State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4941**	NAICS Code:	**221310**	SPDES Number:	**NY0313696**
Discharge Class (CL):	**04**			DEC Number:	**3-5534-00369**
Toxic Class (TX):	**N**			Effective Date (EDP):	**EDP**
Major-Sub Drainage Basin:	**17 - 02**			Expiration Date (ExDP):	**ExDP**
Water Index Number:	**ER - 3 - 38**	Item No.:	**935.6 - 41**	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:	**New York City Department of Environmental Protection**	Attention:	**Ana Barrio, Deputy Commissioner**		
Street:	**95-05 Horace Harding Expressway**				
City:	**Corona**	State:	**NY**	Zip Code:	**11368**
Email:	**abarrio@dep.nyc.gov**	Phone:	**(718)-595-3966**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																		
Name:	**Kensico Eastview Connection – Kensico Campus**																	
Address / Location:	**20 Westlake Drive**												County:	**Westchester**				
City:	**Mount Pleasant**							State:	**NY**				Zip Code:	**10595**				
Facility Location:		Latitude:	**41**	°	**05**	’	**14.30**	” N	& Longitude:	**73**	°	**46**	’	**30.59**	” W			
Primary Outfall No.:	**001**	Latitude:	**41**	°	**05**	’	**16.22**	” N	& Longitude:	**73**	°	**46**	’	**39.14**	” W			
Wastewater Description:	**Treated Construction Wastewater**	Receiving Water:	**Clove Brook**					NAICS:	**221310**	Class:	**C**		Standard:	**C(TS)**				

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

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

DISTRIBUTION:
BWP Permit Coordinator (permit.coordinator@dec.ny.gov)
BWP Permit Writer
RWE
RPA
EPA Region II (Region2_NPDES@epa.gov)

Permit Administrator:	
Address:	21 S. Putt Corners Road, New Paltz, NY 12561
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 DEC.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Range	The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See DEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Treated Construction Wastewater	Clove Brook	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	MGD			Continuous	Meter		X	
pH	Daily Minimum	6.5	SU			3/Week	Grab		X	
	Daily Maximum	8.5	SU							
Temperature	Daily Maximum	Monitor	ºF			3/Week	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	15	mg/L			3/Week	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			3/Week	Grab		X	
Total Aluminum	Daily Maximum	6.1	mg/L			3/Week	Grab		X	
Total Iron	Daily Maximum	1.2	mg/L			3/Week	Grab		X	
Oil and Grease	Daily Maximum	10	mg/L			3/Week	Grab		X	

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

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

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

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

NYSDEC Division of Water Regional Office Address:

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

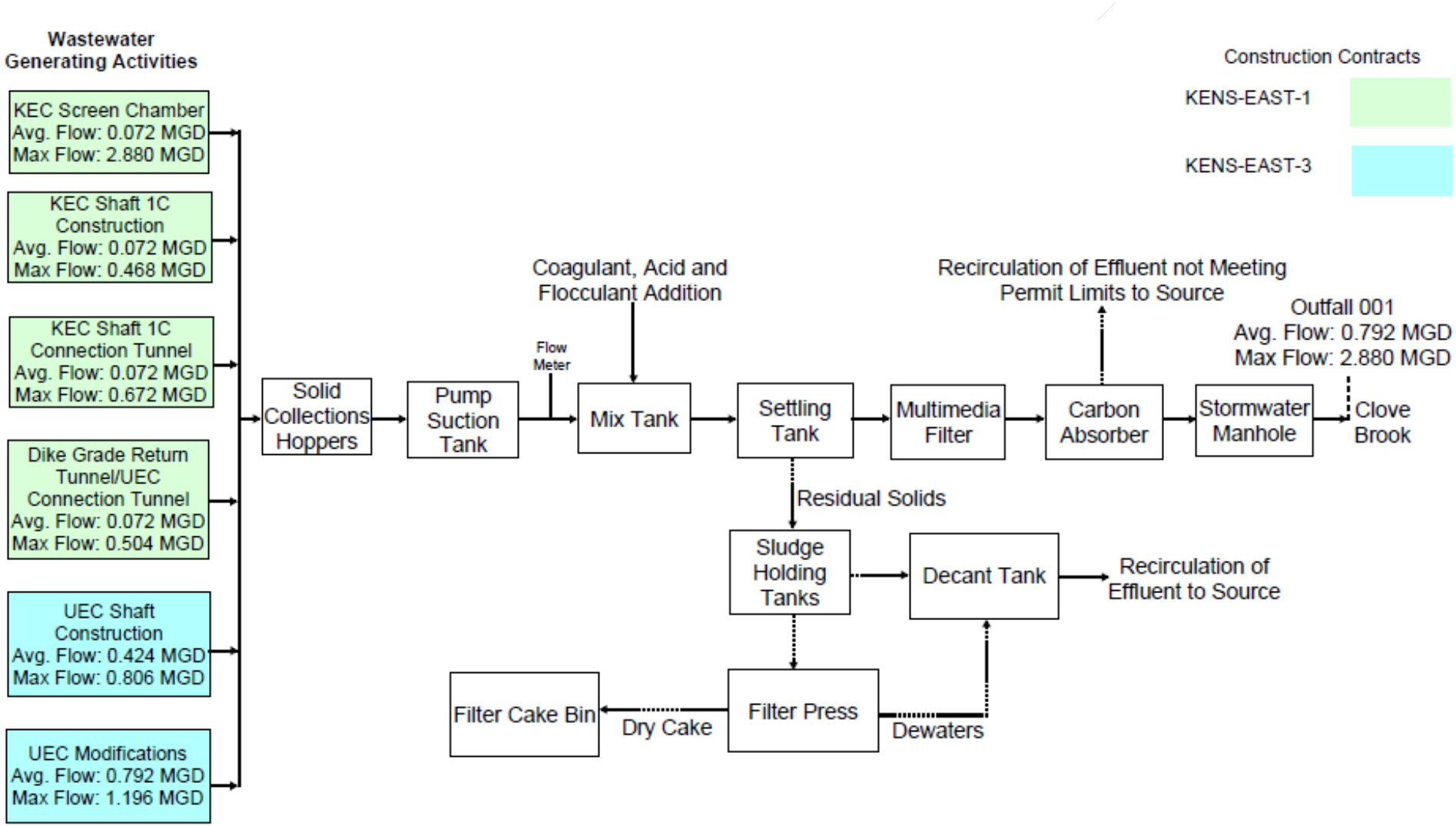
(e) The permittee shall provide for public review at the business office repository of the permittee or at the off-premises location of its choice, provided the custodian of the off-premise location grants written permission, (such off-premise location shall be the village, town, city or county clerk's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

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

MONITORING LOCATIONS

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

Effluent: at the carbon absorber



GENERAL REQUIREMENTS

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

B. General Conditions

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

C. Operation and Maintenance

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

D. Monitoring and Records

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

E. Reporting Requirements

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

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

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

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

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

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

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

Department of Environmental Conservation
Regional Water Engineer, Region 3
220 White Plains Road, Suite 110, Tarrytown, New York, 10591, Phone: (914) 803-8157
DOW.R3@dec.ny.gov

C. Annual SPDES Monitoring Reports: An annual report shall be submitted to DEC by February 1st each year. The report shall summarize information for January to December of the previous year and shall be submitted electronically, or in hardcopy format, utilizing the SPDES Annual Report Form available on the DEC's website.

D. Schedule of Additional Submittals:

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

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	EMERGING CONTAMINANT SHORT-TERM MONITORING The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfalls for Per-and Polyfluoroalkyl Substances (PFAS) utilizing EPA analytical method 1633 and 1,4-Dioxane (1,4-D) utilizing EPA Method 8270D SIM or 8270E SIM. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a monthly basis for at least three (3) consecutive months. The results shall be reported through the "Emerging Contaminants Survey for Industrial Facilities" found at: Emerging Contaminants In NY's Waters - NYSDEC. Please utilize the link above to access the chain of custody template, monitoring template for laboratories, and monitoring template instructions for laboratories. For each month, please fill out the chain of custody template to reflect the required analytical sampling for each outfall using the correct sample naming convention (example provided in the form). The chain of custody, monitoring template, and monitoring template instructions should then be provided to the laboratory. The laboratory should complete the monitoring template, utilizing EQuIS EDD format, for each month of sampling. The completed chain of custody, monitoring template, and PDF laboratory reports should be submitted with the Emerging Contaminants Survey. The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for Industrial Facilities" available at the above link. The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	EDP + 6 months Within 90 days of DEC written notification
	REPORT, PLANS, SPECIFICATIONS, AND CONSTRUCTION SCHEDULE The permittee shall submit a Basis of Design Report, plans, specifications, and a construction schedule for the treatment system for Department review and approval. The documents must be prepared and stamped by a Professional Engineer licensed to practice in New York State.	Prior to Start-up
	NOTIFICATION OF START DATE ("START-UP") The permittee shall provide the Department with the proposed start date for the treatment system. This date will be used to establish the start of compliance reporting. Notice can be provided via email to NetDMR@dec.ny.gov.	30 Days Prior to Start-up
001	ANNUAL EFFLUENT DATA SUMMARY Within 90 days following the end of each calendar year, the permittee shall submit an annual effluent data summary to the Regional Water Engineer at the address listed in the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS PAGE and to the Bureau of Water Permits, 4th Floor, 625 Broadway, Albany NY 12233-3505. The summary shall be submitted electronically in a spreadsheet format acceptable to the DEC showing all analytical results and flow monitoring results for samples collected the previous year.	Annually on February 1st
001	CONFIRMATORY MERCURY SAMPLE The permittee shall collect one (1) sample representative of normal discharge conditions and treatment operations for mercury. The permittee shall use EPA analytical method 1631E for the determination of the concentrations of mercury. The permittee shall submit a summary of the results.	Start-up + 6 months

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	SHORT-TERM HIGH-INTENSITY MONITORING PROGRAM The permittee shall collect 6 samples representative of normal discharge conditions and treatment operations over a 6-week period for total chromium, total copper, and total zinc. The permittee shall use approved EPA analytical method with the lowest possible detection limit as promulgated under 40 CFR Part 136 for the determination of the concentrations of parameters listed. The permittee shall submit a summary of the results.	EDP + 2 months
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be submitted with the annual monitoring report.	Annually on February 1st

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

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

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

G. 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.

H. 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
New York City Department of Environmental Protection
Kensico Eastview Connection – Kensico Campus
NY0313696

Contents

Summary of Permit Changes 3
Administrative History 3
Facility Information 3
Site Overview 5
Existing Effluent Quality 8
Interstate Water Pollution Control Agencies 9
Receiving Water Information 9
Impaired Waterbody Information 9
Critical Receiving Water Data 9
Permit Requirements 10
Whole Effluent Toxicity (WET) Testing 10
Antidegradation 10
Discharge Notification Act Requirements 10
Stormwater Pollution Prevention Requirements 10
Emerging Contaminant Monitoring 10
Schedule of Additional Submittals 11
OUTFALL AND RECEIVING WATER SUMMARY TABLE 12
POLLUTANT SUMMARY TABLE 12
Outfall 001 12
Appendix: Regulatory and Technical Basis of Permit Authorizations 15
Regulatory References 15
Outfall and Receiving Water Information 15
Interstate Water Pollution Control Agencies 16
Existing Effluent Quality 16
Permit Requirements 16

Summary of Permit Changes

A new State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Kensico Eastview Connection – Kensico Campus. The changes to the permit are summarized below:

- Added a new Permit Limits, Levels, and Monitoring table with effluent limits effective on the permit effective date for Outfall 001
  - Added monthly average monitor only limit for Flow
  - Added daily minimum limit of 6.5 SU for pH
  - Added daily maximum limit of 8.5 SU for pH
  - Added daily maximum monitor only limit for Temperature
  - Added daily maximum limit of 15 mg/L for Total Suspended Solids (TSS)
  - Added daily maximum limit of 0.1 mL/L for Settleable Solids
  - Added daily maximum limit of 6.1 mg/L for Total Aluminum
  - Added daily maximum limit of 1.2 mg/L for Total Iron
  - Added daily maximum limit of 10 mg/L for Oil and Grease
- Added a new Monitoring Location schematic
- Added a Schedule of Additional Submittals including the following items:
  - Emerging Contaminant Short-Term Monitoring
  - Report, Plans, Specifications, and Construction Schedule
  - Notification of Start Date (“Start-Up”)
  - Annual Effluent Data Summary
  - Short-Term, High-Intensity Monitoring Program for total chromium, total copper, and total zinc
  - Confirmatory Mercury Sample
  - Water Treatment Chemical (WTC) Annual Report Form

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

Administrative History

11/25/2025 The New York City Department of Environmental Protection (NYCDEP) submitted a NY-2C permit application.

3/13/2026 The New York State Department of Environmental Conservation (NYSDEC) issued a Notice of Incomplete Application (NOIA).

5/4/2026 The NYCDEP submitted an updated NY-2C permit application.

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

Facility Information

This is an industrial facility (SIC code 4941) that produces potable drinking water.

The permittee is undertaking the Kensico-Eastview Connection (KEC) Project which involves the construction of a new, additional water conveyance tunnel between the Kensico Reservoir and the Catskill/Delaware Ultraviolet Disinfection (CDUV) Facility. Kensico Campus is one of the two

project locations which will undergo construction and is located immediately adjacent to and west of the Kensico Reservoir. The other project location is the Eastview site which is covered under a separate SPDES permit.

Construction activities at Kensico Campus include construction of the Upper Effluent Chamber (UEC) Shaft (or Starter Shaft), UEC Connection Tunnel, and Dike Grade Return Tunnel, and KEC Shaft 1C Connection Tunnel; construction of KEC Shaft 1C; construction of the proposed KEC Screen Chamber; UEC modifications; and shoreline stabilization.

Discharge of treated wastewaters is proposed to be to Clove Brook through one of two existing outfalls. Outfall 001 would discharge treated construction wastewaters from Kensico Campus activities located north of Westlake Drive. Initial wastewaters would result from construction activities associated with the KEC Shaft 1C, KEC Screen Chamber, UEC Connection Tunnel, Dike Grade Return Tunnel, and KEC Shaft 1C Connection Tunnels. Additional flows would subsequently be contributed by additional construction associated with the UEC Shaft and Starter Tunnel and UEC Modifications. Construction wastewater generating activities take place sequentially with some overlap such that the proposed maximum effluent flowrate for Outfall 001 is 2.88 MGD.

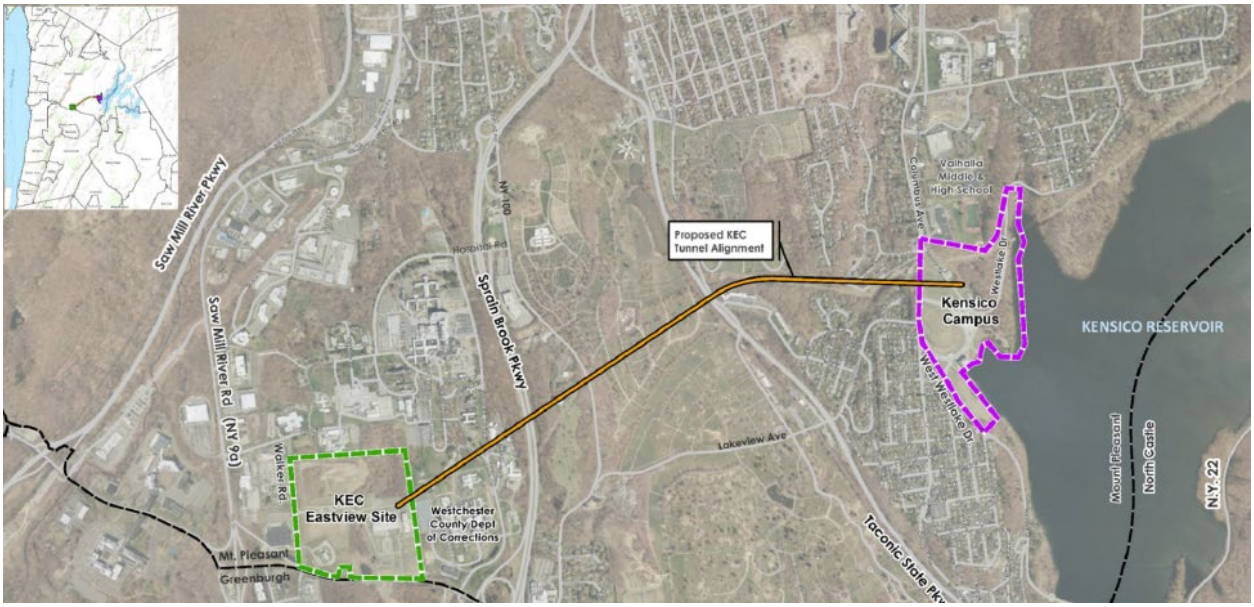
Outfall 002 is proposed to be used for discharges primarily related to shoreline stabilization and dredging activities. The estimated volumes and disposition of wastewaters to be discharged via Outfall 002 are still being assessed by NYCDEP. However, the flowrates and pollutants of concern for this outfall must be adequately characterized for this outfall to be permitted. NYCDEP must submit a permit modification and adequately characterize the flowrates and pollutants of concern for Outfall 002 if it becomes necessary to include this outfall in the permit.

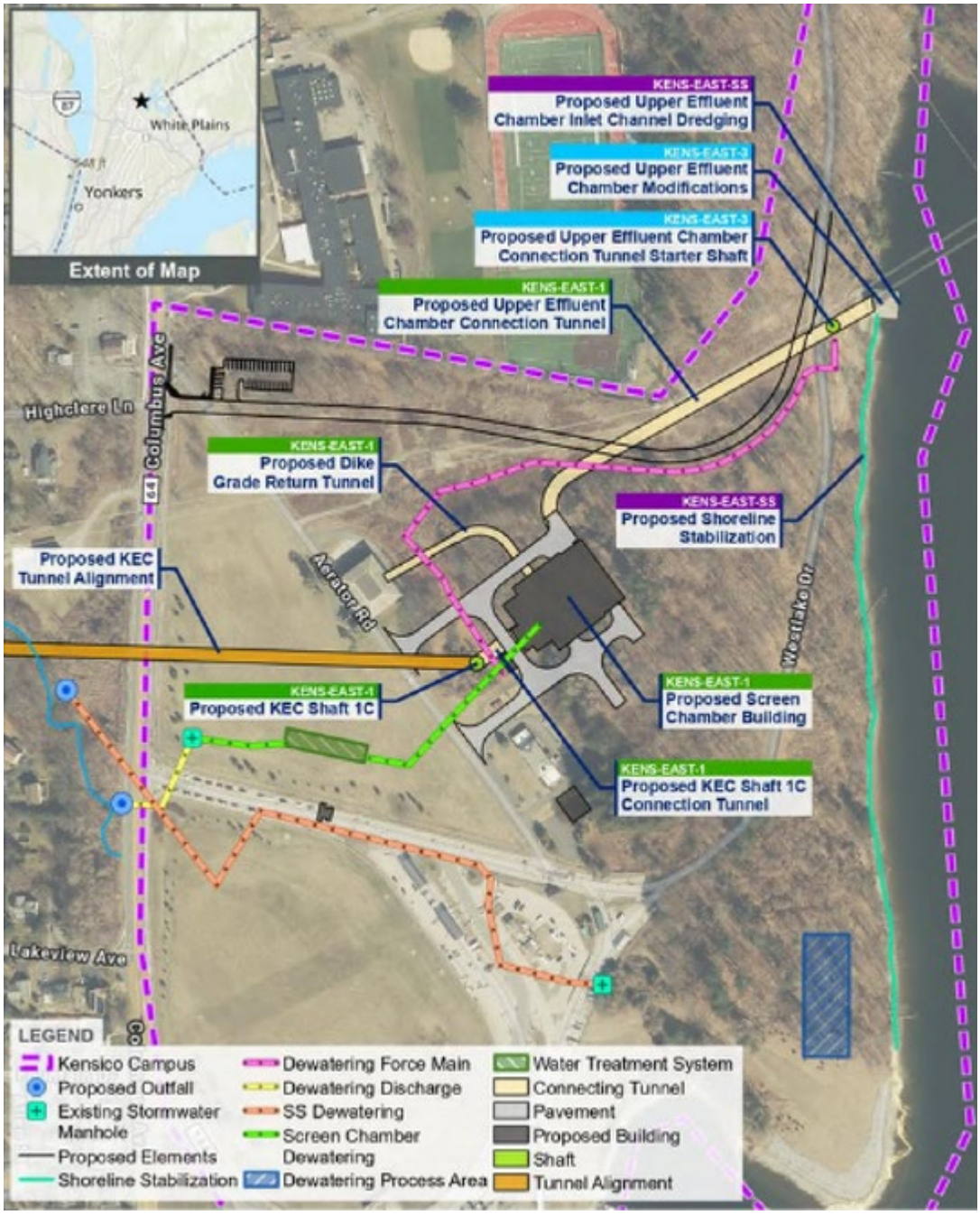
The proposed treatment system is the same for both outfalls and includes the following treatment units:

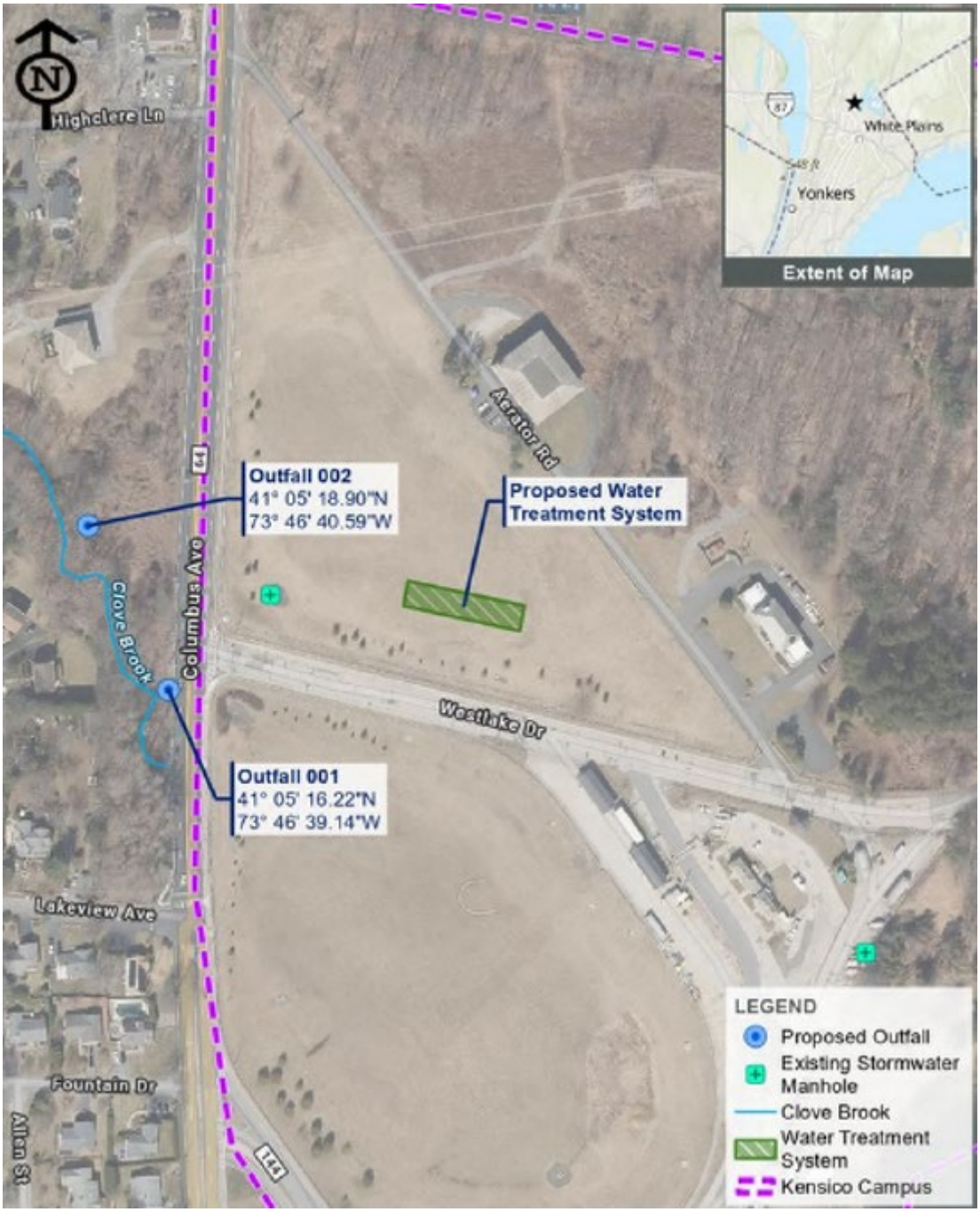
- Solids Collection Hoppers
- Chemical Flocculant/Coagulant Addition
- pH Adjustment
- Multimedia Filter
- Settling Tanks
- Carbon Absorber
- Sludge Holding Tanks
- Filter Press

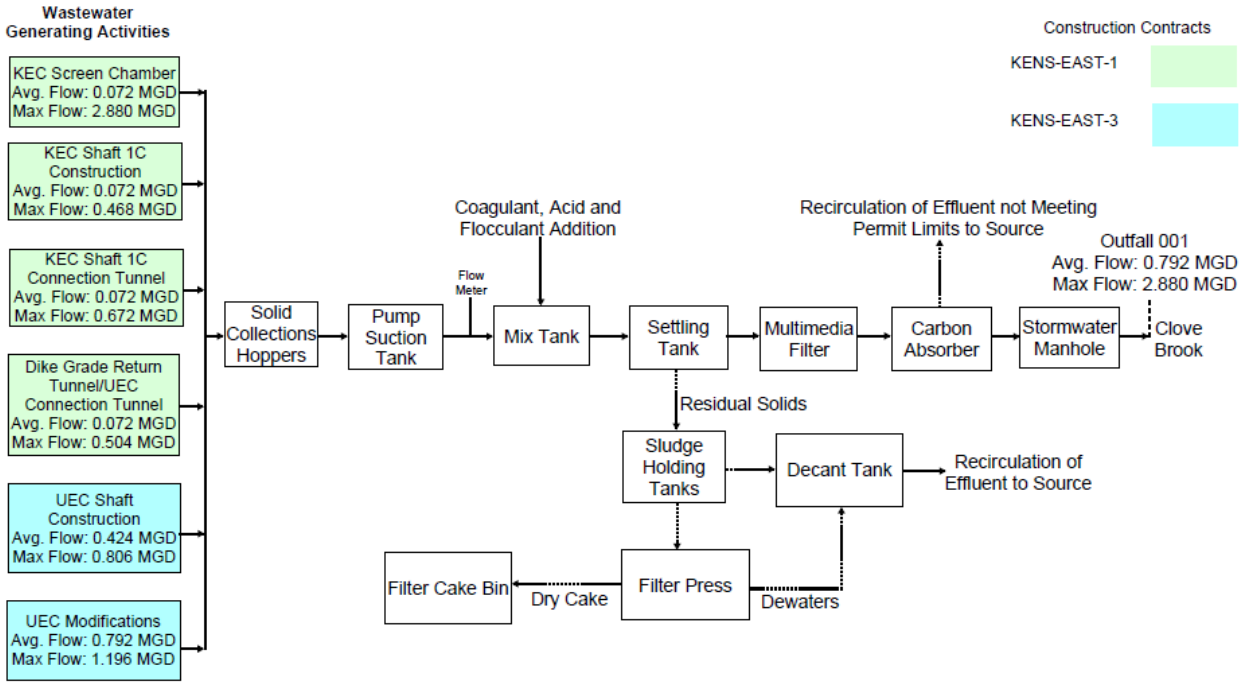
For both outfalls, it is proposed that sludge from the settling tanks will be directed to a series of sludge holding tanks. Water will be decanted from the holding tanks, and the solids will be pumped to a filter press which will generate a dry filter cake that will be hauled to and disposed of at a licensed and permitted disposal facility.

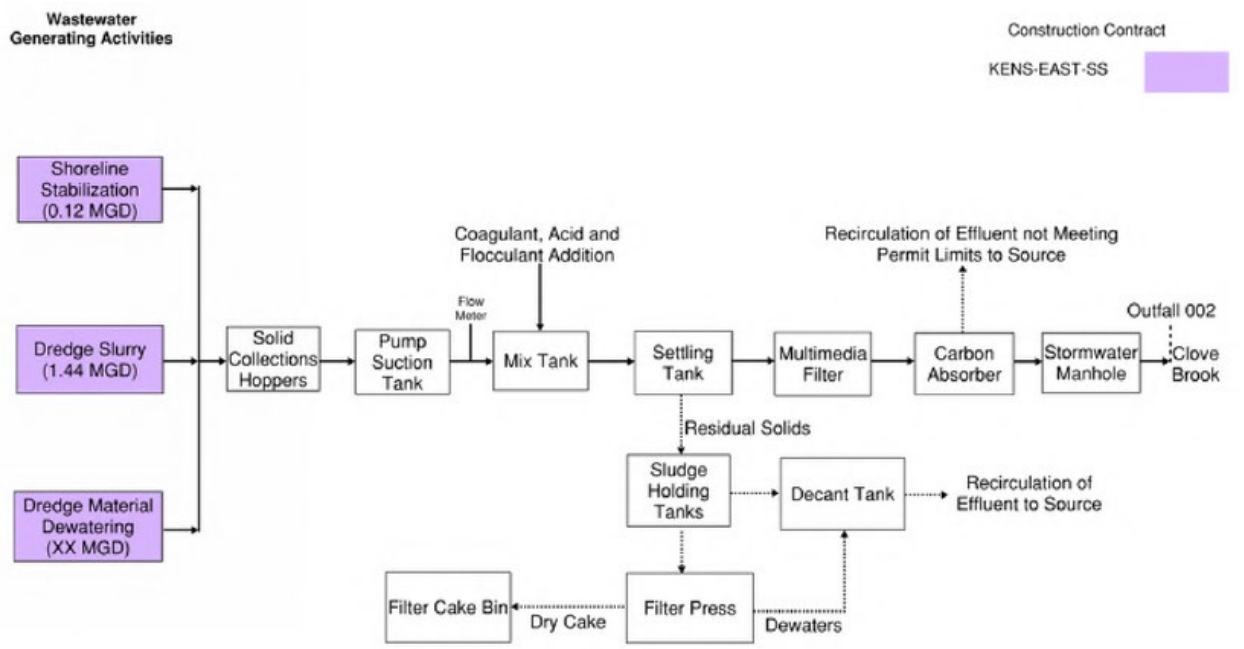
Site Overview




White Plains
Yonkers
Extent of Map
KENS-EAST-SS
Proposed Upper Effluent Chamber Inlet Channel Dredging
KENS-EAST-3
Proposed Upper Effluent Chamber Modifications
KENS-EAST-3
Proposed Upper Effluent Chamber Connection Tunnel Starter Shaft
KENS-EAST-1
Proposed Upper Effluent Chamber Connection Tunnel
Highclere Ln
Columbus Ave
KENS-EAST-1
Proposed Dike Grade Return Tunnel
KENS-EAST-SS
Proposed Shoreline Stabilization
Proposed KEC Tunnel Alignment
Aerator Rd
Westlake Dr
KENS-EAST-1
Proposed KEC Shaft 1C
KENS-EAST-1
Proposed Screen Chamber Building
KENS-EAST-1
Proposed KEC Shaft 1C Connection Tunnel
Lakeview Ave
LEGEND
Kensico Campus
Proposed Outfall
Existing Stormwater Manhole
Proposed Elements
Shoreline Stabilization
Dewatering Force Main
Dewatering Discharge
SS Dewatering
Screen Chamber Dewatering
Dewatering Process Area
Water Treatment System
Connecting Tunnel
Pavement
Proposed Building
Shaft
Tunnel Alignment


N
Highclere Ln
Aerator Rd
Outfall 002
41° 05' 18.90"N
73° 46' 40.59"W
Proposed Water Treatment System
Clove Brook
Columbus Ave
Westlake Dr
Outfall 001
41° 05' 16.22"N
73° 46' 39.14"W
Lakeview Ave
Fountain Dr
Allen St
White Plains
Yonkers
Extent of Map
LEGEND
Proposed Outfall
Existing Stormwater Manhole
Clove Brook
Water Treatment System
Kensico Campus





Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from the application submitted by the permittee. Appendix Link

Interstate Water Pollution Control Agencies

Outfalls 001 and 002 are located within the Interstate Environmental Commission (IEC) compact area. Appendix Link

Receiving Water Information

The facility proposes to discharge via the following outfall:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4941	Treated Construction Wastewater	Clove Brook, Class C(TS)

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

Impaired Waterbody Information

The Clove Brook segment (PWL No. 1702-0113) discharges to the Long Island Sound watershed. The Long Island Sound was listed on the 1992 New York State Section 303(d) List of Impaired/TMDL Waters as impaired due to dissolved oxygen. On December 2000, a TMDL was approved for the Long Island Sound. The TMDL addresses the following pollutant to address the dissolved oxygen impairment: total nitrogen. Total nitrogen is not expected to be present in this facility's discharge. Therefore, the discharges from this facility are not subject to any wasteload allocations (WLA) part of the TMDL.

Critical Receiving Water Data

Reach Description: Clove Brook (ER-3-38) is a tributary of the Bronx River. The segment of Clove Brook at the point of discharge is classified as C(TS) (6 NYCRR 935.6-41 – Table I – Item 41).

The low flow condition for the Clove Brook was obtained from a drainage basin ratio analysis with USGS gage station 01302000, Bronx River at Bronxville NY located approximately 12.6 miles downstream. The 7Q10 and 30Q10 flows at the gage were found from the USGS Hydrologic Toolbox software and an analysis of data from 1960 to 1989. The 1Q10 flow was estimated as half the 7Q10.

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

DRAINAGE BASIN RATIO	**1Q10**	**7Q10**	**30Q10**
Gage Name	Bronx River at Bronxville NY		
Gage ID Number	01302000		
Low Flow at Gage (cfs)		4.5496	7.0455
Drainage Area at Gage (mi^2)	43.9	43.9	43.9
Drainage Area at Facility (mi^2)	0.14	0.14	0.14
Drainage Basin Ratio (facility / gage)	0.0032	0.0032	0.0032
Calculated Flow at Facility (cfs)	0.0073	0.015	0.022

The 7Q10 low-flow condition of the Clove Brook was found to be 0.015 CFS. The effluent discharge will dominate the streamflow, so there will be little to no streamflow available for dilution. Therefore, the water quality standards have been applied as end-of-pipe limitations with no mixing or dilution, and acute, chronic, and HEW dilution ratios of 1:1 have been applied.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	1:1	1:1	1:1	Effluent-dominated stream

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

None of the seven criteria that are indicative of potential toxicity are applicable to this facility; therefore, WET testing has not been included in the permit. 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)[1] 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 new.

Stormwater Pollution Prevention Requirements

The facility discharges stormwater associated with industrial activity and requires SPDES permit coverage under 40 CFR 122.26(a)(6).

Stormwater discharges at this facility are required to obtain coverage under the current Construction General Permit (CGP) Sector (GP-0-25-001).

Emerging Contaminant Monitoring

Pursuant to 6 NYCRR 750-1.13(b), the permit includes a short-term monitoring program listed in the Schedule of Additional Submittals to evaluate the influent and effluent discharge levels of Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane. This monitoring program is consistent with guidance released in EPA guidance memos dated April 28, 2022, and December 5, 2022.

The DEC will review the monitoring results and pursuant to 6 NYCRR 750-2.1(i) may notify the permittee of the need for further monitoring to identify potential sources as specified in the Emerging Contaminants Investigation Checklist for Industrial Facilities to determine whether cause exists to modify the permit to incorporate a pollutant minimization program per 6 NYCRR 750-1.14(f).
Appendix Link

[1] As prescribed by 6 NYCRR Part 617

Schedule of Additional Submittals

Emerging Contaminant Short-term Monitoring

Pursuant to 6 NYCRR 750-1.13(b), the permit includes a short-term monitoring program. On a quarterly basis for at least four consecutive quarters, the permittee shall collect, under normal discharge conditions, grab samples of both the influent and effluent for PFAS and 1,4-dioxane analysis using EPA Method 1633/1633A and EPA Method 8270D SIM or 8270E SIM, respectively. Results must be reported through the "Emerging Contaminants Survey for POTWs" and on the provided monitoring template, which can be found at this link: Emerging Contaminants In NY's Waters - NYSDEC. Please see Emerging Contaminant Monitoring above for more information.

Report, Plans, Specifications, and Construction Schedule

Pursuant to 6 NYCRR 750-2.10, prior to construction of the new waste disposal system, permittee shall submit a Basis of Design Report, plans, specifications, and a construction schedule for the treatment system for Department review and approval. The documents must be prepared and stamped by a Professional Engineer licensed to practice in New York State.

Notification of Start Date ("Start-Up")

The permittee shall provide the Department with the proposed start date for the treatment system. This date will be used to establish the start of compliance reporting.

Annual Effluent Data Summary

Within 90 days following the end of each calendar year, the permittee shall submit an annual effluent data summary to the Regional Water Engineer and to the Bureau of Water Permits. The summary shall be submitted electronically in a spreadsheet format acceptable to the DEC showing all analytical results and flow monitoring results for samples collected the previous year.

Confirmatory Mercury Sample

In accordance with 6 NYCRR 750-1.13(a), the permittee shall be subject to monitoring requirements to determine compliance with water quality standards. The permittee submitted a Conditional Exclusion Form on 2/17/2026, certifying the facility does not have a mercury source as listed in Part III.E. of the Multiple Discharge Variance (MDV). However, as a new discharger, the facility was unable to sample for mercury during the application process. Consistent with the Conditional Exclusion Form, one mercury sample will be required.

Short-Term, High Intensity Monitoring Program

In accordance with 6 NYCRR 750-1.13(a), the permittee shall be subject to monitoring requirements to determine compliance with water quality standards. Consistent with TOGS 1.2.1, where limited data is available to confirm the presence or absence of a parameter in an outfall, a short-term, high intensity monitoring program may be used. Please see the Pollutant Summary Table below for more information.

WTC Annual Report

In accordance with 6 NYCRR 750-2.1(i), the permit requires submission of an annual report each year that the permittee uses and discharges WTCs. The permittee must summarize all WTC use for the prior calendar year, January 1 through December 31, and attach it either to the December DMR or annual monitoring report required by the permit. More information is located on the DEC's website under SPDES Permitting of Water Treatment Chemicals.

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/L)	1Q10 (CFS)	7Q10 (CFS)	30Q10 (CFS)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	41° 05' 16.22" N	73° 46' 39.14" W	Clove Brook	C(TS)	ER-3-38 PWL: 1702-0113	17/02	66[2]	0.0073	0.015	0.022	2.88	1:1	1:1	1:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated Construction Wastewater													
		Type of Treatment: Chemical Flocculation/Coagulation, pH Adjustment, Filtration, Settling, Carbon Absorption, Filter Press													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: Existing discharge data was obtained from the application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent. The technology based effluent limitations (TBELs) were developed from TOGS 1.2.1 Attachment C for category B (lime, settle & filter), category H (carbon), and category J (miscellaneous) treatment systems.															
Flow Rate	MGD	Monthly Avg	-	2.88 Estimated	-	**Monitor**	750-1.13 Monitor	No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow monitoring has been continued for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	-	6.5 Estimated	-	6.0	TOGS 1.2.1	7.0[2]	-	6.5 – 8.5	Range	**6.5 - 8.5**	703.3	-	WQBEL
		Maximum	-	8.5 Estimated	-	9.0									
	The WQBEL has been applied as an end-of-pipe limitation with no mixing or dilution because the effluent discharge will dominate the streamflow.														
Temperature	°F	Daily Max	-	-	-	**Monitor**	750-1.13 Monitor	-	(Trout): No discharge at a temperature over 70F (21C) shall be permitted at any time to streams classified for trout				704.2	-	Monitor
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required to determine compliance with the water quality standard.														

[2] Ambient hardness and ambient pH were established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the RIBS Data Portal.

Outfall #	001	**Description of Wastewater:** Treated Construction Wastewater													
		Type of Treatment: Chemical Flocculation/Coagulation, pH Adjustment, Filtration, Settling, Carbon Absorption, Filter Press													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Total Suspended Solids (TSS)	mg/L	Daily Max	-	15 Estimated	-	**15**	TOGS 1.2.1	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C.														
Settleable Solids	mL/L	Daily Max	-	-	-	**0.1**	TOGS 1.2.1	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	TBEL
	Consistent with TOGS 1.2.1, the TBEL reflects the available treatment technology listed in Attachment C. The permittee indicated the use of sedimentation, therefore, the TBEL is appropriate.														
Additional Pollutants															
Total Aluminum	mg/L	Daily Max	-	3.57	1/0	**6.1**	TOGS 1.2.1	-	-	-	-	-	TOGS 1.3.1E	-	TBEL
	Consistent with TOGS 1.2.1, the TBEL reflects the available treatment technology listed in Attachment C. Consistent with TOGS 1.3.1E, when the receiving water pH is 6.5 or greater, TBELs for total aluminum are adequate to meet water quality standards.														
Total Iron	mg/L	Daily Max	-	4.77	1/0	**1.2**	TOGS 1.2.1	-	-	-	-	-	-	-	TBEL
	Consistent with TOGS 1.2.1, the TBEL reflects the available treatment technology listed in Attachment C.														
Oil and Grease	mg/L	Daily Max	-	15 Estimated	-	**10**	TOGS 1.2.1	-	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				703.2	-	TBEL
	Consistent with TOGS 1.2.1, the TBEL reflects the available treatment technology listed in Attachment C.														
Total Chromium	mg/L	Daily Max	-	0.011	1/0	0.37	TOGS 1.2.1	-	0.059	0.053	A(C)	0.061	703.5	-	**STHIM**
	The projected instream concentration was calculated using the maximum reported effluent concentration of 0.011 mg/L, a multiplier of 6.2, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.163 was also applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified. The WQBEL is specified as an end-of-pipe limitation with no mixing or dilution because the effluent discharge will dominate the streamflow. Very limited data is available to confirm the presence or absence of this parameter and evaluate reasonable potential to cause or contribute to a water quality standard (WQS) violation. Consistent with TOGS 1.2.1, short-term high-intensity monitoring (STHIM) is being required for this parameter to generate the data necessary to perform a future reasonable potential analysis. See the Schedule of Additional Submittals.														

Outfall #	001	**Description of Wastewater:** Treated Construction Wastewater **Type of Treatment:** Chemical Flocculation/Coagulation, pH Adjustment, Filtration, Settling, Carbon Absorption, Filter Press														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis			
Total Copper	mg/L	Daily Max	-	0.0262	1/0	1.3	TOGS 1.2.1	-	0.16	0.0063	A(C)	0.0065	703.5	-	**STHIM**	
	The projected instream concentration was calculated using the maximum reported effluent concentration of 0.0262 mg/L, a multiplier of 6.2, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.042 was also applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified. The WQBEL is specified as an end-of-pipe limitation with no mixing or dilution because the effluent discharge will dominate the streamflow. Very limited data is available to confirm the presence or absence of this parameter and evaluate reasonable potential to cause or contribute to a water quality standard (WQS) violation. Consistent with TOGS 1.2.1, short-term high-intensity monitoring (STHIM) is being required for this parameter to generate the data necessary to perform a future reasonable potential analysis. See the Schedule of Additional Submittals.															
Total Zinc	mg/L	Daily Max	-	0.021	1/0	1.0	TOGS 1.2.1	-	0.13	0.058	A(C)	0.059	703.5	-	**STHIM**	
	The projected instream concentration was calculated using the maximum reported effluent concentration of 0.021 mg/L, a multiplier of 6.2, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.014 was also applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL has been specified. The WQBEL is specified as an end-of-pipe limitation with no mixing or dilution because the effluent discharge will dominate the streamflow. Very limited data is available to confirm the presence or absence of this parameter and evaluate reasonable potential to cause or contribute to a water quality standard (WQS) violation. Consistent with TOGS 1.2.1, short-term high-intensity monitoring (STHIM) is being required for this parameter to generate the data necessary to perform a future reasonable potential analysis. See the Schedule of Additional Submittals.															
Chloroform	ug/L	Daily Max	-	1.3	1/0	100	TOGS 1.2.1	-	-	-	-	-	-	-	**No Limitation**	
	Consistent with TOGS 1.2.1, the TBEL reflects the available treatment technology listed in Attachment C. The maximum reported effluent concentration is below the TBEL. Therefore, no limitation or monitoring has been specified.															
Total Barium	mg/L	Daily Max	-	0.0542	1/0	1.2	TOGS 1.2.1	-	-	-	-	-	-	-	**No Limitation**	
	Consistent with TOGS 1.2.1, the TBEL reflects the available treatment technology listed in Attachment C. The maximum reported effluent concentration is below the TBEL. Therefore, no limitation or monitoring has been specified.															
Total Magnesium	mg/L	Daily Max	-	8.06	1/0	-	-	-	-	-	-	-	-	-	**No Limitation**	
	There is no numeric WQS or numeric GV for translation of the narrative WQS for Total Magnesium name for Class C waterbodies. Therefore, no limitation or monitoring has been specified.															
Total Manganese	mg/L	Daily Max	-	0.237	1/0	0.30	TOGS 1.2.1	-	-	-	-	-	-	-	**No Limitation**	
	Consistent with TOGS 1.2.1, the TBEL reflects the available treatment technology listed in Attachment C. The maximum reported effluent concentration is below the TBEL. Therefore, no limitation or monitoring has been specified.															

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

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

Interstate Water Pollution Control Agencies

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

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Antidegradation Policy

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

Effluent Limitations

In developing a permit, the DEC determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed

to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

Best Professional Judgement (BPJ)

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

Water Quality-Based Effluent Limitations (WQBELs)

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

Mixing Zone Analyses

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

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

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

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

2) identify water quality criteria applicable to these pollutants;

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

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

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

For carbonaceous and nitrogenous oxygen demanding pollutants, the DEC uses a model which incorporates the Streeter-Phelps equation. The equation relates the decomposition of inorganic

and organic materials along with oxygen reaeration rates to compute the downstream dissolved oxygen concentration for comparison to water quality standards.

The Division of Water has been using the TMDL approach in permit limit development for the control of toxic substances. Since the early 1980's, the loading capacity for specific pollutants has been determined for each drainage basin. Water quality-limiting segments and pollutants have been identified, TMDLs, wasteload allocations and load allocations have been developed, and permits with water quality-based effluent limits have been issued. In accordance with TOGS 1.3.1, the Division of Water implements a Toxics Reduction Strategy which is committed to the application of the TMDL process using numeric, pollutant-specific water quality standards through the Watershed Approach. The Watershed Approach accounts for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments.

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 6 NYCRR 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

Emerging Contaminants

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial products as well as in manufacturing processes for decades. Based on available research, water quality assessments for 1,4-D will follow existing WQBEL development. PFOA and PFOS do not break down easily; therefore, their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: Emerging Contaminants In NY's Waters - NYSDEC.

Schedule(s) of Additional Submittals

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