STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Violations of Article 17 of the Environmental Conservation Law and Part 750, et seq., of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York:

ORDER ON CONSENT
(CSO Order Modification to CO2-20000107-8)

The City of New York and
The New York City Department of Environmental Protection,

Respondents.

WHEREAS:

1. The Department of Environmental Conservation ("Department") is an executive agency of the State of New York with jurisdiction to enforce environmental laws of the State pursuant to the Environmental Conservation Law ("ECL"), Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR"), and Orders issued thereunder.

2. The Department has jurisdiction over the abatement and prevention of pollution to the waters of the State pursuant to ECL Article 17 and 6 NYCRR Part 750, et seq. This jurisdiction also authorizes the Department, as a State agency with an approved program per Sections 318, 402 and 405 of the federal Clean Water Act ("CWA"), 33 U.S.C. Section 1251, et seq., to regulate the discharge of pollutants from point sources into waters of the State in conformity with federal law.

3. Pursuant to its authority to protect the waters of the State, the Department administers the State Pollutant Discharge Elimination System ("SPDES") program, ECL §17-0801, et seq. In general, the SPDES program prohibits any discharge of pollutants to the waters of the State without a permit establishing pollutant limitations and treatment requirements. Thus, SPDES permits set certain effluent limitation parameters, determined according to ECL §17-0809 and 6 NYCRR Part 750-1.11, to avoid contravention of mandated water pollution control requirements and water quality standards ("WQS"). Those conditions address not only the allowable range of parameters for discharge of pollutants to waters of the State, but also the manner in which the permittee is to operate, maintain, monitor and report on its regulated facilities and activities.
4. The New York City Department of Environmental Protection ("DEP"), a municipal agency, and the City of New York ("City") (sometimes jointly referred to herein as "Respondents") own, operate and are responsible for a vast network of pipelines and pump stations that deliver wastewater to the Respondents' 14 Wastewater Treatment Plants ("WWTPs"). WWTPs remove pollutants to meet State and local water quality requirements before releasing the treated water to the City's waterbodies and watersheds. Collectively, these WWTPs process approximately 1.4 billion gallons of sewage per day generated within New York City.

5. Wastewater collection systems may receive higher than normal flows during wet weather events, or from inflow and infiltration. Per 6 NYCRR 750-1.2(47), infiltration means water other than wastewater that enters a sewerage system (including sewer service connections) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include and is distinguished from inflow. Per 6 NYCRR 750-1.2(48), inflow means water other than wastewater that enters a sewerage system (including sewer service connections) from sources such as roof leaders, cellar drains, yard drains, area drains, foundation drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers, process and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from infiltration.

6. 6 NYCRR Section 750-2.9(a)(3) requires Respondents to identify all inflow to the collection system and remove excessive infiltration/inflow to an extent that is economically feasible.

7. In addition to inflow and infiltration, another cause of higher flows during a heavy rainstorm may be that the wastewater collection system serving the WWTP is a combined sewer collection system.

8. About 60% of New York City has a combined sewer system. In a combined sewer system, there is a single pipe that carries stormwater runoff, domestic sewage from sanitary fixtures in buildings, and industrial wastewaters. This mix of stormwater and sewage is sent to a WWTP for treatment before it is discharged to the City's waterways.

9. The City's WWTPs are designed to accept and treat some wet weather flows to in excess of the design dry weather flow ("DDWF"), typically with capacity up to two times the design dry weather flow ("2xDDWF") or more.

10. When wet weather flows are in excess of the capacity of a combined sewer collection system and/or the WWTP it serves, a mix of stormwater and untreated domestic sewage and industrial wastewaters may discharge directly into the City's waterways. These events are called combined sewer overflows (CSOs). CSOs may contribute to violations of state WQS.
11. CSO outfalls functioning as conventional combined overflow relief outfalls are subject to SPDES permit requirements, including CSO BMPs established pursuant to both water quality-based and technology-based requirements of the CWA.

12. Some options to reduce the frequency and volume of CSO discharges include:
   - Separating the stormwater and sewage lines;
   - Installing storage tanks to hold combined overflow during storm events;
   - Expanding capacity of collection systems and/or the WWTP they serve;
   - Creating retention basins to hold overflow during storm events;
   - Screening and disinfecting a combined sewer overflow; and
   - Using green infrastructure to reduce stormwater flows into a combined sewer system.

13. With a goal of reducing the impact and occurrence of CSOs, the Department and Respondents entered into an Order on Consent dated June 26, 1992, a Modification of the 1992 Order on September 19, 1996, and an Order on Consent on January 14, 2005 (Case No. CO2-20000107-8) (the “2005 Order”) which replaced in entirety the 1992 Order and 1996 Modification. Thereafter, the 2005 Order was amended on April 14, 2008 (Case No. CO2-2007-0101-1), September 3, 2009 (Case No. CO2-20090318-30), March 8, 2012 (Case No. CO2-20110512-25) (the “2012 Modification”), March 26, 2015 (Case No. CO2-20140314-01); May 19, 2017 (CO2-20140314-01); and on December 7, 2017 (CO2-20161013-375); all of which are hereinafter referred to collectively as the “2005 CSO Order, as modified.”

14. Respondents continue to perform work pursuant to the 2005 CSO Order, as modified.

**Rockaway Wastewater Treatment Plant 2xDDWF and Wet Weather Discharges**

15. The Rockaway WWTP is one of the 14 WWTPs that Respondents own and operate. The collection system serves the Rockaway peninsula. The Rockaway WWTP is located approximately in the center of the northern shore of the peninsula. Sanitary sewage and wet weather flows are collected and conveyed to the Rockaway WWTP via two principal interceptors, an Eastern interceptor and a Western interceptor.

16. The Rockaway WWTP has a design dry weather flow of 45 million gallons per day ("MGD") and a wet weather capacity of 90 MGD. Based on flow data for the past six years, the Rockaway WWTP receives an average of between 15 to 20 MGD during dry weather. The maximum of the monthly average flows for the past six years is 25 MGD. Maximum instantaneous flows recorded in recent years are typically in the range of 30 to 40 mgd, and during extreme wet weather
events, the Rockaway WWTP has received peak instantaneous flows of up to 50 to 60 MGD. The maximum flows may indicate that the collection system may either have some infiltration/inflow or that a portion of the collection system functions similar to a combined system, or both.

17. The Rockaway WWTP SPDES permit NY0026221 currently identifies ten outfalls on the Eastern Interceptor as CSO outfalls.

18. Five of the 10 outfalls are associated with either pump station or WWTP emergency bypasses or storm flow, and all of which are not conventional CSO outfalls. These pump station or WWTP bypasses are designated as ROC-003, ROC-016, ROC-017, ROC-029, and ROC-031 in the Rockaway WWTP SPDES permit. The Parties desire to eliminate these five CSO outfalls from the Rockaway WWTP SPDES permit and designate them as either emergency bypass outfalls in the permit fact sheet or as MS4 outfalls in the Citywide MS4 permit.

19. The Rockaway WWTP SPDES permit lists another five CSO outfalls, as summarized in the following table.

<table>
<thead>
<tr>
<th>Outfall ID</th>
<th>Contributors/Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROC-009</td>
<td>Regulator D-6</td>
</tr>
<tr>
<td>ROC-013</td>
<td>Regulator D-3</td>
</tr>
<tr>
<td>ROC-014</td>
<td>Regulator D-2</td>
</tr>
<tr>
<td>ROC-032</td>
<td>Regulators D-7, D-8, D-9, D-10, D-11</td>
</tr>
<tr>
<td>ROC-033</td>
<td>Regulator D-12</td>
</tr>
</tbody>
</table>

20. Respondents have conducted multiple inspections of the diversion and regulator chambers associated with these five outfalls to determine whether each outfall listed in Paragraph 19 of this Order is functioning as a conventional combined overflow relief outfall from the sewer system.

21. Based on the findings of the inspections, the Parties wish to include in the Rockaway WWTP SPDES permit only the outfall discharging treated wastewater effluent from the Rockaway WWTP and eliminate all other permitted CSO outfalls from the WWTP SPDES permit. Once the permitted CSO outfalls have been removed from the Rockaway WWTP SPDES permit, the Rockaway sewer system will be regulated as a separate sewer system.

22. The Rockaway WWTP SPDES permit currently requires Respondents to comply with best management practices for combined sewer systems including having the physical capacity to receive and treat a minimum of 2xDDWF or 90 MGD through the plant headworks and primary treatment works, and receive and treat a minimum of one and a half times design dry weather flow or 68 MGD through the secondary treatment works during wet weather.
23. Respondents have determined through the site inspections that none of the outfalls listed in Paragraph 19 of this Order is discharging treated wastewater or functioning as a conventional combined sewer overflow relief outfall. Thus, the Rockaway WWTP may not be required to have the physical capacity to receive and treat a minimum of 2xDDWF.

24. Respondents executed an Order with the Department in 1999 requiring the Respondents to ensure that the Rockaway WWTP and associated sewer system were capable of delivering, accepting, and treating influent at or above twice the WWTP’s design flow during any storm event. The Rockaway 2xDDWF milestone was subsequently rolled over into the 2008 CSO Consent Order along with its completion date of December 2017.

25. DEP failed to submit a Certification of Construction Completion for the Milestone XII.G.1 on December 31, 2017.

26. DEP submitted a Modification Request on November 1, 2017 (the “11/1/17 Modification Request”) requesting that the milestone XII.G.1 be replaced with a milestone to initiate an evaluation of the collection system for Rockaway WWTP and submit an Engineering Report following that evaluation. The Engineering Report would recommend appropriate dry and wet weather flow treatment capacities for the WWTP and the associated collection system.

27. The Department responded to the 11/1/17 Modification Request on November 10, 2017 and requested additional information on the proposed engineering evaluation.

28. The Department and DEP conducted technical discussions regarding the 11/1/17 Modification Request on December 4, 2017 and January 9, 2018.

29. The Department and DEP were unable to reach agreement on a suitable alternative project. The Department issued a DEC Determination and Notice of Violation on April 3, 2018 for DEP’s failure to certify completion of Milestone XII.G.1.

30. Since DEP’s original modification request and in response to guidance from DEC, DEP has conducted multiple inspections of the diversion chambers and associated sewer connections and outfalls over the course of 2018, 2019, and 2020 and has verified that there are no combined sewers directly connected to any of the outfalls listed in paragraph 19 and based on the inspections completed there is no potential of any combined sewer overflow from those outfalls. DEP continues to build separate storm sewers in the Rockaway WWTP drainage area. The 2018 field inspections provided some data on potential sources of tidal
inflows. The results of these inspections will be included in the Inspection Report referred to herein.

31. DEP completed a field study of the Rockaway sewer collection system in 2014 ("2014 Rockaway Field Report") to seek to identify the source of the peak flows of 60 MGD that occurred at the plant. The 2014 Rockaway Field Report tasks involved: 1) confirming that overflows at 28 sites had been sealed and 2) taking conductivity / salinity measurements to determine if the peak flows were due to tidal effects. DEP provided a copy of the 2014 Rockaway Field Report to the Department in April 2020.

32. DEP plans to conduct an additional 3-year study to evaluate inflow and infiltration in the Rockaway sewershed starting in 2020 ("2020 Rockaway I&I Study").

33. The Department and Respondents have each consented to the making of this Order which amends the 2005 CSO Order, as modified.

IT IS HEREBY ORDERED:

I. EFFECT ON PREVIOUS ORDERS

Respondents are bound by, and agree to follow and comply with the terms, provisions and requirements set forth in this Order, including the modified and new milestone dates in Appendix A and field investigations set forth in Article II of the below. This Order modifies and replaces only so much of the 2005 CSO Order, as modified as is set forth herein and in Appendix A. All other provisions of the 2005 CSO Order, as modified shall remain in full force and effect. The requirements set forth in this Order are in addition to, and do not affect any requirements set forth in, any other Orders on Consent between the Department and Respondents.

II. CIVIL PENALTY

In settlement of the violation described above in Paragraph 25, Respondents shall pay no civil penalty because Respondents have demonstrated that the Rockaway WWTP and its associated sewer collection system is not functioning as a conventional combined sewer overflow system. Thus, the Rockaway WWTP is not required to have the physical capacity to receive and treat a minimum of 2xDWDF, and should not be required to submit a Certification of Construction Completion for the Milestone XII.G.1 on December 31, 2017 or thereafter.

III. COMPLIANCE SCHEDULE

A. Respondents are permanently enjoined and directed to complete the tasks described in Article V below and meet the milestones set forth in Appendix A of this Order, which is incorporated herein and attached hereto.
B. This Order amends the 2005 CSO Order, as modified solely to the extent stated herein and reflected in Appendix A of this Order. Respondents shall comply strictly with all milestones set forth in Appendix A. Implementation and enforcement of the activities required by these milestones shall be governed by the terms of the 2005 CSO Order, as modified.

C. Upon the effective date of this Order, Appendix A of the 2005 CSO Order, as modified shall be modified by the pages set forth in the Appendix A of this Order to incorporate new milestones. The pages of Appendix A shall be substituted for the corresponding pages of any other Appendices A of the 2005 CSO Order, as modified, as appropriate.

IV. ROCKAWAY WWTP SEWER SYSTEM ASSESSMENT AND OUTFALL CLOSURE AND REDESIGNATION

A. Within 30 days of the effective date of this Order, DEP shall send a letter to the Department requesting the removal of outfalls designated ROC-003, ROC-016, ROC-017, ROC-029, and ROC-031 from SPDES Permit Number NY0026221, and shall apply to modify the Rockaway WWTP SPDES permit to remove these outfalls from the permit at the time of the next SPDES permit renewal.

B. Within 180 days, DEP shall submit a report ("Inspection Report") documenting the inspections conducted of the outfalls and diversion and regulator/tide gate chambers associated with outfalls ROC-009, ROC-013, ROC-014, ROC-032, and ROC-033 to determine if these outfalls are connected to combined sewer lines and are functioning as conventional combined sewer overflow relief points. This Inspection Report shall include a description of the status of each outfall and associated diversion and tide gate chambers and a schedule for any work required to close or reclassify an outfall, and to permanently seal any tide gate chamber that is connected to an active stormwater outfall, in accordance with the milestone set forth in modified Appendix A.

C. In accordance with the milestone set forth in modified Appendix A, DEP shall complete the 2020 Rockaway I&I study, referenced in Para. 32, and submit the results of the study to the Department. The submittal shall document the existing conditions of the Rockaway WWTP sewer system and include an Alternatives Analysis Report that recommends specific projects that could cost-effectively reduce inflow and infiltration and a Project Implementation Plan to implement those projects. These projects may be implemented by DEP in the future based on Respondent's priorities and budget constraints. The 2020 Rockaway I&I Study shall be used to estimate the relative contributions of inflow and infiltration from various sources including, but not limited to tidal and storm water I&I sources. The submittal referenced herein shall also include the estimated contributions of inflow and infiltration from various sources, and a discussion of
any additional field monitoring data needed to calibrate the InfoWorks model in the future to incorporate inflow and infiltration components if the need arises.

D. In accordance with the milestone set forth in modified Appendix A, DEP shall evaluate the maximum amount of flow that can be processed through full treatment at the WWTP from a hydraulic and secondary treatment perspective and based on the results of that evaluation, submit an updated Wet Weather Operating Plan (WWOP).

E. Within 90 days of the approval of the Inspection Report, DEP shall submit a permit modification request to:
   a. Remove currently SPDES-designated CSO outfalls ROC-009, ROC-013, ROC-014, ROC-032, and ROC-033 from SPDES Permit Number NY0026221.
      i. For any of the currently SPDES-designated CSO outfalls ROC 009, ROC-013, ROC-014, ROC-032, and ROC-033 from SPDES Permit Number NY0026221 that DEP determines provides relief for stormwater from a separately sewered collection system, DEP shall submit a letter to the Department requesting the outfall be re-designated as a MS4 outfall. DEP shall also update its Storm Water Management Plan to incorporate the new outfall(s).

F. DEP shall report any discharges via NY-Alert and in accordance with 6 NYCRR Part 750-2.7.

V. EFFECTIVE DATE

The effective date of this Order shall be the date it is executed by the Department's Commissioner or his designee.
DATED: May 25, 2021
Albany, New York

Basil Seggos, Commissioner
New York State Department of
Environmental Conservation

By: James M. Tierney
Deputy Commissioner
CONSENT BY RESPONDENTS

The New York City Department of Environmental Protection hereby consents to the issuance and entry of the foregoing Order, waives its right to a hearing herein as provided by law, and agrees to be bound by the provisions, terms and conditions contained herein.

Vincent Sapienza, Commissioner
New York City Department of Environmental Protection

2/23/2021
Date

ACKNOWLEDGMENT

State of New York
County of Queens:

On the 23 day of February, 2021, before me personally came Vincent Sapienza to me known, who being by me duly sworn did depose and say that s/he was duly authorized to execute the foregoing instrument and did so on behalf of the Respondents of New York.

Notary Public

KEVIN C. HARMON
Notary Public, State of New York
No. 01HA638546
Qualified in Queens County
Commission Expires December 18, 2027
CONSENT BY RESPONDENTS

The New York City Corporation Counsel hereby consents to the issuance and entry of the foregoing Order without further notice, waives its right to a hearing herein, and agrees to be bound by the terms, conditions and provisions hereof.

James E. Johnson
Corporation Counsel of the
City of New York

By: [Signature]
Title: ASSISTANT CORPORATION COUNSEL

2/24/21

Date

ACKNOWLEDGMENT

State of New York )
County of Kings ) s.:

On this 24th day of February, 2021, before me personally came Devon Goodrich, to me known, who being duly sworn, deposed and stated that s/he maintains an office at 100 Church Street, New York, New York, that s/he is an Assistant Corporation Counsel, Environmental Law Section of the New York City Corporation Counsel, and that s/he was authorized by said Department to execute the foregoing instrument.

[Signature]
Notary Public

Nathan M. P. Taylor
Notary Public No. 02TA6362150
State of New York
Qualified in Kings County
Commission Exp. 10/22/2022

Witnessing Electronically
Pursuant to
Executive Order ("EO") 202.7
As extended by EO 202.94
### XII. Jamaica Bay CSO

<table>
<thead>
<tr>
<th>Milestone Date</th>
<th>New Milestone Dates</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Three (3) years from effective date of CSO Order Modification (EDCOM)</td>
</tr>
</tbody>
</table>

#### A. Rockaway WRFF CSO Outfall Closure, I&I Study and Updated WWOP

1. Submit Updated WWOP for Rockaway WWTP
2. Permanently Seal Tide Gate Chambers Connected to Active Stormwater Outfalls
3. Submit Results from 2020 Rockaway I&I Study For Information Only

#### B. 26th Ward High Level Sewer Separation

1. Submit Drainage Plan
2. Phase 1 - Initiate Design
3. Phase 1 - Design Completion
4. Phase 1 - Notice to Proceed to Construction
5. Phase 1 - Construction Completion
6. Phase 2 - Initiate Design
7. Phase 2 - Design Completion
8. Phase 2 - Notice to Proceed to Construction
9. Phase 2 - Construction Completion
10. Phase 3 - Initiate Design
11. Phase 3 - Design Completion
12. Phase 3 - Notice to Proceed to Construction
13. Phase 3 - Construction Completion

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<th>Milestone Date</th>
<th>New Milestone Dates</th>
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<tr>
<td>September 2012</td>
<td>Four (4) years from EDCOM</td>
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<td>December 2012</td>
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<td>March 2015</td>
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<td>March 2016</td>
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<td>March 2020</td>
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<tr>
<td>December 2022</td>
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</tbody>
</table>

#### C. 26th Ward WPCP Preliminary Treatment Reliability Improvements

1. Design Completion for Low Level Main Sewage Pumps
2. Notice to Proceed to Construction for Low Level Main Sewage Pumps
3. Construction Completion for Low Level Main Sewage Pumps
4. Initiate Design for 26th Ward Wet Weather Stabilization

<table>
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<tr>
<th>Milestone Date</th>
<th>New Milestone Dates</th>
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<td>September 2011</td>
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<td>September 2012</td>
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<td>April 2015</td>
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<tr>
<td>December 2011</td>
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</table>
5. Design Completion for 26th Ward Preliminary Treatment
   Reliability Improvements
6. Notice to Proceed to Construction for High Level Main
   Sewage Pumps
7. Construction Completion for High Level Main Sewage Pumps
8. Notice to Proceed to Construction for 26th Ward Preliminary
   Treatment Reliability Improvements to PSTs #1 to 4 and
   Construction of PST #5
9. Construction Completion for 26th Ward Preliminary Treatment
   Reliability Improvements to PSTs #1 to 4 and Construction of
   PST #5
10. Update WWOP to Capture Improved Monitoring of 26th
    Ward WPCP Wet Weather Performance

D. Submit Approvable Drainage Basin Specific LTCP for Jamaica
   Bay/Tribs*

   * The Jamaica Bay/Tribs LTCP will include Paerdegat Basin

December 2014 (complete)
June 2015 (complete)
August 4, 2018
January 2016 (complete)
July 19, 2020
6 months after construction completion of low level main
sewage pumps
June 2018

EDMS: 630585
STATEMENT OF NOTARY PUBLIC

In accordance with the Governor’s Executive Orders No. 202.7, issued on March 19, 2020, as extended by No. 202.94, I hereby affirm:

1. My name is Nathan Taylor, and I am a Notary Public in the State of New York (Registration No. 02TA6382150, Kings County, expires 10/22/2022).

2. On Feb. 24, 2021, I notarized the signature of Devon Goodrich on the Consent by Respondents in accordance with the procedures set forth in Governor’s Executive Order No. 202.7.

3. I performed the notarization using audio-visual technology.

4. Ms. Goodrich is personally known to me, and thus, I was able to verify her identity without additional documentation.

5. The video conference allowed for direct interaction between me and Ms. Goodrich.

6. Ms. Goodrich affirmatively represented that she is physically situated in the State of New York.

NATHAN TAYLOR