¹Most Sensitive Species 48-hour Lethal Concentration: (F=Fish; I=Invertebrate) is the concentration or percentage of effluent that is lethal to 50% of the exposed organisms over a 48-hour period, and often indicates one species is more sensitive than the other during effluent testing.

²Most Sensitive Species Toxic Units Acute: is calculated as (100 / MSS 48H LC50). However, because ≤ 0.3 TU_a is defined as the acceptable amount of acute toxicity at the edge of the acute mixing zone, and mathematically 100 / 100 = 1.0 (i.e. a "failing result"), non-toxic acute test results are indicated as < 0.3.

³Toxic Unit Acute Action Level/Limit: is calculated as [Acute Dilution Factor x 0.3 TUa] representing the maximum allowable effluent TUa at the edge of the acute mixing zone using the seven-day once-in-ten year low flow (7Q10) ensuring acute protection of the receiving water. When the Acute Dilution Factor is <3.3, the default Acute Action Level of 0.3 TUa is used representing the maximum allowable effluent TUa at the end of pipe.

⁴Most Sensitive Species Survival in 100% Effluent: is the lowest percentage of surviving organisms in 100% effluent, providing additional evidence of unacceptable acute toxicity when the necessary 50% or greater mortality required to generate an LC50 has not been attained.
^{*}Denotes statistically significant mortality as compared to the control.

⁵Acute Test Result: MSS TUa \leq TUa Action Level/Limit for passing effluent test result and MSS TUa $>$ TUa Action Level/Limit for a failing effluent test result. If unacceptable mortality (i.e. statistically significant as compared to the control), this may also be considered a failing test result.

⁶Most Sensitive Species Reasonable Potential Determination Toxic Units Acute: is calculated as (MSS TUa x 2.6), the Reasonable Potential Multiplier when four quarterly tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based action level.

⁷Acute Whole Effluent Toxicity Limit Required: MSS RPD TUa \leq TUa Action Level, then no toxicity-based limit is required and the action level remains in place. If MSS RPD TUa $>$ TUa Action Level, then a toxicity-based limit is required and the action level becomes the limit. ******In low dilution situations, the application of the RPD to the acute results often mathematically suggests the need for acute WET limits even when there is no toxicity evident in 100% effluent (a non-detect). Therefore, this data cannot be used to implement a WET limit.

⁸Predicted Most Sensitive Species Toxic Units Chronic: is calculated as (MSS TUa x 10) the default Acute:Chronic ratio used to predict chronic toxicity from acute test results in the absence of chronic testing. When MSS TUa is $<$ 0.3, $<$ 1.0 should be used for the prediction, since this is defined as the acceptable amount of chronic toxicity at the edge of the chronic mixing zone. In Class A/SA, B/SB and C/SC waters, we must ultimately protect for chronic toxicity.

⁹Toxic Unit Chronic Action Level/Limit: is calculated as [Chronic Dilution Factor x 1.0 TUc] representing the maximum allowable effluent TUc at the edge of the chronic mixing zone using the seven-day once-in-ten year low flow (7Q10) ensuring chronic protection of the receiving water.

¹⁰Chronic Test Result: MSS TUc \leq TUc Action Level/Limit for passing effluent test result and MSS TUc $>$ TUc Action Level/Limit for a failing effluent test result.

¹¹Most Sensitive Species Reasonable Potential Determination Toxic Units Chronic: is calculated as (MSS TUc x 2.6), the Reasonable Potential Multiplier when four quarterly tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based action level.

¹²Chronic Whole Effluent Toxicity Limit Required: MSS RPD TUc \leq TUc Action Level, then no toxicity-based limit is required and the action level remains in place. If MSS RPD TUc $>$ TUc Action Level, then a toxicity-based limit is required and the action level becomes the limit. *******In low dilution situations, the combined application of the default ACR and RPD to the acute results often mathematically suggests the need for chronic WET limits even when there is no toxicity evident in 100% effluent (a non-detect). Therefore, this data cannot be used to implement a WET limit.

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](#)

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.

Stormwater Pollution Prevention Requirements

The facility is a publicly owned treatment works \geq 1 MGD that requires SPDES permit coverage under 40 CFR 122.26 (b)(14)(ix).

² As prescribed by 6 NYCRR Part 617

On 4/25/2022, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. This condition must be maintained for the exclusion to remain applicable. The schedule of submittals also includes a due date for re-certification every five years as required by 40 CFR 122.26(g)(iii). This requirement is new.

Mercury³

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

The facility is located outside of the Great Lakes Basin, is an EPA Major, Class 05 POTW and the permit includes requirements for the implementation of MMP Type I.

Based on 1 data point(s) of 2.3 ng/L collected as part of the application the facility is expected to meet the new daily max permit limit of 50 ng/L (with monthly sampling frequency). The limit represents the general level currently achievable (GLCA). The data collected will be used to establish an additional 12-month rolling average effluent limit during the next permit review.

A mercury minimization program consisting of the following is also required:

- Additional monitoring
- Control strategy for implementation of the MMP
- Annual status report (maintained onsite)

Biennial Pollutant Scan

Three effluent samples for applicable parameters must be submitted with an NY-2A Application⁴. The permit includes a requirement to perform biennial sampling (once every two years) of the WWTP effluent for the parameters in the NY-2A Application, Tables A – D. This requirement ensures the data is representative of effluent conditions over the permit term and will be available for the next application submittal and permit review. This requirement is new.

Schedule(s) of Compliance

A Schedule of Compliance is being included⁵ for the following items ([Appendix Link](#)):

- Compliance period for attainment of final effluent limits for Total Residual Chlorine
 - This is a new requirement, and the permittee cannot immediately comply with the WQBEL
- Status reports for attainment of final effluent limits for Total Residual Chlorine
- Bacterial Assessment Study (BAS) for Enterococci
 - This is a new requirement, and the permittee cannot immediately comply with the WQBEL

Schedule(s) of Additional Submittals

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

- Water Treatment Chemical (WTC) Annual Report Form
- Annual Flow Certification
- Biennial Pollutant Scan
- Whole Effluent Toxicity (WET) Testing

³ In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

⁴ Pursuant to 40 CFR 122.21(j)(4)(vi).

⁵ Pursuant to 6 NYCRR 750-1.14

Permittee: Port Washington Water Pollution Control District
Facility: Port Washington Water Pollution Control Plant
SPDES Number: NY0026778
USEPA Major/Class 05 Municipal

Date: April 7, 2023 v.1.15
Permit Writer: Gwendolyn Temple
Water Quality Reviewer: Gwendolyn Temple
Full Technical Review

- Stormwater No Exposure Certification Form
- Mercury Minimization Plan
- Mini Pretreatment Program – FROSI
- Mini Pretreatment Program – Industrial Chemical Survey (ICS) Forms

DRAFT

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	40° 50' 7" N	73° 43' 10" W	Manhasset Bay	SB	MB portion PWL: 1702-0141	17 / 02	-	-	-	-	4.0	17.7:1	19:1	19:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	Description of Wastewater: Treated Sanitary Sewage													
		Type of Treatment: Screening, Grit Removal, Primary Clarification, Oxidation Ditch, Return Activated Sludge, UV Disinfection													
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 for WQBEL		
General Notes: Existing discharge data from 4/30/2017 to 3/31/2022 was obtained from Discharge Monitoring Reports 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	4.0	2.695 Actual Average	60/0	4.0	TOGS 1.3.3	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	TBEL	
		Consistent with TOGS 1.3.3, a monthly average flow limitation equal to the average daily design capacity of the treatment plant is specified.													
pH	SU	Minimum	6.0	6.6 Actual Minimum	60/0	6.0	TOGS 1.3.3	-	-	6.5 – 8.5	Range	-	703.3	-	TBEL
		Maximum	9.0	8.3 Actual Maximum	60/0	9.0		Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given the available dilution an effluent limitation equal to the TBEL is protective of the WQS.							
Temperature	°F	Daily Max	Monitor	85.56	60/0	Monitor	750-1.13 Monitor	-	Narrative (Estuary): The water temperature at the surface of an estuary shall not be raised to more than 90F at any point.			704.2	-	Monitor	
		Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit.													

⁶ Existing Effluent Quality: 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, Grit Removal, Primary Clarification, Oxidation Ditch, Return Activated Sludge, UV Disinfection													
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 for WQBEL		
5-day Carbonaceous Biochemical Oxygen Demand (CBOD ₅)	mg/L	Monthly Avg	25	2.96	52/8	25	TOGS 1.3.3	-	-	-	-	-	703.3	-	TBEL
		7 Day Avg	40	6.39	58/2	40	TOGS 1.3.3					-			
	lbs/d	Monthly Avg	834	67.11	53/7	834	TOGS 1.3.3					-			
		7 Day Avg	1334	137.88	55/5	1334	TOGS 1.3.3					-			
	% Rem	Minimum	85	95.9 Actual Minimum	60/0	85	TOGS 1.3.3					-			
Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given that adequate dilution is available, an effluent limitation equal to the TBEL, and consistent with TOGS 1.3.3, is protective of water quality standards.															
5-day Biochemical Oxygen Demand (BOD ₅)	mg/L	6 hour mean	50	-	-	-	-	-	-	-	-	-	-	-	IEC
This is an Interstate Environmental Commission (IEC) requirement. The permittee is not required to perform this sampling but shall be required to meet the limit at all times. EPA, DEC, or IEC may perform this sampling.															
Total Suspended Solids (TSS)	mg/L	Monthly Avg	30	3.22	60/0	30	TOGS 1.3.3	-	Narrative: 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	9.38	60/0	45	TOGS 1.3.3								
	lbs/d	Monthly Avg	1001	71.22	60/0	1001	TOGS 1.3.3								
		7 Day Avg	1501	199.92	60/0	1501	TOGS 1.3.3								
	% Rem	Minimum	85	96.2 Actual Minimum	60/0	85	TOGS 1.3.3								
Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given that adequate dilution is available, an effluent limitation equal to the TBEL, and consistent with TOGS 1.3.3, is protective of water quality standards.															
Total Suspended Solids (TSS)	mg/L	6 hour mean	50	-	-	-	-	-	-	-	-	-	-	IEC	
This is an Interstate Environmental Commission (IEC) requirement. The permittee is not required to perform this sampling but shall be required to meet the limit at all times. EPA, DEC, or IEC may perform this sampling.															

Outfall #	001	Description of Wastewater: Treated Sanitary Sewage													
		Type of Treatment: Screening, Grit Removal, Primary Clarification, Oxidation Ditch, Return Activated Sludge, UV Disinfection													
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 for WQBEL		
Settleable Solids	mL/L	Daily Max	0.3	0.39	60/0	0.3	TOGS 1.3.3	-	Narrative: 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. Given that adequate dilution is available the TBEL is protective of WQS.												
Total Phosphorus (as P)	mg/L	Daily Max	Monitor	6.10	19/0	Monitor	TOGS 1.3.3	-	Narrative: None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.			-	-	Monitor	
			Consistent with TOGS 1.3.3 permits for discharges with design flows greater than 1 MGD and to saline waters shall require influent and effluent monitoring for total phosphorus and orthophosphate.												
Orthophosphate (as P)	mg/L	Daily Max	Monitor	4.24	19/0	Monitor	TOGS 1.3.3	-	-			-	-	Monitor	
			Consistent with TOGS 1.3.3 permits for discharges with design flows greater than 1 MGD and to saline waters shall require influent and effluent monitoring for total phosphorus and orthophosphate.												
Nitrogen, Ammonia (as N) June 1 st – Oct. 31 st	mg/L	Monthly Avg	Monitor	8.08	24/36	-	-	-	0.0425	0.390	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation
			The chronic summer WQS was converted from an unionized ammonia of 0.035 mg/L (as NH ₃) to 0.4735 mg/L (as NH ₃) (0.390 mg/L (as N)) using a surface salinity of 24.39 g/kg, a surface temperature of 25°C, and an assumed surface pH of 8.2 SU for Manhasset Bay. The WQBEL was then determined by applying the chronic dilution ratio to the WQS of 0.390 mg/L (as N). A comparison of the projected instream concentration to the WQS indicates no reasonable potential to violate the WQS. Therefore, no limitation is being imposed. Monitoring is being continued under the LISS TMDL.												
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 existing effluent quality of 9.81 mg/L (as NH ₃) was converted to 8.08 mg/l (as N).															
Nitrogen, Ammonia (as N) Nov. 1 st – May 31 st	mg/L	Monthly Avg	Monitor	8.08	24/36	-	-	-	0.0425	0.790	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation
			The chronic winter WQS was converted from an unionized ammonia of 0.035 mg/L (as NH ₃) to 0.9597 mg/L (as NH ₃) (0.790 mg/L (as N)) using a surface salinity of 24.39 g/kg, a surface temperature of 15°C, and an assumed surface pH of 8.2 SU for Manhasset Bay. The WQBEL was then determined by applying the chronic dilution ratio to the WQS of 0.790 mg/L (as N). A comparison of the projected instream concentration to the WQS indicates no reasonable potential to violate the WQS. Therefore, no limitation is being imposed. Monitoring is being continued under the LISS TMDL.												
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 existing effluent quality of 9.81 mg/L (as NH ₃) was converted to 8.08 mg/l (as N).															

Outfall #	001	Description of Wastewater: Treated Sanitary Sewage													
		Type of Treatment: Screening, Grit Removal, Primary Clarification, Oxidation Ditch, Return Activated Sludge, UV Disinfection													
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 for WQBEL		
Total Mercury	ng/L	Daily Max	-	2.3	1/0	-	-	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
	See Mercury section of this factsheet.														
Coliform, Fecal	#/100 ml	30d Geo Mean	200	3634	1/59	200	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	400	26092.5	12/48	400	TOGS 1.3.3	-							
		6 hour geometric mean	800	-	-	-	-	-					-	-	IEC
		Individual sample	2400	-	-	-	-	-					-	-	IEC
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.															
6 hour geometric mean and individual sample are both Interstate Environmental Commission (IEC) requirements. The permittee is not required to perform this sampling but shall be required to meet the permit limit at all times. EPA, DEC, or IEC may perform the sampling.															
Coliform, Total	#/100 ml	Monthly median	700	192.02	3/57	-	-	-	-	-	-	700	703.4	-	WQBEL
		This limit is being continued from the previous permit to conform with the WQS for total coliform of 70 assuming a dilution of 10:1.													
Enterococci	#/100 ml	30-Day Geometric Mean	-	Non-Detect	0/30	-	-	-	-	35	-	35	703.4	-	WQBEL
		Daily Maximum	-	-	-	Monitor	750-1.13 Monitor	-	-	-	-	-	-	-	Monitor
In accordance with 6 NYCRR 703.4(d), a final 30-Day Geometric Mean effluent limitation of 35 #/100mL is being included in the permit with an interim limit of monitor only and a Schedule of Compliance requirement to complete a Bacterial Assessment Study (BAS).															
Consistent with 6 NYCRR 750-1.13(a), daily maximum monitoring is required and may be used to inform future permitting decisions. This requirement is new.															
Total Residual Chlorine (TRC)	mg/L	Daily Max	0.18	1.22 Actual Maximum	7/0	2.0	TOGS 1.3.3	-	-	0.0075	A(C)	0.143	703.5	-	WQBEL
			Effluent disinfection is currently required year-round and will remain a permit requirement. The WQBEL was calculated by multiplying the WQS by the chronic dilution ratio. Due to the low dilution, the calculated WQBEL is less than the TBEL and an effluent limitation equal to the WQBEL is appropriate.												

Outfall #	001	Description of Wastewater: Treated Sanitary Sewage													
		Type of Treatment: Screening, Grit Removal, Primary Clarification, Oxidation Ditch, Return Activated Sludge, UV Disinfection													
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 for WQBEL		
Total Nitrogen (LISS Zone 10 POTW Aggregate)	lb/d	12 MRA	959	1053.46	60/0	-	-	-	-	-	-	-	-	-	LISS TMDL
		Monthly Avg	Monitor	819.96	60/0	-	-	-	-	-	-	-	-	-	
LISS Management Zone 10 POTW Aggregate is defined as the sum of effluent discharges from Great Neck District (NY0026999), Glen Cove (NY0026620), Oyster Bay (NY0021822), Port Washington (NY0026778), Belgrave (NY0026841), and the Village of Great Neck (NY0022128).															
Total Nitrogen	lb/d	12 MRA	Monitor	200.49	60/0	-	-	-	-	-	-	-	-	-	LISS TMDL
		Monthly Avg	Monitor	210.25	60/0	-	-	-	-	-	-	-	-	-	
	mg/L	Monthly Avg	Monitor	9.22	60/0	-	-	-	-	-	-	-	-	-	
The Long Island Sound Study (LISS) Management Conference has adopted "Phase III Actions for Hypoxia Management." The States of New York and Connecticut have jointly established the "Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound" which was approved by the U.S. Environmental Protection Agency (EPA) on April 5, 2001. Port Washington Water Pollution Control Plant (NY0026778) falls under Zone 10, following the zone's individual POTW and total CSO Waste Load Allocations (WLA). The total WLA for this facility is 237 lbs/day. These are the final Water Quality Based Effluent Limits based on the Waste Load Allocations in the TMDL.															
Nitrogen, Ammonia (as N)	mg/L	Monthly Avg	Monitor	8.08	24/36	-	-	-	-	-	-	-	-	-	LISS TMDL
		The Long Island Sound Study (LISS) Management Conference has adopted "Phase III Actions for Hypoxia Management." The States of New York and Connecticut have jointly established the "Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound" which was approved by the U.S. Environmental Protection Agency (EPA) on April 5, 2001. Port Washington Water Pollution Control Plant (NY0026778) falls under Zone 10, following the zone's individual POTW and total CSO Waste Load Allocations (WLA). These are the final Water Quality Based Effluent Limits based on the Waste Load Allocations in the TMDL.													
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 existing effluent quality of 9.81 mg/L (as NH ₃) was converted to 8.08 mg/l (as N).															
Nitrogen, TKN (as N)	mg/L	Monthly Avg	Monitor	5.12	47/13	-	-	-	-	-	-	-	-	-	LISS TMDL
		The Long Island Sound Study (LISS) Management Conference has adopted "Phase III Actions for Hypoxia Management." The States of New York and Connecticut have jointly established the "Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound" which was approved by the U.S. Environmental Protection Agency (EPA) on April 5, 2001. Port Washington Water Pollution Control Plant (NY0026778) falls under Zone 10, following the zone's individual POTW and total CSO Waste Load Allocations (WLA). These are the final Water Quality Based Effluent Limits based on the Waste Load Allocations in the TMDL.													

Outfall #	001	Description of Wastewater: Treated Sanitary Sewage													
		Type of Treatment: Screening, Grit Removal, Primary Clarification, Oxidation Ditch, Return Activated Sludge, UV Disinfection													
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 for WQBEL		
Nitrate (NO ₃) as N	mg/L	Monthly Avg	Monitor	5.31	58/2	-	-	-	-	-	-	-	-	-	LISS TMDL
	The Long Island Sound Study (LISS) Management Conference has adopted "Phase III Actions for Hypoxia Management." The States of New York and Connecticut have jointly established the "Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound" which was approved by the U.S. Environmental Protection Agency (EPA) on April 5, 2001. Port Washington Water Pollution Control Plant (NY0026778) falls under Zone 10, following the zone's individual POTW and total CSO Waste Load Allocations (WLAs). These are the final Water Quality Based Effluent Limits based on the Waste Load Allocations in the TMDL.														
Nitrite (NO ₂) as N	mg/L	Monthly Avg	Monitor	0.39	22/38	-	-	-	-	-	-	-	-	-	LISS TMDL
	The Long Island Sound Study (LISS) Management Conference has adopted "Phase III Actions for Hypoxia Management." The States of New York and Connecticut have jointly established the "Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound" which was approved by the U.S. Environmental Protection Agency (EPA) on April 5, 2001. Port Washington Water Pollution Control Plant (NY0026778) falls under Zone 10, following the zone's individual POTW and total CSO Waste Load Allocations (WLAs). These are the final Water Quality Based Effluent Limits based on the Waste Load Allocations in the TMDL.														
Additional Pollutants Detected															
Boron, Total	mg/L	-	-	0.14	1/0	-	-	-	0.04568	1	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation
	Boron, Total was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using a maximum reported effluent concentration of 0.14 mg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Calcium, Total	mg/L	-	-	30.7	2/0	-	-	-	-	-	-	-	-	-	No Limitation
	Calcium, Total was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Calcium, Total does not exist for Class SB waterbodies. Therefore, no WQBEL is specified.														
Manganese, Total	mg/L	-	-	0.023	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Manganese, Total was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Manganese, Total does not exist for Class SB waterbodies. Therefore, no WQBEL is specified.														

Outfall #	001	Description of Wastewater: Treated Sanitary Sewage														
		Type of Treatment: Screening, Grit Removal, Primary Clarification, Oxidation Ditch, Return Activated Sludge, UV Disinfection														
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 for WQBEL			
Potassium, Total	mg/L	-	-	13	1/0	-	-	-	-	-	-	-	-	-	-	No Limitation
Potassium, Total was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Potassium, Total does not exist for Class SB waterbodies. Therefore, no WQBEL is specified.																
Sodium Total	mg/L	-	-	104	1/0	-	-	-	-	-	-	-	-	-	-	No Limitation
Sodium, Total was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Sodium, Total does not exist for Class SB waterbodies. Therefore, no WQBEL is specified.																
Zinc, Total	mg/L	-	-	0.045	1/0	-	-	-	0.01468	0.066	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation	
Zinc, Total was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using a maximum reported effluent concentration of 0.045 mg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.																
Bromodichloro methane	µg/L	-	-	2.5	1/0	-	-	-	-	-	-	-	-	-	-	No Limitation
Bromodichloromethane was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Bromodichloromethane does not exist for Class SB waterbodies. Therefore, no WQBEL is specified.																
Chloroform, Total	µg/L	-	-	10.6	1/0	-	-	-	-	-	-	-	-	-	-	No Limitation
Chloroform, Total was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Chloroform, Total does not exist for Class SB waterbodies. Therefore, no WQBEL is specified.																
Total Dissolved Solids	mg/L	-	-	450	1/0	-	-	-	-	-	-	-	-	-	-	No Limitation
Total Dissolved Solids was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Total Dissolved Solids does not exist for Class SB waterbodies. Therefore, no WQBEL is specified.																
Cyanide, Total	µg/L	-	-	10.4	1/0	-	-	-	3.39	9000	H(FS)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation	
Cyanide, Total was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using a maximum reported effluent concentration of 10.4 µg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.																
Phenolics, Total Recoverable	µg/L	-	-	35.7	1/0	-	-	-	-	-	-	-	-	-	-	No Limitation
Phenolics, Total Recoverable was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Phenolics, Total Recoverable does not exist for Class SB waterbodies. Therefore, no WQBEL is specified.																

Permittee: Port Washington Water Pollution Control District
 Facility: Port Washington Water Pollution Control Plant
 SPDES Number: NY0026778
 USEPA Major/Class 05 Municipal

Date: April 7, 2023 v.1.15
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	001	Description of Wastewater: Treated Sanitary Sewage													
		Type of Treatment: Screening, Grit Removal, Primary Clarification, Oxidation Ditch, Return Activated Sludge, UV Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & QBELs						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. QBEL	Basis for QBEL		
Magnesium, Total	µg/L	-	-	13500	1/0	-	-	-	-	-	-	-	-	-	No Limitation
Magnesium, Total was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Magnesium, Total does not exist for Class SB waterbodies. Therefore, no QBEL is specified.															

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Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the factsheet 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 factsheet:

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 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 wasteload allocations (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, and/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 factsheet. Consistent with current case law⁷ and USEPA interpretation⁸ 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 and/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/or 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 Department 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.

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. 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 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 Department 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 Department 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 Department;
- 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 Department 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 Department 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.

A Watershed Maximum Daily Load (WMDL) may be developed by the Department to account for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments. The WMDL uses a simple dilution model, assuming full mix in the receiving stream, to calculate the maximum allowable pollutant load that can be discharged and still meet water quality standards during critical low flow in downstream segments such as those with sensitive receptors (e.g. public water supply) or higher water classification. WQBELs are established to ensure that the cumulative mass load from point source discharges does not exceed the maximum allowable load to ensure permit limits are protective of water quality.

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.

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 Department 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.

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