State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**2951**	NAICS Code:	**324121**	SPDES Number:	**NY0277398**
Discharge Class (CL):	**04**			DEC Number:	**2-6302-00138/00039**
Toxic Class (TX):	**N**			Effective Date (EDP):	**TBD**
Major-Sub Drainage Basin:	**17-02**			Expiration Date (ExDP):	**TBD**
Water Index Number:	**(MW2.5) ER-LI-12**	Item No.:	**935.6 - 6**	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 Transportation (NYCDOT)**	Attention:	**Anthony Bordenca, Asphalt Operations Director**		
Street:	**55 Water Street, 4th Floor**				
City:	**New York**	State:	**NY**	Zip Code:	**10041**
Email:	**abordenca@dot.nyc.gov**	Phone:	**(212) 839-2355**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																
Name:	**NYC DOT - HARPER STREET ASPHALT PLANT**															
Address / Location:	**131-21 Northern Boulevard**											County:	**Queens**			
City:	**Queens**						State:	**NY**				Zip Code:	**11368**			
Facility Location:		Latitude:	**40**	°	**45**	’	**48.8**	” N	& Longitude:	**75**	°	**50**	’	**17.5**	” W	
Primary Outfall No.:	**001 (BB-988)**	Latitude:	**40**	°	**45**	’	**47**	” N	& Longitude:	**73**	°	**50**	’	**15**	” W	
Wastewater Description:	**Treated Groundwater**	Receiving Water:	**Flushing Creek/Bay**				NAICS:	**324121**	Class:	**I**		Standard:	I			

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)
IEC
NYCDOHMH

Permit Administrator:	Caitlyn P. Nichols
Address:	47-40 21st Street, Long island City, NY 11101
Signature	Date

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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 (BB-988)	Treated Groundwater	Flushing Creek/Bay	DRAFT	DRAFT

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Daily Maximum	0.19	MGD			Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU			Daily	Grab		X	
	Daily Maximum	9.0	SU							
Total Suspended Solids (TSS)	Monthly Average	20	mg/L			Monthly	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	40	mg/L			Monthly	Grab		X	
Oil & Grease	Monthly Average	15	mg/L			Monthly	Grab		X	
Total Mercury	Daily Minimum	50	ng/L			Monthly	Grab		X	
Total Copper	Daily Maximum	33.74	ug/L			Monthly	Grab		X	
Total Lead	Daily Maximum	42.08	ug/L			Monthly	Grab		X	
Total Nickel	Daily Maximum	41.41	ug/L			Monthly	Grab		X	
Total Zinc	Daily Maximum	348.81	ug/L			Monthly	Grab		X	
Total Aluminum	Daily Maximum	6100	ug/L			Monthly	Grab		X	
Total Iron	Daily Maximum	1200	ug/L			Monthly	Grab		X	
ACTION LEVEL PARAMETERS	**Type**	**Action Level**	**Units**	**Action Level**	**Units**	**Sample Frequency**	**Sample Type**	**Inf.**	**Eff.**	**FN**
Total Arsenic	Daily Maximum	180	ug/L			Monthly	Grab		X	1
Total Barium	Daily Maximum	1200	ug/L			Monthly	Grab		X	1
Total Manganese	Daily Maximum	300	ug/L			Monthly	Grab		X	1
Total Vanadium	Daily Maximum	100	ug/L			Monthly	Grab		X	1
Pyrene	Daily Maximum	Monitor	ug/L			Monthly	Grab		X	
Acenaphthene	Daily Maximum	Monitor	ug/L			Monthly	Grab		X	
1,1-Dichloroethane	Daily Maximum	Monitor	ug/L			Monthly	Grab		X	
Benzene	Daily Maximum	5	ug/L			Monthly	Grab		X	1
Toluene	Daily Maximum	5	ug/L			Monthly	Grab		X	1
Ethylbenzene	Daily Maximum	5	ug/L			Monthly	Grab		X	1
Xylene (o)	Daily Maximum	5	ug/L			Monthly	Grab		X	1
Xylene (m+p)	Daily Maximum	10	ug/L			Monthly	Grab		X	1

EMERGING CONTAMINANTS	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluorooctanoic acid (PFOA)	Daily Maximum	Monitor	ug/L			Quarterly	Grab	X	X	2

Perfluorooctanesulfonic acid (PFOS)	Daily Maximum	Monitor	ug/L			Quarterly	Grab	X	X	2
All 38 Per-and Polyfluoroalkyl Substances (PFAS)	Daily Maximum	Monitor	ug/L			Quarterly	Grab	X	X	2, 3
1,4-Dioxane (1,4-D)	Daily Maximum	Monitor	ug/L			Quarterly	Grab	X	X	2

FOOTNOTES:

1. Action Levels: If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for the respective parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive days and analyzed. Results shall be expressed in both mass and concentration. If levels higher than the action levels are confirmed, the permittee shall evaluate the treatment system operation and identify and employ actions to reduce concentrations present in the discharge. The permit may also be reopened by the DEC for consideration of revised action levels or effluent limits. Action level monitoring results and the effectiveness of the actions taken shall be summarized and submitted with the monthly operating report [or DMR] data.

2. The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall 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 monthly for at least 3 consecutive months.

3. Refer to the Emerging Contaminants Pollutant Summary Table for a list of the 38 PFAS compounds to test for.

SPECIAL CONDITIONS

BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES

Note that for some facilities, especially those with few employees or limited industrial activities, some of the below BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the DEC as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized DEC representatives upon request.

2. **Compliance Deadlines** –The permittee shall develop and submit an initial BMP plan in accordance with the Schedule of Submittals to the Regional Water Engineer. The permittee shall implement the BMP plan within 6 months of submission, unless a different time frame is approved by the Department through a permit modification. Annually, the permittee **shall review** and modify the BMP plan whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The permittee shall consider relative toxicity of the pollutant in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at SPDES Application Procedures and Forms - NYSDEC) or that are required to be monitored for by the SPDES permit.

4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

1. BMP Pollution Prevention Team
2. Reporting of BMP Incidents
3. Risk Identification & Assessment
4. Employee Training
5. Inspections and Records
6. Security
7. Preventive Maintenance
8. Good Housekeeping
9. Materials/Waste Handling, Storage, & Compatibility
10. Spill Prevention & Response
11. Erosion & Sediment Control
12. Management of Runoff
13. Street Sweeping

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

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

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

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

NYSDEC Division of Water Regional Office Address:

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

(e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.

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

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:

Influent: Prior to settling tank. Sample for emerging contaminants only.

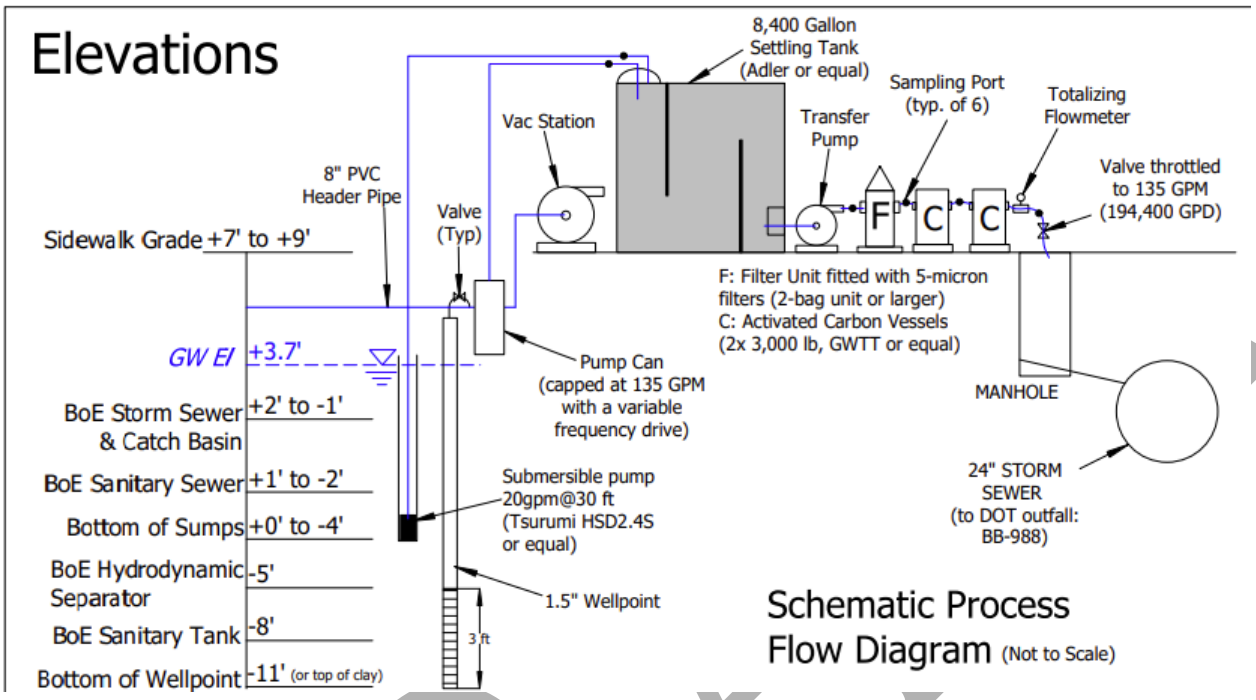
Effluent: After the Effluent Pump.

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:

Influent: Prior to settling tank. Sample for emerging contaminants only.

Effluent: After the Effluent Pump.



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)(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 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 outside of the formal permit administrative process. The use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

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

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

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

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

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

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

Department of Environmental Conservation
Regional Water Engineer, Region 2
One Hunters Point Plaza, Long Island City, New York, 11101-5407 Phone: (718) 482-4933

SPDES Permit Fact Sheet
NYC DEPT OF TRANSPORTATION
NYC DOT - HARPER STREET ASPHALT PLANT
NY0277398

NEW YORK STATE | Department of Environmental Conservation

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Summary of Proposed Permit

A new State Pollutant Discharge Elimination System (SPDES) permit is proposed for the discharge of treated groundwater generated from temporary construction dewatering activities at Harper Street Asphalt Plant to complete construction of sanitary sewers, storm sewers, hydrodynamic separators, and a sanitary holding tank.

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

5/8/2025 The NYC DEPT OF TRANSPORTATION submitted a NY-2C permit application.

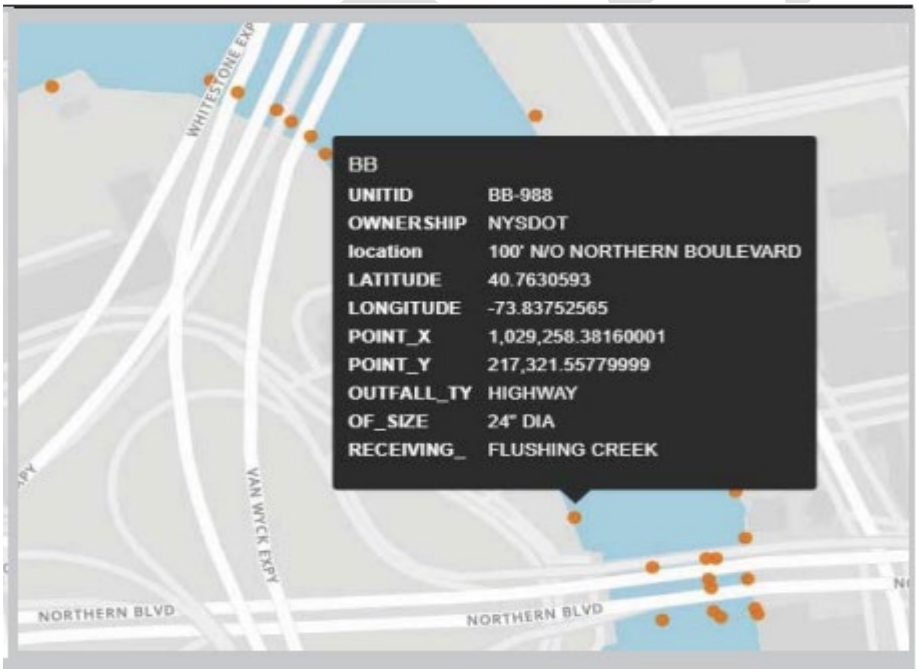
The Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, contains information on the public notice process.

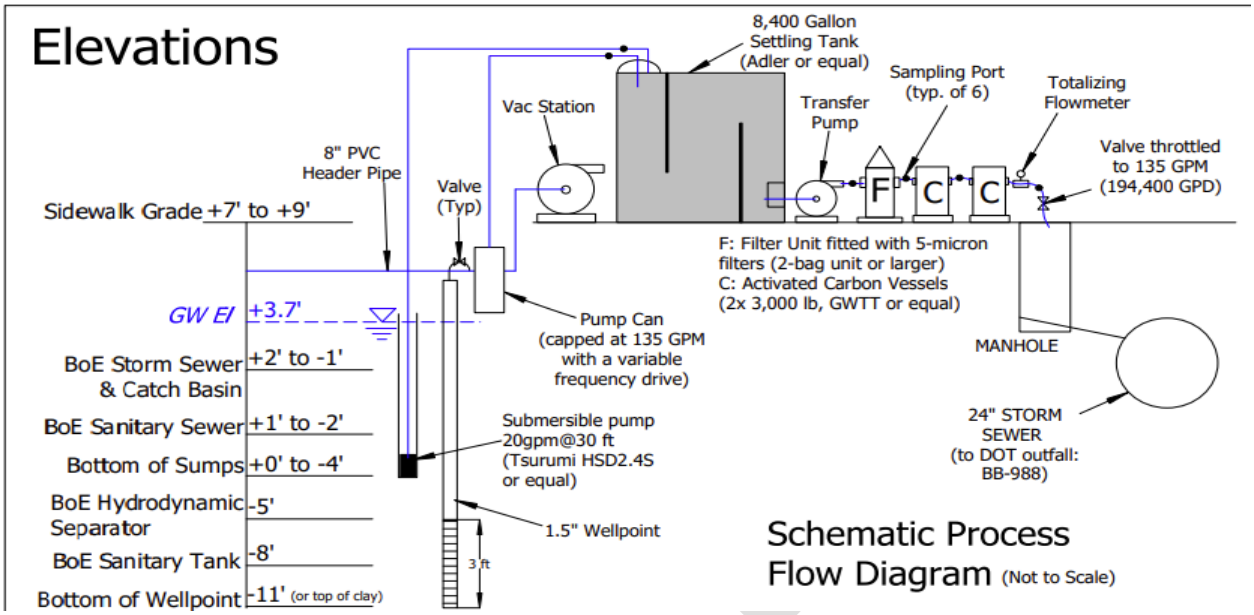
Facility Information

This is an industrial facility (SIC code 2951) Effluent consists of treated groundwater.

Permittee proposes to discharge water from construction dewatering into Flushing Creek/Bay via Outfall 001 (NYCDEP Outfall BB-988). Treatment will be provided prior to discharge. The treatment system consists of an 8,400-gallon settling tank, 2-bag filter unit, and two 3,000 lb carbon vessels.

Site Overview




Elevations
8,400 Gallon Settling Tank (Adler or equal)
Vac Station
Transfer Pump
Sampling Port (typ. of 6)
Totalizing Flowmeter
Valve throttled to 135 GPM (194,400 GPD)
8" PVC Header Pipe
Valve (Typ)
Sidewalk Grade +7' to +9'
GW El +3.7'
BoE Storm Sewer & Catch Basin +2' to -1'
BoE Sanitary Sewer +1' to -2'
Bottom of Sumps +0' to -4'
BoE Hydrodynamic Separator -5'
BoE Sanitary Tank -8'
Bottom of Wellpoint -11' (or top of clay)
F
C
C
F: Filter Unit fitted with 5-micron filters (2-bag unit or larger)
C: Activated Carbon Vessels (2x 3,000 lb, GWTT or equal)
Pump Can (capped at 135 GPM with a variable frequency drive)
MANHOLE
24" STORM SEWER (to DOT outfall: BB-988)
Submersible pump 20gpm@30 ft (Tsurumi HSD2.4S or equal)
1.5" Wellpoint
3 ft
Schematic Process Flow Diagram (Not to Scale)

Existing Effluent Quality

The Pollutant Summary Table presents the untreated groundwater sampling results and effluent limitations. The untreated groundwater sampling results, taken on 11/18/2024, were included in the application submitted by the permittee.

Receiving Water Information

The facility proposes to discharge via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001 (BB-988)	2951	Treated groundwater	Flushing Creek/Bay, Class I

Impaired Waterbody Information

The Flushing Creek/Bay segment (PWL No. 1702-0005) was first listed on the 2000 New York State Section 303(d) List of Impaired/TMDL Waters as impaired due to Dissolved Oxygen, Fecal Coliform, and Garbage Refuse. The segment continues to be listed as of the 2022 NYS Section 303(d) List. A TMDL has not been developed to address the impairment and, therefore, there are no applicable wasteload allocations (WLAs) for this facility.

Critical Receiving Water Data & Mixing Zone

The facility discharges to Flushing Creek/Bay, which is a tidal waterbody and therefore an acute, chronic, and HEW dilution ratio of 5:1 is applicable.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	5:1	5:1	5:1	TOGS 1.3.1 (for ponded or tidal waterbodies)

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

Permit Requirements

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

Antidegradation

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

[1] As prescribed by 6 NYCRR Part 617

Discharge Notification Act Requirements

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

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

Best Management Practices (BMPs) for Industrial Facilities

In accordance with 6 NYCRR 750-1.14(f) and 40 CFR 122.44(k), the permittee is required to develop and implement a BMP plan that prevents, or minimizes the potential for, the release of toxic or hazardous pollutants to state waters. The BMP plan requires annual review by the permittee.

Emerging Contaminant Monitoring

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), all 38 Per-and Polyfluoroalkyl Substances (PFAS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial product as well as in manufacturing processes for decades. These contaminants do not break down easily, therefore their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: Emerging Contaminants In NY's Waters - NYSDEC.

Pursuant to 6 NYCRR Part 750-1.13(a), the permit includes a monitoring requirement for Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), all 38 Per-and Polyfluoroalkyl Substances (PFAS), and 1,4-Dioxane (1,4-D), to evaluate the influent and effluent discharge levels. This monitoring program is consistent with guidance released in EPA guidance memos dated April 28, 2022, and December 5, 2022.

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° 45' 47" N	73° 50' 15" W	Flushing Creek/Bay	I	(MW2.5) ER-LI-12 PWL: 1702	1702/ 0005	-	-	-	-	0.19	5:1	5:1	5:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated groundwater														
		Type of Treatment: Settling, Filtration, Carbon Absorption														
Effluent Parameter	Units	Averaging Period	Untreated Groundwater Samples			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Untreated groundwater	# 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: Untreated groundwater samples received on 11/18/2024. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent. The technology based effluent limitations (TBELs) were developed from TOGS 1.2.1 Att.C, for category B (filtration) and H (carbon adsorption) treatment systems.																
Flow Rate	MGD	Daily Max	-	Actual Average	-	0.19	Design Flow	No alterations that will impair the waters for their best usages.					703.2	-	Monitor	
	The flow limit is set at the design flow of the wastewater treatment facility. The flow limit is based on the pump capacity and treatment system.															
pH	SU	Minimum	-	6.86 Actual Min	1	6.0	40 CFR 133.102	-	-	6.5 – 8.5	Range	6.5 - 8.5	703.3	-	TBEL	
		Maximum	-	8.33 Actual Max	1	9.0										
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS.															
Total Suspended Solids (TSS)	mg/L	Monthly Avg	-	-	-	20	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	
		Daily Max	-	3190	3/0	40	TOGS 1.2.1									

Outfall #	001	**Description of Wastewater:** Treated groundwater														
		Type of Treatment: Settling, Filtration, Carbon Absorption														
Effluent Parameter	Units	Averaging Period	Untreated Groundwater Samples			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Untreated groundwater	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
	The sampling analysis indicated presence of heavy metals, Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs) in the untreated groundwater at the proposed dewatering location. Heavy metals, VOCs, and SVOCs are readily adsorbed onto particulate matter and the release of these compounds into the environmental can be reduced by regulating the amount of TSS discharged. Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS.														
Oil & Grease	mg/L	Daily Max	-	0.784	2 /1	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
	Fuels/petroleum Products may be carried by the stormwater to the dewatering site, thus has a reasonable potential to discharge of oil & grease. This limit is based on the statewide effluent guideline with similar pollutants such as oil terminals. The department has established that the Oil & Grease TBEL limit of 15 mg/l is sufficient to meet narrative water quality standards of no visible oil film nor globules of grease														
Total Mercury	ng/L	Daily Max	-	500	2/1	-	-	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
	See Mercury section of this fact sheet.														
Total Copper	ug/L	Daily Max	-	42.2	1/2	1300/610	TOGS 1.2.1	-	-	5.6(c); 7.9(a)	A(C); A(A)	33.74 (Total)	703.5	-	WQBEL
	The WQBEL was calculated from the chronic water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. A metals translator of 1.205 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS.														
Total Lead	ug/L	Daily Max	-	50.4	3/0	280/130	TOGS 1.2.1	-	-	8(c); 204(a)	A(C); A(A)	42.08	703.5	-	WQBEL
	The WQBEL was calculated from the chronic water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. A metals translator of 1.052 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS.														
Total Nickel	ug/L	Daily Max	-	63.3	2/1	550/370	TOGS 1.2.1	-	-	8.2(c); 74(a)	A(C); A(A)	41.41	703.5	-	WQBEL
	The WQBEL was calculated from the chronic water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. A metals translator of 1.010 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS.														

Outfall #	001	**Description of Wastewater:** Treated groundwater													
		Type of Treatment: Settling, Filtration, Carbon Absorption													
Effluent Parameter	Units	Averaging Period	Untreated Groundwater Samples			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Untreated groundwater	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Total Zinc	ug/L	Daily Max	-	364	3/0	1000/42	TOGS 1.2.1	-	-	66	A(C)	348.81	703.5	-	WQBEL
	The WQBEL was calculated from the chronic water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. A metals translator of 1.057 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS.														
Total Aluminum	ug/L	Daily Max	-	10,300	3/0	6100/270	TOGS 1.2.1	-	-	-	-	-	-	-	TBEL
Total Iron	ug/L	Daily Max	-	52,100	3/0	1200/610	TOGS 1.2.1	-	-	-	-	-	-	-	TBEL
Additional Pollutants Detected															
Total Arsenic	ug/L	Daily Max	-	15.3	3/0	1400/620	TOGS 1.2.1	-	-	36(c)	A(C)	180(Total)	TOGS 1.1.1	-	Action Level
	This parameter is detected in the untreated groundwater sampling. *The WQBEL was calculated from the chronic water quality standard, dilution ratio, and an assumed negligible upstream ambient concentration. A metals translator of 1.000 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007.* Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS.														
Total Beryllium	ug/L	Daily Max	-	0.65	2/1	820/370	TOGS 1.2.1	-	-	-	-	-	-	-	-
	This parameter is detected in the untreated groundwater sampling. No monitor														
Total Chromium	ug/L	Daily Max	-	3	3/0	370/150	TOGS 1.2.1	-	-	-	-	-	-	-	-
	This parameter is detected in the untreated groundwater sampling. No monitor														
Total Selenium	ug/L	Daily Max	-	69.1	3/0	820/370	TOGS 1.2.1	-	-	-	-	-	-	-	-
	This parameter is detected in the untreated groundwater sampling. No monitor														
Total Barium	ug/L	Daily Max	-	394	3/0	1200/510	TOGS 1.2.1	-	-	-	-	-	-	-	Action Level
	This parameter is detected in the untreated groundwater sampling.														
Total Manganese	ug/L	Daily Max	-	2400	3/0	300/230	TOGS 1.2.1	-	-	-	-	-	-	-	Action Level
	This parameter is detected in the untreated groundwater sampling.														

Outfall #	001	**Description of Wastewater:** Treated groundwater													
		Type of Treatment: Settling, Filtration, Carbon Absorption													
Effluent Parameter	Units	Averaging Period	Untreated Groundwater Samples			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Untreated groundwater	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Total Vanadium	ug/L	Daily Max	-	57.1	3/0	100	TOGS 1.2.1	-	-	-	-	-	-	-	Action Level
	This parameter is detected in the untreated groundwater sampling.														
Total Magnesium	ug/L	Daily Max	-	599,000	3/0	-	-	-	-	-	-	-	-	-	-
	This parameter is detected in the untreated groundwater sampling.														
Total Sodium	ug/L	Daily Max	-	6,690,000	2/1	-	-	-	-	-	-	-	-	-	-
	This parameter is detected in the untreated groundwater sampling.														
Total Potassium	ug/L	Daily Max	-	239,000	3/0	-	-	-	-	-	-	-	-	-	-
	This parameter is detected in the untreated groundwater sampling.														
	This parameter is detected in the untreated groundwater sampling.														
Fluoranthene	ug/L	Daily Max	-	0.21	1/2	10	TOGS 1.2.1	-	-	-	-	-	-	-	-
	This parameter is detected in the untreated groundwater sampling.														
Fluorene	ug/L	Daily Max	-	0.36	1/2	10	TOGS 1.2.1	-	-	2.5(C); 23(A)	A(C); A(A)	12.5 (C)	TOGS 1.1.1	-	-
	This parameter is detected in the untreated groundwater sampling.														
Naphthalene	ug/L	Daily Max	-	2.76	1/2	30	TOGS 1.2.1	-	-	16 (C); 140 (A)	A(C); A(A)	80 (C)	TOGS 1.1.1	-	-
	This parameter is detected in the untreated groundwater sampling.														
Pyrene	ug/L	Daily Max	-	2.5	1/2	5	TOGS 1.2.1	-	-	-	-	-	-	-	Monitor
	This parameter is detected in the untreated groundwater sampling.														
Acenaphthene	ug/L	Daily Max	-	0.76	2/1	10	TOGS 1.2.1	-	-	6.6 (C); 60 (A)	A(C); A(A)	33 (C)	TOGS 1.1.1	-	Monitor
	This parameter is detected in the untreated groundwater sampling.														
Phenanthrene	ug/L	Daily Max	-	0.7	1/2	10	TOGS 1.2.1	-	-	1.5 (C); 14 (A)	A(C); A(A)	7.5 (C)	TOGS 1.1.1	-	-

Outfall #	001	**Description of Wastewater:** Treated groundwater														
		Type of Treatment: Settling, Filtration, Carbon Absorption														
Effluent Parameter	Units	Averaging Period	Untreated Groundwater Samples			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Untreated groundwater	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis			
	This parameter is detected in the untreated groundwater sampling.															
1,1,1-Trichloroethane	ug/L	Daily Max	-	0.8	1/2	10	TOGS 1.2.1	-	-	-	-	-	-	-	-	
	This parameter is detected in the untreated groundwater sampling.															
1,1-Dichloroethane	ug/L	Daily Max	-	1.5	2/1	10	TOGS 1.2.1	-	-	-	-	-	-	-	Monitor	
	This parameter is detected in the untreated groundwater sampling.															
Methyl t-butyl ether (MTBE)	ug/L	Daily Max	-	0.65	2/1	-	-	-	-	-	-	-	-	-	-	
	This parameter is detected in the untreated groundwater sampling.															
2-Butanone	ug/L	Daily Max	-	-	1/2	-	-	-	-	-	-	-	-	-	-	
	This parameter is detected in the untreated groundwater sampling.															
Acetone	ug/L	Daily Max	-	-	1/2	-	-	-	-	-	-	-	-	-	-	
	This parameter is detected in the untreated groundwater sampling.															
Carbon disulfide	ug/L	Daily Max	-	-	2/1	-	-	-	-	-	-	-	-	-	-	
	This parameter is detected in the untreated groundwater sampling.															
Methyl acetate	ug/L	Daily Max	-	0.66	1/2	-	-	-	-	-	-	-	-	-	-	
	This parameter is detected in the untreated groundwater sampling.															
Benzene	ug/L	Daily Max	-	-	-	5	TOGS 1.2.1	-	-	10	H(FC)	50	703.5		Action Level	
	The State regulates petroleum related contaminants by setting limits on the individual BTEX components. To ensure that contaminants may not be drawn during the dewatering operations, reporting requirements for BTEX has been added in the draft permit. Per TOGS 1.2.1 Attachment, the carbon adsorption treatment process can meet 5 ug/l limit for individual Benzene, ethylene and individual Xylene isomers. Given the available dilution, an effluent limitation equal to the TBEL is protective of the WQS.															
Toluene	ug/L	Daily Max	-	-	-	5	TOGS 1.2.1	-	-	6,000	H(FC)	30,000	703.5	-	Action Level	
	See justification for Benzene															
Ethylbenzene	ug/L	Daily Max	-	-	-	5	TOGS 1.2.1	-	-	5	H(WS)	25	703.5	-	Action Level	

Outfall #	001	**Description of Wastewater:** Treated groundwater														
		Type of Treatment: Settling, Filtration, Carbon Absorption														
Effluent Parameter	Units	Averaging Period	Untreated Groundwater Samples			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Untreated groundwater	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
	See justification for Benzene														
Xylene (o)	ug/L	Daily Max	-	-	-	5	TOGS 1.2.1	-	-	19(c); 170(a)	A(C); A(A)	95	TOGS 1.1.1	-	Action Level
	See justification for Benzene														
Xylene (m+p)	ug/L	Daily Max	-	-	-	5	TOGS 1.2.1	-	-	19(c); 170(a)	A(C); A(A)	95	TOGS 1.1.1	-	Action Level
	See justification for Benzene														

POLLUTANT SUMMARY TABLE

Outfall 001(BB-988)

Emerging Contaminants: Outfall # 001 (BB-988)															
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		
Notes: See Emerging Contaminant Monitoring section above. Effluent samples were analyzed for Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), all 38 Per-and Polyfluoroalkyl Substances (PFAS), and 1,4-Dioxane (1,4-D).															
Perfluorooctanoic Acid (PFOA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluorooctanesulfonic Acid (PFOS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-butanoic Acid (PFBA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-pentanoic Acid (PFPeA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-hexanoic Acid (PFHxA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor

Perfluoro-heptanoic Acid (PFHpA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-nonanoic Acid (PFNA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-decanoic Acid (PFDA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-undecanoic Acid (PFUnA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-dodecanoic Acid (PFDoA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-tridecanoic Acid (PFTriA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-tetradecanoic Acid (PFTeA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-butanesulfonic Acid (PFBS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-pentanesulfonic Acid (PFPeS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-hexanesulfonic Acid (PFHxS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-heptanesulfonic Acid (PFHpS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-nonanesulfonic Acid (PFNS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-decanesulfonic Acid (PFDS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-dodecane-sulfonic Acid (PFDoS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-octane-sulfonamide (FOSA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
4:2 Fluorotelomer Sulfonic Acid (FTS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
6:2 Fluorotelomer Sulfonic Acid (FTS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
8:2 Fluorotelomer Sulfonic Acid (FTS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor

N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-4-methoxy-butanoic Acid (PFMBA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro-3-methoxy-propanoic Acid (PFMPA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA)[1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor
1,4-Dioxane (1,4-D) [1]	ng/L	Daily Max	-	-	0/0	-	-	-	-	-	-	-	-	-	Monitor

[1] Monitoring has been added to support establishment of future standards or TBELs.

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

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

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

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

Best Professional Judgement (BPJ)

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

Technology-based Effluent Limitations (TBELs)

CWA sections 301(b)(1)(B) and 304(d)(1), 40 CFR 133.102, ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls, known as secondary treatment. These and other requirements are summarized in TOGS 1.3.3. Where the TBEL is more stringent than the WQBEL, the TBEL is applied as a limit in accordance with TOGS 1.3.3. Equivalent secondary treatment, as defined in 40 CFR 133.105, allow for effluent limitations of the more stringent of the consistently achievable concentrations or monthly/weekly averages of 45/65 mg/L, and the minimum monthly average of at least 65% removal. Consistently achievable concentrations are defined in 40 CFR 133.101(f) as the 95th percentile value for the 30-day (monthly) average effluent quality achieved by the facility in a period of two years. The achievable 7-day (weekly) average value is equal to 1.5 times the 30-day average value calculated above. Equivalent secondary treatment applies to those facilities where the principal treatment process is either a trickling filter or a waste stabilization pond; the treatment works provides significant biological treatment of municipal wastewater; and, the effluent concentrations consistently achievable through proper operation and maintenance of the facility cannot meet traditional secondary treatment requirements. There are no federal technology-based standards for toxic pollutants from POTWs. A statistical analysis of existing effluent data, as described in TOGS 1.2.1, may be used to establish other performance-based TBELs.

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

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

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

- Disinfection will typically not be required for discharges to groundwater unless local public health concerns exist due to exposure or contact with effluent. When this occurs, disinfection requirements and effluent limitations for chlorine residual are developed in accordance with TOGS Water Quality-Based Effluent Limitations (WQBELs)

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

Mixing Zone Analyses

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

Reasonable Potential Analysis (RPA)

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

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

2) identify water quality criteria applicable to these pollutants;

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

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

The DEC uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e. numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may

cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

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

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

Minimum Level of Detection

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

Monitoring Requirements

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

Other Conditions

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.