State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

Industrial Code:	**1623, 1794**	SPDES Number:	NY0277304
Discharge Class (CL):	**04**	DEC Number:	2-6299-00027/00040
Toxic Class (TX):	**N**	Effective Date (EDP):	**DRAFT**
Major Drainage Basin:	**17**	Expiration Date (ExDP):	**DRAFT**
Sub Drainage Basin:	**01**	Modification Dates: (EDPM)	
Water Index Number:	**H (portion 1)**		
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. §1251et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS					
Name:	**High L. Carey Battery Park City Authority**	Attention:	**Gwen Dawson, Senior Vice President**		
Street:	**200 Liberty Street, 24th Floor**				
City:	**New York**	State:	**NY**	Zip Code:	**10281**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS																
Name:	**South Battery Park City Resiliency (Package 2 and 4)**															
Location (C,T,V):	**Manhattan**									County:	**NY**					
Facility Address:	**401 South End Avenue**															
City:	**Manhattan**						State:	**NY**		Zip Code:	**10282**					
From Outfall No.:	**NCM-634 (Outfall 001)** **NCM-070 (Outfall 002)** **NCM-071 (Outfall 003)**	at Latitude:	**40** **40** **40**	**°**	**42** **42** **42**	**'**	**24.0** **15.7** **34.5**	**"**	& Longitude:	**-74** **-74** **-74**	**°**	**1** **1** **1**	**'**	**9.15** **2.10** **5.70**	**"**
into receiving waters known as:	**Hudson River**									Class:	**I**					

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

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS					
Mailing Name:	**High L. Carey Battery Park City Authority**				
Street:	**200 Liberty Street, 24th Floor**				
City:	**Manhattan**	State:	**NY**	Zip Code:	**10281**
Responsible Official or Agent:	**Gwen Dawson, Senior Vice President**		Phone:	**212-417-4304**	

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:

Bureau of Water Permits
Battery Park City Authority
Region 2 Division of Water
SPDES Permit Mailing List
USEPA R2

Permit Administrator: Stephen A. Watts III

Address: NYS Department of Environmental Conservation
Division of Environmental Permits- Region 2
47-40 21st Street,
Long Island City, NY 11101

Signature:

Date: / /

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.	See below	See below

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the Permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This Minimum Level (ML) can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Notes:

1. EFFLUENT LIMIT TYPES:
   a. 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.
   b. DAILY MAX: The highest allowable daily discharge. DAILY MIN: The lowest allowable daily discharge.
   c. MONTHLY AVG: 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.
   d. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week.
   e. 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.
   f. 7 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar week.
   g. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

2. ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Groundwater Construction Dewatering	Hudson River (via Outfall NCM-634)	DRAFT	DRAFT

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Monthly	Grab	1

PARAMETER[1]	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow		1,296,000			GPD	Daily	Pump Record	2
Total Suspended Solids	20	40			mg/l	Monthly	Grab	1
Oil & Grease		15			mg/l	Monthly	Grab	1
Benzene				5	µg/l	Monthly	Grab	1
Toluene				5	µg/l	Monthly	Grab	1
Ethylbenzene				5	µg/l	Monthly	Grab	1
Xylene, Total				5	µg/l	Monthly	Grab	1
Naphthalene				10	µg/l	Monthly	Grab	1
Chrysene				10	µg/l	Monthly	Grab	1
Benzo(a)anthracene				1	µg/l	Monthly	Grab	1
Copper, Total				3.4	µg/l	Monthly	Grab	1
Zinc, Total				66	µg/l	Monthly	Grab	1
Lead, Total				8	µg/l	Monthly	Grab	1
Nickel, Total				8.2	µg/l	Monthly	Grab	1

FOOTNOTES:

1. Unless specified in this permit all samples shall be tested using analytical methods found in 40CFR136 or alternative methods approved by EPA in accordance with the procedures in 40 CFR 136.
2. Total maximum discharge for this project will be 2.592 MGD (million gallons per day).

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Groundwater Construction Dewatering	Hudson River (via Outfall NCM-670)	DRAFT	DRAFT

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Monthly	Grab	1

PARAMETER[1]	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow		1,296,000			GPD	Daily	Pump Record	2
Total Suspended Solids	20	40			mg/l	Monthly	Grab	1
Oil & Grease		15			mg/l	Monthly	Grab	1
Benzene				5	µg/l	Monthly	Grab	1
Toluene				5	µg/l	Monthly	Grab	1
Ethylbenzene				5	µg/l	Monthly	Grab	1
Xylene, Total				5	µg/l	Monthly	Grab	1
Naphthalene				10	µg/l	Monthly	Grab	1
Chrysene				10	µg/l	Monthly	Grab	1
Benzo(a)anthracene				1	µg/l	Monthly	Grab	1
Copper, Total				3.4	µg/l	Monthly	Grab	1
Zinc, Total				66	µg/l	Monthly	Grab	1
Lead, Total				8	µg/l	Monthly	Grab	1
Nickel, Total				8.2	µg/l	Monthly	Grab	1

FOOTNOTES:

1. Unless specified in this permit all samples shall be tested using analytical methods found in 40CFR136 or alternative methods approved by EPA in accordance with the procedures in 40 CFR 136.
2. Total maximum discharge for this project will be 2.592 MGD (million gallons per day).

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
003	Groundwater Construction Dewatering	Hudson River (via Outfall NCM-071)	DRAFT	DRAFT

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Monthly	Grab	1

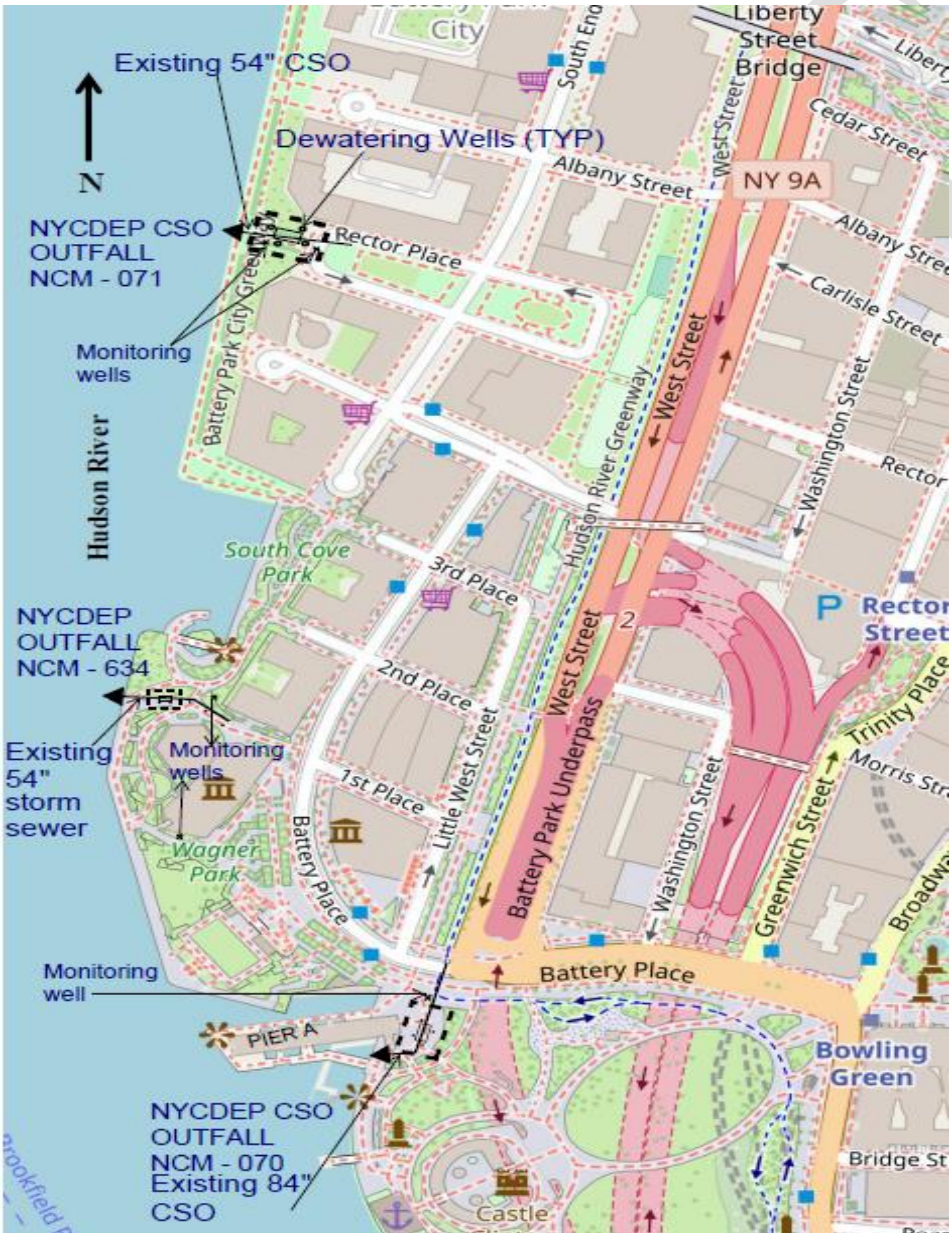
PARAMETER[1]	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow		720,000			GPD	Daily	Pump Record	2
Total Suspended Solids	20	40			mg/l	Monthly	Grab	1
Oil & Grease		15			mg/l	Monthly	Grab	1
Benzene				5	µg/l	Monthly	Grab	1
Toluene				5	µg/l	Monthly	Grab	1
Ethylbenzene				5	µg/l	Monthly	Grab	1
Xylene, Total				5	µg/l	Monthly	Grab	1
Naphthalene				10	µg/l	Monthly	Grab	1
Chrysene				10	µg/l	Monthly	Grab	1
Benzo(a)anthracene				1	µg/l	Monthly	Grab	1
Copper, Total				3.4	µg/l	Monthly	Grab	1
Zinc, Total				66	µg/l	Monthly	Grab	1
Lead, Total				8	µg/l	Monthly	Grab	1
Nickel, Total				8.2	µg/l	Monthly	Grab	1

FOOTNOTES:

1. Unless specified in this permit all samples shall be tested using analytical methods found in 40CFR136 or alternative methods approved by EPA in accordance with the procedures in 40 CFR 136.
2. Total maximum discharge for this project will be 2.592 MGD (million gallons per day).

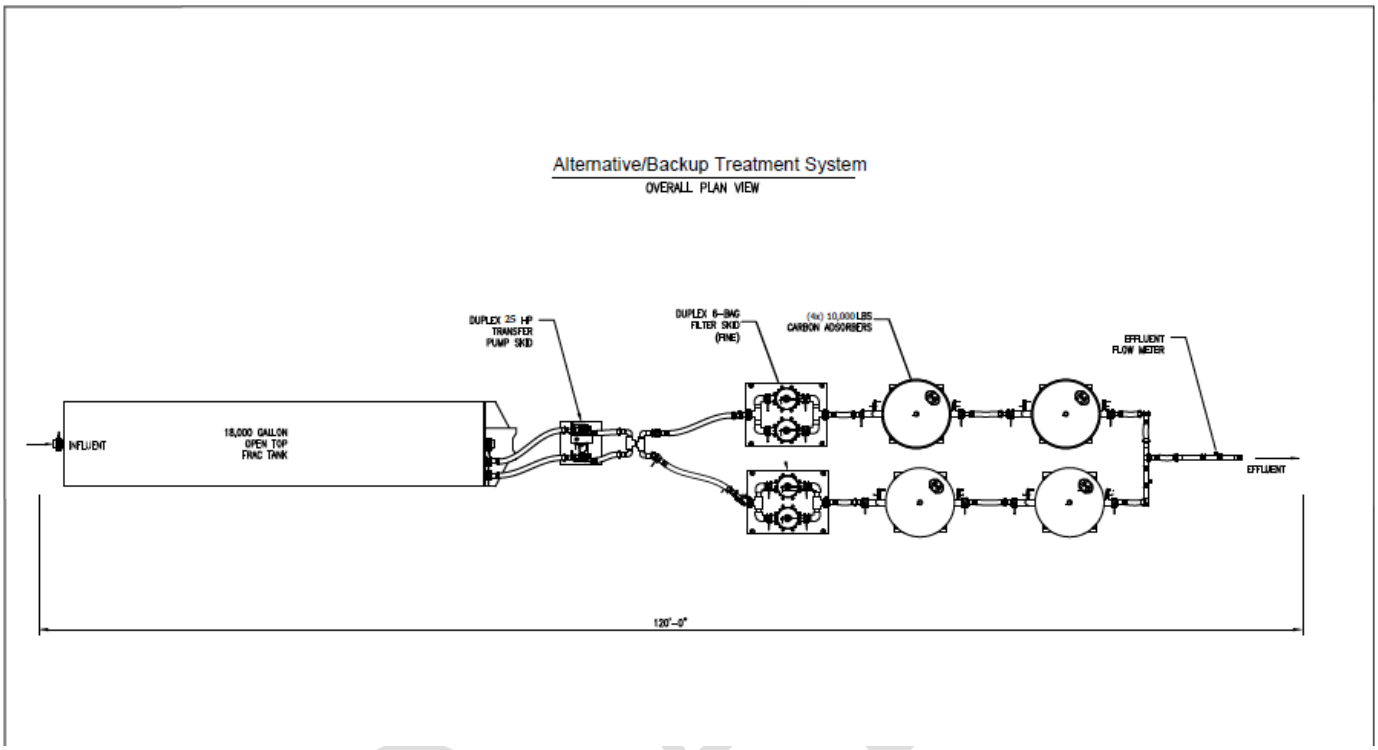
MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below; samples must be taken after treatment process but prior to discharge to the outfall. Please note that changes of any treatment unit or changes to the overall treatment system included/specified requires notification to the Department.



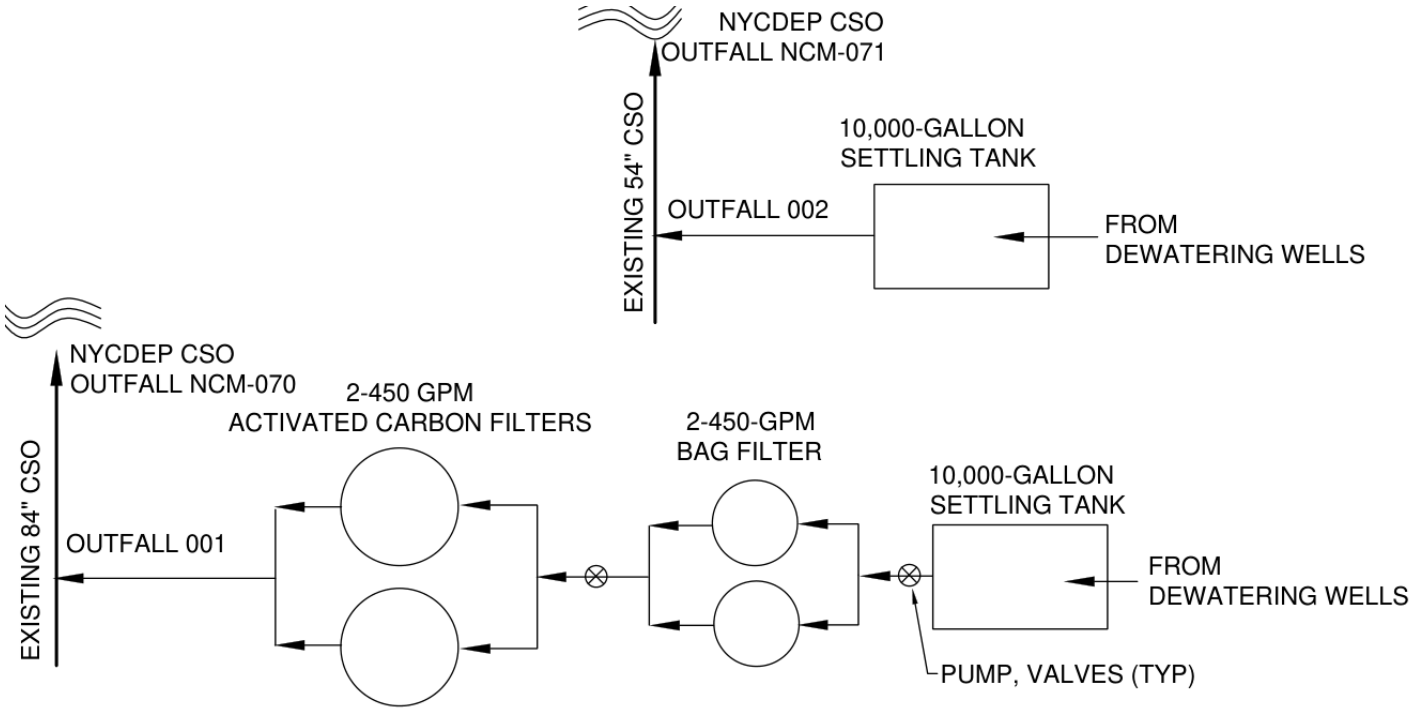
MONITORING LOCATIONS continued

Treatment Schematic Provided by Tristate Construction (Package 2)



MONITORING LOCATIONS continued

Treatment Schematic Provided by Applemon Construction (Package 4)



SPECIAL CONDITIONS

1) **The permittee shall submit a quarterly sampling result report to the Regional Water Engineer, in addition to the annual report.** The first report is due no later than the 28th day of the month following the first month of operation, with subsequent reports every quarter. The first report is for only one month.

   The permittee shall submit copies of any document required by the above special condition to the NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS, unless otherwise specified in this permit or in writing by the Department.

GENERAL REQUIREMENTS

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

B. General Conditions

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

C. Operation and Maintenance

1. Proper Operation & Maintenance	6NYCRR Part 750-2.8
2. Bypass	6NYCRR Part 750-1.2(a)(17), 2.8(b) & 2.7
3. Upset	6NYCRR Part 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

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

E. Reporting Requirements

1. Reporting requirements	6NYCRR Part 750-2.5, 2.6, 2.7 & 1.17
2. Anticipated noncompliance	6NYCRR Part 750-2.7(a)
3. Transfers	6NYCRR Part 750-1.17
4. Monitoring reports	6NYCRR Part 750-2.5(e)
5. Compliance schedules	6NYCRR Part 750-1.14(d)
6. 24-hour reporting	6NYCRR Part 750-2.7(c) & (d)
7. Other noncompliance	6NYCRR Part 750-2.7(e)
8. Other information	6NYCRR Part 750-2.1(f)
9. Additional conditions applicable to a POTW	6NYCRR Part 750-2.9
10. Special reporting requirements for discharges that are not POTWs	6NYCRR Part 750-2.6

F. Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The alteration or addition to the permitted facility may meet of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

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

GENERAL REQUIREMENTS continued

G. Notification Requirement for POTWs

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

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

H. Sludge Management

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

I. SPDES Permit Program Fee

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

J. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

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

The *WTC Notification Form* and *WTC Annual Report Form* are available from the Department's website at http://www.dec.ny.gov/permits/93245.html .

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. Also, monitoring information required by this permit shall be summarized and reported by submitting;

☐ (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

☒ (if box is checked) **The permittee shall submit a quarterly sampling result report to the Regional Water Engineer, in addition to the annual report.** The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

☐ (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:
☐ Regional Water Engineer and/or ☐ County Health Department or Environmental Control Agency specified below

Send the **original** (top sheet) of each DMR page to:
Department of Environmental Conservation
Division of Water, Bureau of Water Compliance
625 Broadway
Albany, New York 12233-3506
Phone: (518) 402-8177

Send the **first copy** (second sheet) of each DMR page to:
Department of Environmental Conservation
Regional Water Engineer, Region 2
1 Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101
Phone: (718) 482-4930

B. Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

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

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

E. 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.

F. 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 Statement of Basis – Surface Water Discharges

I. 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 during South Battery Park City Resiliency Project in Manhattan. The Battery Park City Authority (BPCA) is requesting a SPDES Permit for all dewatering activities associated with the South Battery Park City Resiliency Project (the "SBPCR Project"). The referenced project involves construction of three tide gate chambers on existing outfall pipes in Manhattan, New York. The SBPCR project has been divided into multiple construction contracts. Two of the contracts include project components that require dewatering; these contracts are referred to as (1) Package 2 (Wagner Park and Museum of Jewish Heritage (MJH) Site Work) and (2) Package 4 (Pier A Plaza and The Battery). Package 2 includes the construction of the tide gate chamber and associated dewatering at First Place. Package 4 includes the construction of the tide gate chambers and the associated dewatering operations at The Battery and Rector Place. Dewatering is projected to occur over a period of approximately five years and anticipated to start in June 2024. Pumped and treated groundwater water will be discharged to the Hudson River via existing NYCDEP outfalls. The draft permit includes the reporting requirements for the following parameters: Flow, pH, total suspended solids (TSS), oil and grease, benzene, toluene, ethylbenzene, xylene, naphthalene, chrysene, benzo(a)anthracene, lead, copper, zinc, and nickel.

II. BACKGROUND INFORMATION

As noted throughout this document, SPDES permits are based on both federal and state requirements including laws, regulations, policies, and guidance. These references can generally be found on the internet. Current locations include: Clean Water Act (CWA) *www.epa.gov/lawsregs/laws/index.html#env*; Environmental Conservation Law (ECL)*www.dec.ny.gov/regulations/40195.html*; federal regulations *www.gpo.gov/fdsys/browse/collectionCfr.action?CollectionCode=CFR*; state environmental regulations *www.dec.ny.gov/regulations/regulations.html*; NYSDEC water policy *www.dec.ny.gov/regulations/2654.html*.

A. Administrative History and Project Description

On April 4, 2024, the applicant, Battery Park Authority (BPCA) submitted a request for an individual SPDES permit allowing temporary discharge of up to 2.592 MGD (million gallons per day) of treated groundwater into the Hudson River via three (3) points of discharge (PODs) to existing storm sewers along the west side of Manhattan to facilitate all dewatering activities associated with the South Battery Park City Resiliency Project.

B. Outfall & Receiving Water Information

The applicant proposes to discharge treated groundwater into the Hudson River through the following outfalls:

- POD1 will discharge to Hudson River via NYCDEP outfall NCM-634
- POD2 will discharge to Hudson River via NYCDEP outfall NCM-070
- POD3 will discharge to Hudson River via NYCDEP outfall NCM-071

Dewatering may occur concurrently for the two contract areas with up to one POD from each active at a time resulting in a total discharge of up to 2.592 MGD of treated groundwater from the project. Treatment will be provided prior to discharge. The treatment system includes sedimentation, filtration, and carbon adsorption.

The location of the outfall, and the name, classification and index numbers of the receiving waters are indicated in the *Outfall & Receiving Water Location Table* at the end of this fact sheet. The classifications of individual surface waters are specified in 6 NYCRR Parts 800 – 941. The best uses and other requirements applicable to the specific water classes are specified in 6 NYCRR Part 701.

Impaired Water body Information –The CWA requires states to identify impaired waters, where designated uses are not fully supported. For these impaired waters/pollutants, states must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) restricting water body uses. A TMDL may be developed to address the impairment.

III. PROPOSED PERMIT REQUIREMENTS

The Department evaluates discharges with respect to the relevant sections of the CWA, ECL, federal/state regulations, policy, and guidance to determine which conditions to include in the draft permit.

A. Effluent Limitations

The Department determines the **technology-based effluent limits (TBELs)** that must be incorporated into the permit. A TBEL requires a minimum level of treatment. For industrial point sources, TBELs are typically based on federal effluent guidelines and/or best professional judgment (BPJ). BPJ considers currently available treatment technologies and appropriate Best Management Practices (BMPs). For municipal POTWs and private sewage treatment plants, TBELs are typically based on secondary treatment requirements and, if applicable, CSO control policy. The Department 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 so, **water quality-based effluent limits (WQBELs)** must be included in the permit. A WQBEL is designed to ensure that the water quality standards of receiving waters are being met. In general, effluent limits for a particular pollutant are the more stringent of either the TBEL or WQBEL.

For existing permittees, the previous permit typically forms the basis for the next permit. Permit revisions are implemented where justified due to changed conditions at the facility and/or in response to updated regulatory requirements. Regulatory anti-backsliding requirements prohibit the relaxation of effluent limits in reissued permits unless one of the specified exceptions applies, as detailed in TOGS 1.2.1.

Applicable law and regulation 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, when required, for reporting results on 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 TOGS 1.2.1 and TOGS 1.3.3. Mercury-related requirements, if included, conform to TOGS 1.3.10.

Specific Pollutant Analysis

This section outlines the basis for each of the effluent limitations in the draft permit.

Flow limit of 2.592 MGD has been added in the draft permit.

pH range – the New York State WQSs, 6NYCRR Part703.3 for class I waters prohibits discharges that cause the in-stream pH to change more than 0.1 SU outside of the background range. State has established a pH range limit of 6.0 to 9.0 for dewatering operations discharging to class I waters. Maintaining the pH level within this range demonstrates compliance with the NYS WQS. This pH limit range of 6.0 to 9.0has been added in the draft permit.

Total Suspended Solids (TSS):

Heavy metals and polycyclic aromatic hydrocarbons (PAHs) are readily adsorbed onto particulate matter and the release of these compounds into the environment can be reduced by regulating the amount of TSS discharged. Per NYSDEC TOGS 1.2.1 Attachment C, a treatment process that includes coagulation and sedimentation can achieved a TBEL of daily max 40 mg/l and a monthly average limit of 20 mg/l. The narrative water quality standards, 6 NYCRR Part 703.2, state that discharge of suspended solids shall not cause deposition or impair the receiving waters for their best usages. Achieving the TBEL will also achieve the WQBEL.

Oil & Grease:

Construction activities and using of heavy equipment during the infrastructure project has a reasonable potential to discharge oil & grease. The draft permit incorporates the oil & grease maximum daily limit of 15 mg/l using a TBEL for an oil/water separator. The department has established that the oil & grease TBEL limit of 15 mg/l is sufficient to meet neither narrative water quality standards of no visible oil film nor globules of grease.

Metals:
The sampling analysis conducted of the untreated groundwater shows that some metals: lead, copper, zinc, and nickel were detected and might detect above ambient water quality standards during the dewatering operation. Thus, reporting requirements has been added in the draft permit.

Antimony, Barium, Calcium, Chromium, Cobalt, Magnesium, Potassium, Sodium, Manganese, Vanadium: The sampling analysis of untreated groundwater indicated that these parameters were either non-detect or reported at levels well-below the TBEL and the water quality standard. As discussed in TSS section, heavy metals adsorbed onto particulate matter and can be limited by regulating TSS discharge. Thus, routine monitoring for these metals is not necessary.

Other parameters:
In addition, there have been histories of leaking underground storage tanks at commercial facilities, and other sources of petroleum pollution of soil and groundwater in the Hudson Park neighborhood. Volatile organic compounds (VOCs) such as benzene, toluene, ethylbenzene, and the xylene compounds (BTEX) are normally found at relatively high concentrations in gasoline and light distillate products (e.g., diesel fuel). BTEX concentrations typically decrease in the heavier grades of petroleum distillate products (e.g., fuel oils). Since many petroleum spills involve gasoline or diesel fuel, 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 BTEX.

Historical fill soil has been identified in some areas of the site. Therefore, other potential contaminants of concern that can be detected during dewatering operation are naphthalene, chrysene, benzo(a) anthracene etc. To ensure that the suspected contaminants of concern may not be drawn during the dewatering operations, a routine monitoring for these parameters have been added in the draft permit.

B. Monitoring & Reporting Requirements
CWA section 308, 40 CFR 122.44(i), and 6 NYCRR Part 750-1.13 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 for reporting results on 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. For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1.

C. General Conditions Applicable to All Permits
The permit contains standard regulatory language that is required to be in all SPDES permits. These permit provisions, based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750, include requirements pertaining to monitoring, recording, reporting, and compliance responsibilities. These "general conditions" of permits are typically specified, summarized, or referenced on the first and last pages of the permit.

OUTFALL, RECEIVING WATER& POLLUTANT SUMMARY TABLES

Outfall Number		Latitude	Longitude	Receiving Water Name	Water Class	Water Index Number	Major/Sub Basin
001		40° 42' 24.0"	-74° 1' 9.15"	Hudson River (via outfall NCM-634)	I	H (portion 1)	17/01
	Source(s) of Wastewater:			Construction dewatering water			
	Proposed Wastewater Treatment Facilities:			Sedimentation, Filtration, Carbon Adsorption			

Effluent Parameter (Concentration in ug/l and mass in lbs/day unless otherwise specified)	Untreated Groundwater[1]		TBELs					WQBELs					Permit Basis
	Concentration[1]					PQL		Ambient Criteria	Ambient Background	WQBEL			(T or WQ or NA)
	Max[1]		conc.	mass	Type	conc.	BASIS	conc.	conc.	conc.	mass	Type	
Flow Rate, units = MGD	1.296		MGD			NA		7Q10 = , 30Q10 = , Dilution/Mixing =					T
pH (su)	7.65		(6.0 – 9.0)		Range			narrative					T
Total suspended solids	32		20				TOGS 1.2.1 Att C	narrative					T
Oil & Grease, mg/l	1.05		15				TOGS 1.2.1 Att C						T
Benzene, µg/l	<5		5				TOGS 1.2.1 Att C	10					**T**
Toluene, µg/l	<5		5				TOGS 1.2.1 Att C	6000					**T**
Ethylbenzene, µg/l	<5		5				TOGS 1.2.1 Att C	-					**T**
Xylene, Total, µg/l	<5		5				TOGS 1.2.1 Att C	-					**T**
Naphthalene, µg/l	<5		10				TOGS 1.2.1 Att C	-					T
Benzo(a)anthracene, µg/l	<1		1				TOGS 1.2.1 Att C	-					T
Chrysene, µg/l	<1		10				TOGS 1.2.1 Att C	-					T
METALS			Monthly Avg.										
Lead, µg/l	37.2		420/200				TOGS 1.2.1 Att C	8					WQ
Zinc, µg/l	27.7		1500/610				TOGS 1.2.1 Att C	66					WQ
Copper, µg/l	2.43		1900/1000				TOGS 1.2.1 Att C	3.4					WQ
Nickel, µg/l	4.22		550/370				TOGS 1.2.1 Att C	8.2					WQ

Footnotes: [1]Highest detected concentration

OUTFALL, RECEIVING WATER& POLLUTANT SUMMARY TABLES

Outfall Number		Latitude	Longitude	Receiving Water Name	Water Class	Water Index Number	Major/Sub Basin
002		40° 42' 15.7"	-74° 1' 2.10"	Hudson River (via outfall NCM-070)	I	H (portion 1)	17/01
	Source(s) of Wastewater:			Construction dewatering water			
	Proposed Wastewater Treatment Facilities:			Sedimentation, Filtration, Carbon Adsorption			

Effluent Parameter (concentration in ug/l and mass in lbs/day unless otherwise specified)	Untreated Groundwater[1]		TBELs					WQBELs					Permit Basis
	Concentration[1]					PQL		Ambient Criteria	Ambient Background	WQBEL			(T or WQ or NA)
	Max[1]		conc.	mass	Type	conc.	BASIS	conc.	conc.	conc.	mass	Type	
Flow Rate, units = MGD	1.296		MGD			NA		7Q10 = , 30Q10 = , Dilution/Mixing =					T
pH (su)	7.65		(6.0 – 9.0)		Range			narrative					T
Total suspended solids	13		20				TOGS 1.2.1 Att C	narrative					T
Oil & Grease, mg/l	<1.4		15				TOGS 1.2.1 Att C						T
Benzene, µg/l	<5		5				TOGS 1.2.1 Att C	10					**T**
Toluene, µg/l	<5		5				TOGS 1.2.1 Att C	6000					**T**
Ethylbenzene, µg/l	<5		5				TOGS 1.2.1 Att C	-					**T**
Xylene, Total, µg/l	<5		5				TOGS 1.2.1 Att C	-					**T**
Naphthalene, µg/l	<5		10				TOGS 1.2.1 Att C	-					T
Benzo(a)anthracene, µg/l	<1		1				TOGS 1.2.1 Att C	-					T
Chrysene, µg/l	<1		10				TOGS 1.2.1 Att C	-					T
METALS			Monthly Avg.										
Lead, µg/l	37.2		420/200				TOGS 1.2.1 Att C	8					WQ
Zinc, µg/l	27.7		1500/610				TOGS 1.2.1 Att C	66					WQ
Copper, µg/l	2.43		1900/1000				TOGS 1.2.1 Att C	3.4					WQ
Nickel, µg/l	4.22		550/370				TOGS 1.2.1 Att C	8.2					WQ

Footnotes: [1] Highest detected concentration

OUTFALL, RECEIVING WATER& POLLUTANT SUMMARY TABLES

Outfall Number		Latitude	Longitude	Receiving Water Name	Water Class	Water Index Number	Major/Sub Basin
003		40° 42' 34.5"	-74° 1' 5.70"	Hudson River (via outfall NCM-071)	I	H (portion 1)	17/01
	Source(s) of Wastewater:			Construction dewatering water			
	Proposed Wastewater Treatment Facilities:			Sedimentation, Filtration, Carbon Adsorption			

Effluent Parameter (concentration in ug/l and mass in lbs/day unless otherwise specified)	Untreated Groundwater[1]		TBELs					WQBELs					Permit Basis
	Concentration[1]					PQL		Ambient Criteria	Ambient Background	WQBEL			(T or WQ or NA)
	Max[1]		conc.	Mass	Type	conc.	BASIS	conc.	Conc.	Conc.	Mass	Type	
Flow Rate, units = MGD	1.296		MGD			NA		7Q10 = , 30Q10 = , Dilution/Mixing =					T
pH (su)	7.65		(6.0 – 9.0)		Range			narrative					T
Total suspended solids	13		20				TOGS 1.2.1 Att C	narrative					T
Oil & Grease, mg/l	<1.4		15				TOGS 1.2.1 Att C						T
Benzene, µg/l	<5		5				TOGS 1.2.1 Att C	10					**T**
Toluene, µg/l	<5		5				TOGS 1.2.1 Att C	6000					**T**
Ethylbenzene, µg/l	<5		5				TOGS 1.2.1 Att C	-					**T**
Xylene, Total, µg/l	<5		5				TOGS 1.2.1 Att C	-					**T**
Naphthalene, µg/l	<5		10				TOGS 1.2.1 Att C	-					T
Benzo(a)anthracene, µg/l	<1		1				TOGS 1.2.1 Att C	-					T
Chrysene, µg/l	<1		10				TOGS 1.2.1 Att C	-					T
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Lead, µg/l	37.2		420/200				TOGS 1.2.1 Att C	8					WQ
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Nickel, µg/l	4.22		550/370				TOGS 1.2.1 Att C	8.2					WQ

Footnotes: [1]Highest detected concentration