

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

Index # 402174 / 04

FILED

JUN 17 2011

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In the Matter of the Application of :

NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION, CASWELL HOLLOWAY AS COMMISSIONER OF THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND THE CITY OF NEW YORK, :

Index No. 04-~~COUNTY~~ COUNTY CLERK'S OFFICE
Hon. Paul G. Feinman NEW YORK

entered AS A judgment

Petitioners, :

FIRST AMENDED
NITROGEN CONSENT
JUDGMENT

FILED

for a judgment pursuant to Article 78 of the Civil Practice Law and Rules, :

- against- :

THE STATE OF NEW YORK, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, AND JOSEPH MARTENS, AS COMMISSIONER OF THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, :

NEW YORK
COUNTY CLERK'S OFFICE

SO ORDERED

Respondents. :
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PAUL G. FEINMAN
J.S.C. 6/15/11

WHEREAS:

A. THE CLEAN WATER ACT AND ECL ARTICLE 17

The Federal Water Pollution Control Act of 1972, also known as the Clean Water Act ("CWA"), 33 U.S.C. § 1251 *et seq.*, authorizes the Administrator of the United States Environmental Protection Agency ("EPA") to establish and administer a National Pollutant Discharge Elimination System ("NPDES") for discharges of pollution into the navigable waters of the United States, 33 U.S.C. § 1342.

Respondent New York State Department of Environmental Conservation ("DEC"), through a partnership agreement with EPA, administers this program in New York State. Since 1973, DEC on behalf of the State of New York (respondents will be referred to as the "State" collectively) has conducted the State Pollutant Discharge Elimination System ("SPDES") permit program pursuant to Article 17, Titles 7 and 8 of the New York State Environmental Conservation Law ("ECL"). Among other things, a SPDES permit imposes limitations on the levels of pollutants that a source can lawfully discharge, and imposes sampling, recording, reporting, monitoring and operational requirements. A SPDES permittee is required to record the levels of discharged pollutants on Discharge Monitoring Reports ("DMRs"), which must be

filed with the DEC.

The New York City Department of Environmental Protection (“DEP”), is a municipal agency operating and having responsibility for the City of New York’s 14 municipal sewage treatment plants, known as Water Pollution Control Plants (“WPCPs”) (which process the sewage generated within the City of New York), as well as the City’s combined and separate sanitary sewage collection facilities.

The City of New York (DEP and the City of New York will be collectively referred to herein as the “City”) owns the fourteen WPCPs and DEP is the named permittee.

Any violation of a SPDES permit condition or order entered under Article 17, constitutes a violation of ECL §§17-0803, 17-0807, 17-0815 and 6 NYCRR §§ 750-1.3(d) & 750-2.1(e).

Section17-0501 of Article 17 of the ECL provides authority for the State to take enforcement against violations of any water quality standards (“WQS”) adopted by DEC.

ECL § 71-1929 provides that a discharger who violates any obligation imposed by Titles 1-11 of Article 17, or the rules and regulations promulgated pursuant thereto, or the terms of any permit or order issued thereunder, shall be liable to pay a penalty not to exceed \$37,500 per day for each violation.

CWA § 303(d)(1)(c), 33 U.S.C. § 1313(d)(1)(c), requires the states to promulgate, and EPA to approve, Total Maximum Daily Loads (“TMDLs”) for water bodies for which the effluent limits promulgated pursuant to CWA § 301(b)(1)(A) and (B), 33 U.S.C. § 1311(b)(1)(A) and (B), are not stringent enough to comply with any WQS applicable to that water body. TMDLs establish waste load allocations for individual pollutants, applicable for all point source discharges to the affected water body, in order to ensure that the combined effect of the discharges does not result in violation of the applicable WQS.

DEC incorporates limits into SPDES Permits to meet WQS and TMDLs pursuant to both the ECL (ECL §§17-0809 &17-0811; 6 NYCRR 750-1.1(a)(5)(ii)) and the CWA (33 U.S.C. §§ 1342(a)(1), 1342(b)(1)(A), 1311(b)(1)(C), 1313(e)(3)(A) and 40 C.F.R. §122.42(d)(1)(vii)(b)).

B. HYPOXIA IN LONG ISLAND SOUND AND JAMAICA BAY, AND THE LONG ISLAND SOUND NITROGEN TMDL

The discharge of nitrogen from sewage treatment plants, industrial facilities, surface runoff, and other anthropogenic point and non-point sources causes or contributes to periodic hypoxic, or low oxygen conditions (generally defined as levels of dissolved oxygen of 3 mg/l or less) in some receiving waters bodies, including Long Island Sound and Jamaica Bay.

When hypoxic conditions occur in Long Island Sound and Jamaica Bay, the applicable WQSs for dissolved oxygen are violated.

On April 5, 2001, the EPA approved a TMDL for nitrogen for Long Island Sound (the “LIS TMDL”) established by New York and Connecticut, that mandates a 58.5% reduction of nitrogen from the 1994 nitrogen discharge level to Long Island Sound, for dischargers to the Long Island Sound, including the City’s Upper East River Water Pollution Control Plants (Hunts Point, Bowery Bay, Wards Island and Tallman Island), the City’s Lower East River Water Pollution Control Plants (Newtown Creek and Red Hook), and other sewage treatment plants that discharge to Long Island Sound, through a phased approach over 15 years. DEC has imposed nitrogen limits reflecting the approved TMDL on the Upper East River and Lower East River WPCPs, and all other such dischargers to Long Island Sound in New York State, through the SPDES process.

The LIS TMDL provides for 11 hypoxia management zones for Long Island Sound, and that nitrogen discharges be reduced in three five-year increments over a total of 15 years, culminating in a 58.5% reduction in each zone.

The four New York City Upper East River WPCPs discharge into the Upper East River which is designated as Zone 8 in the LIS TMDL (Zone 8).

The two New York City Lower East River WPCPs discharge into the Lower East River which is designated as Zone 9 in the LIS TMDL (Zone 9).

The City will seek to achieve its proposed Zone 9 reductions by a combination of nitrogen reduction measures at the Lower East River plants along with nitrogen reductions at the Zone 8 WPCPs.

The State and City recognize that additional studies are required before a TMDL or other measures can be developed to bring Jamaica Bay into compliance with the WQS for dissolved oxygen.

C. NITROGEN LIMITS IN THE UPPER EAST RIVER AND JAMAICA BAY WPCP 1994 SPDES PERMITS

The 1994 DEC-issued SPDES permits for the City’s Upper East River WPCPs, and the City’s Rockaway, Jamaica, 26th Ward and Coney Island WPCPs (collectively the “Jamaica Bay WPCPs”) contain limits on the amount of nitrogen that can lawfully be discharged from those WPCPs. Although each of the individual Upper East River and Jamaica Bay WPCPs has a separate SPDES permit, for purposes of establishing allowable nitrogen discharge levels for the Upper East River and Jamaica Bay, the Upper East River and Jamaica Bay WPCPs were aggregated, or treated collectively as two separate single units, with each four-plant unit having an “aggregate Maximum Monthly Average Limit” and an “aggregate 12-month Rolling Average Limit.” The Maximum Monthly Average Limits went into effect in 1996, and the 12-month Rolling Average Limits in 1997.

D. THE 1999-2001 STATE-CITY COMPREHENSIVE DISCUSSIONS CONCERNING NITROGEN-RELATED ISSUES AT THE CITY WPCPS

From 1999 through 2001 the State and City held discussions to resolve various legal and technical issues that had arisen concerning nitrogen discharges from, and treatment at, a number of the City's WPCPs. Among other things, the 1999-2001 discussions: (1) resolved the City's liability to the State for past violations of the permit limits for nitrogen and other past SPDES violations at the Upper East River and Jamaica Bay WPCPs in *State of New York, et al. v. City of New York, et al.*, Index No. 98/400817 (Supreme Court, New York County); (2) addressed how the City would upgrade the Upper East River WPCPs to reduce the level of nitrogen discharged to Long Island Sound in order to meet the 58.5% LIS TMDL-based nitrogen removal reduction levels which DEC planned to incorporate into the SPDES permits for those WPCPs (including discharges from Combined Sewer Overflows), as well as for other New York State dischargers to Long Island Sound covered by the LIS TMDL; (3) addressed the City's upgrading of the 26th Ward WPCP to "full step-feed" biological nitrogen removal technology ("BNR") in order to ensure compliance with current and future nitrogen limits, when the City undertook its next stabilization of that facility; (4) addressed how the City would determine the best method for reducing the nitrogen discharges from the Jamaica Bay WPCPs, as part of the solution for WQS violations in Jamaica Bay, and develop an implementation schedule based on the results of its studies; and (5) resulted in the City and State agreeing to a modification of a consent judgment requiring the City to upgrade the Newtown Creek WPCP that, among other things, replaced the requirement for nitrogen removal at the Newtown Creek WPCP with a commitment by the City to perform significantly greater nitrogen removal at the Upper East River WPCPs (the "Newtown Creek Second Modified Judgment on Consent").

E. THE 2002 ADMINISTRATIVE CONSENT ORDER REQUIRING NITROGEN UPGRADES AND JAMAICA BAY NITROGEN STUDIES

At the culmination of their 1999-2001 discussions the State and City entered into an Administrative Consent Order (Index #CO2-20020131-7) (the "Nitrogen ACO"), effective April 22, 2002, that required the City to design and implement the upgrades to the Upper East River WPCPs to reduce nitrogen discharges to Long Island Sound in light of the LIS TMDL requirements and the upgrade to the 26th Ward WPCP to reduce nitrogen discharges to Jamaica Bay. The Nitrogen ACO additionally required the City to perform various studies to determine the best method for reducing the nitrogen discharges from the Jamaica Bay WPCPs, as part of the solution for dissolved oxygen WQS violations in Jamaica Bay.

The Nitrogen ACO, among other things, established: (1) a schedule pursuant to which the City would design and implement upgrades to the Upper East River and 26th Ward WPCPs to "full step-feed BNR" for better nitrogen removal; (2) interim effluent limits and parameters to be in effect during the construction phase of the upgrades to accommodate anticipated increases in nitrogen discharges necessitated by the construction process; (3) development and incorporation of "post-construction" effluent limits into the City's SPDES permits; (4) stipulated penalties for

non-compliance, including provisions pursuant to which the City would be able to recoup penalties for missed upgrade milestones if it subsequently made up for any lost time; (5) a dedicated environmental monitor to oversee the activities to be conducted under the Nitrogen ACO and facilitate timely review of DEP submissions or any approvals to be given by the State for work to be performed under the Nitrogen ACO; (6) dispute resolution; (7) a schedule pursuant to which the City would perform various studies to assist in comprehensive water quality planning to meet WQSs for Jamaica Bay; (8) an Applied Research Program to identify treatment strategies towards improving nitrogen removal from wastewater treatment plant effluent (“Applied Research Program”); and (9) public notice.

The City timely submitted a facility plan for the upgrade of the WPCPs covered by the Nitrogen ACO (the “Original Facility Plan”) on October 22, 2002, and DEC approved the Original Facility Plan on June 17, 2003.

On February 27, 2004, the City submitted what it contended was a superior, more operationally reliable, flexible and cost-effective Revised Facility Plan (“Revised Facility Plan”), which the City asserted would achieve the same goals of the Original Facility Plan at a significantly lower cost.

DEC rejected the City’s contentions regarding the acceptability of the Revised Facility Plan and issued to the City a Notice of Violation and Determination on March 12, 2004, for violating the Nitrogen ACO by failing to meet seven upgrade milestones established in the Original Facility Plan, which Notice of Violation assessed \$7,498,000.00 in stipulated penalties for the violations, as of that date.

DEC concluded that the Revised Facility Plan would not result in facilities capable of achieving and then reliably maintaining the nitrogen removals mandated by the LIS TMDL for the expected life of the upgrades, and rejected the Revised Facility Plan in a Determination dated March 25, 2004.

The City disputed the March 12, 2004 NOV and Determination and the March 25, 2004 Determination pursuant to the Nitrogen ACO dispute resolution provisions and then commenced an Article 78 proceeding in Supreme Court, New York County, entitled *New York City Department of Environmental Protection, Christopher O. Ward, as Commissioner of the New York City Department of Environmental Protection, and the City of New York, Petitioners v. Erin M. Crotty, as Commissioner of the New York State Department of Environmental Conservation, and the New York State Department of Environmental Conservation*, Respondents, Index No. 04-402174 (Sup. Ct. N.Y. Cty.), in accordance with the dispute resolution provisions of the Nitrogen ACO, by filing a petition on July 13, 2004, challenging: (1) DEC’s rejection of the Revised Facility Plan; and (2) DEC’s assessment of stipulated penalties for violations of milestones set forth in the Nitrogen ACO; and the State counter-claimed for the stipulated penalties challenged in the petition.

The Supreme Court, New York County, issued a decision, order and judgment dated April 8, 2005 (the “2005 Decision, Order, and Judgment”): (1) denying the petition and

dismissing the proceeding; and (2) granting the State's counterclaim for penalties, to the extent they had accrued as of July 13, 2004 (which amounted to \$13,116,000), and directing that those penalties be paid into the Major Milestone Escrow Account provided for in the Nitrogen ACO, to be released back to the City if DEP were to meet the final construction milestones of December 31, 2009 for the Tallman Island and Wards Island WPCPs and June 30, 2007 for the 26th Ward WPCP.

The City filed a notice of appeal of the 2005 Decision, Order, and Judgment on or around May 31, 2005. Subsequent to the 2005 Decision, Order, and Judgment, the City determined that the Hunts Point and Bowery Bay WPCPs were not on schedule to meet the construction completion milestones set forth in the Nitrogen ACO.

F. THE 2002 PROPOSED SPDES PERMIT MODIFICATIONS ISSUED BY DEC TO IMPLEMENT LIS TMDL-MANDATED NITROGEN LIMITS

On or about June 27, 2002, DEC served on DEP a notice of intent to modify and draft SPDES permits for the 14 WPCPs in accordance with New York State's Environmental Benefit Permit Strategy. ECL §§ 17-0817(4)-(6); 6 NYCRR §§ 750-1.18-1.19. The modifications in the notice of intent to modify and draft SPDES permits included, *inter alia*, water quality-based effluent limitations for nitrogen for the four Upper East River and two Lower East River WPCPs in order to implement the LIS TMDL waste load allocations.

On March 31, 2003, DEP formally submitted a request for an adjudicatory hearing on certain terms of the modified SPDES permits for all 14 WPCPs, including the six East River WPCP draft SPDES permits, alleging, among other things, that those draft permits had conditions that were inconsistent with the Nitrogen ACO, which was by then in effect.

Pursuant to DEC regulations, 6 NYCRR Part 624, a legislative hearing was held on September 17, 2003, and an issues conference convened before an Administrative Law Judge ("ALJ") on September 18 and October 9, 2003, to address the issues raised by DEP as well as issues raised by intervening parties. DEP and DEC ultimately resolved the aforementioned issue through the 2004-2005 comprehensive discussions described below. As set forth more fully below, however, administrative appeals pertaining to 13 of the SPDES permits remain pending.

G. THE 2004-2005 STATE-CITY COMPREHENSIVE DISCUSSIONS CONCERNING NITROGEN-RELATED ISSUES AT THE CITY WPCPS

Notwithstanding the pendency of the litigation arising out of the Nitrogen ACO and the SPDES hearing, the State and City continued to discuss and refine the City's proposal concerning the possible upgrade of the Upper East River WPCPs using alternate technical approaches to those in the Original Facility Plan. The City asserted that these technical approaches would cost significantly less than the Original Plan, but would result in upgraded Upper East River WPCPs that would be capable of meeting the 58.5% nitrogen reductions mandated by the LIS TMDL. The State and City additionally discussed resolving the issues

raised by the City concerning alleged conflicts between the proposed SPDES permits and the requirements of the Nitrogen ACO.

These comprehensive discussions, which shall be referred to as the “2004-05 Discussions,” eventually resulted in a consent judgment entered by the Court on February 1, 2006 (the “Nitrogen Consent Judgment”).

During the 2004-05 Discussions the City proposed a modified nitrogen removal program incorporating a two-phased approach for constructing facilities that would, via a series of interim stepdowns, ultimately achieve the 15-year 58.5% nitrogen reductions mandated by the LIS TMDL (“the Modified BNR Facility Plan”). Phase I of this program would establish the base of this program and, as such, specified nitrogen removal actions and upgrades to be implemented at the Upper East River WPCPs to achieve an approximate 52% reduction in nitrogen discharged to the East River and thus the Long Island Sound by August 1, 2014. Phase I would also require the City to upgrade the 26th Ward WPCP to reduce the level of nitrogen discharged to Jamaica Bay. Further, Phase I of the program would require the City to implement a number of nitrogen mitigation measures to reduce nitrogen discharges to the East River during Phase I upgrade construction, including trans-shipment of centrate, separate centrate treatment at designated WPCPs, the SHARON® separate centrate treatment process or a State-approved equivalent separate centrate treatment process at Wards Island and the upgrade of Aeration Tank 13 at Wards Island. The Phase I BNR upgrades are the base that Phase II of the program will later build on and/or supplement at the Upper East River WPCPs as necessary, and subject to State approval, as described more fully in Section III below. The Phase II Plan is meant to achieve the combined Zone 8/Zone 9 effluent limits in accordance with the LIS TMDL.

As part of its proposed modified nitrogen removal program, the City submitted a Phase I BNR facility plan (the “Modified Phase I BNR Facility Plan”) deemed approvable by the State, and which was in fact approved by the State upon execution of the Nitrogen Consent Judgment. The State approved the City’s Modified Phase I BNR Facility Plan as a technically sound, cost-effective plan toward achieving compliance with the LIS Nitrogen TMDL, and to achieve continued compliance with the existing Jamaica Bay nitrogen limits at the time of approval.

Under the City’s approved modified nitrogen removal program, the City would submit the Phase II proposal to the State by December 31, 2009, which would incorporate findings from the continued Applied Research Studies, Demonstration Scale Testing, and Step Feed BNR operational experience to select additional technologies or enhancements that the City would need to implement by July 1, 2016 to enable both Zone 8 and Zone 9 to comply with the 58.5% reduction in nitrogen required by the LIS TMDL by January 1, 2017, as a combined Zone 8 and 9 limit. This would be accomplished by further reduction in nitrogen discharges from the Upper East River Zone 8 WPCPs, which would offset the Lower East River Zone 9 discharges, as described more fully in Section III below.

To avoid subjecting the City to conflicting requirements, the State and the City agreed to harmonize the nitrogen limits imposed under the City’s draft SPDES permits with the nitrogen limits imposed in the Nitrogen Consent Judgment. The parties agreed that while the terms and

limits of the Nitrogen Consent Judgment are in effect, such limits would constitute the enforceable aggregate total nitrogen effluent limits for the Upper and Lower East River WPCPs and supersede any nitrogen effluent limits set forth in any corresponding SPDES Permits (subject to the requirements of Sections XII and XV below), and the City agreed to accept the LIS TMDL-based nitrogen limits in those SPDES Permits to be re-issued in draft upon the effective date of the Nitrogen Consent Judgment (“the 2005 SPDES Permits”).

The State and the City also agreed to harmonize the nitrogen limits imposed under the City’s draft SPDES permit for the Jamaica Bay WPCPs with the nitrogen limits to be incorporated into the Nitrogen Consent Judgment that would resolve various aspects of their comprehensive discussions, as well as outstanding litigation issues, by agreeing that while the terms and limits of the Nitrogen Consent Judgment were in effect, such limits would constitute the enforceable aggregate total nitrogen effluent limits for the Jamaica Bay WPCPs and supersede any nitrogen effluent limits set forth in any corresponding SPDES Permits (subject to the requirements of Sections XII and XV below).

The City agreed to complete the Comprehensive Jamaica Bay Report and to develop an implementation schedule based on the results of the studies contained in such report as required under the Nitrogen ACO.

H. THE REVISED NITROGEN UPGRADE PLANS

In furtherance of the goal of improving water quality and maximizing pollution abatement during the implementation of the upgrades to be set forth in the First Amended Nitrogen Consent Judgment, the State and City agreed that from the date of its execution until the completion of the required upgrades, the City would: (1) comply with a series of interim nitrogen limits as a combined zone for the Upper and Lower East River WPCPs using a 4:1 ratio; (2) comply with an interim nitrogen limit of 49,500 lbs/day at the Jamaica Bay WPCPs, to be reduced to 45,300 lbs on January 1, 2009; (3) make all best efforts to place in operation all treatment units and associated automatic controls as soon as they are available, in order to optimize removals as soon as possible; and (4) mitigate the duration and magnitude of any exceedances of the SPDES effluent limits for nitrogen by the Upper East River WPCPs during the upgrade process.

The State recognized that in the event it would be required to impose more stringent nitrogen limits than those required under the Nitrogen Consent Judgment, through a future SPDES permit modification (consistent with the terms of Paragraph XII.A.), requiring the City to supplement Phase I, and/or revise Phase II, of the Modified BNR Facility Plan, the City might seek more time than allotted under the Nitrogen Consent Judgment to meet those limits. The State additionally recognized that the City had based its predicted ability to achieve the 15-year Long Island Sound nitrogen reduction requirements on a combined nitrogen effluent limit that has been calculated using the System Wide Eutrophication Model (“SWEM”) under which the exchange ratio on water quality equivalency factors between zones is at a minimum 4:1 between Zone 8 and Zone 9, not on the Long Island Sound Management Committee’s Long Island Sound 3.0 model. The City expected that the SWEM model and a minimum exchange ratio of 4:1

between Zone 8 and Zone 9 would be adopted, and DEC supported the adoption of the SWEM model. However, if the SWEM model and a minimum 4:1 exchange ratio were not to be adopted for use in setting nitrogen reduction limits pursuant to the LIS TMDL, the State recognized that the City could be required to supplement Phase I and/or revise Phase II of the Modified BNR Facility Plan, and therefore could request additional time to develop additional nitrogen control measures to meet the LIS TMDL nitrogen limits. Pursuant to DEC's written request, on September 15, 2006, EPA approved the adoption of the SWEM Model and the use of the 4:1 exchange ratio for the Long Island Sound TMDL. The LIS Management Committee adopted the SWEM Model on June 5, 2001.

I. THE 2006 NITROGEN CONSENT JUDGMENT

The State and City concluded the 2004-05 Discussions concerning nitrogen-related issues at the City's WPCPs, including any potential claims by the State under the Tidal Wetlands Law, ECL Article 24 that may arise out of delays to the WPCP upgrades that were the subject of the violations found in the 2005 Decision, Order, and Judgment, by agreeing to the Nitrogen Consent Judgment. The Honorable Paul G. Feinman entered it on February 1, 2006. As more fully set forth therein, pursuant to its terms the City agreed, among other things: (1) to pay a penalty in the amount of \$2,700,000 and to pay a total sum of not less than \$5,300,000 to perform Environmental Benefit Projects ("the EBPs") to benefit Long Island Sound and Jamaica Bay; (2) to withdraw its appeal; (3) to upgrade the Upper East River and 26th Ward WPCPs with improved biological nitrogen removal ("BNR") technology pursuant to a revised, two-phase approach and in accordance with certain specified milestones agreed to with the State, with the BNR work at the Upper East River WPCPs intended to achieve compliance with the LIS TMDL-based limits for all nitrogen discharges to Long Island Sound by January 1, 2017; (4) to accept LIS TMDL-based nitrogen effluent limits in the SPDES permits issued by DEC to DEP for the Upper East River WPCPs; (5) to meet certain aggregate nitrogen interim limits for the Upper East River and Lower East River WPCPs as a combined zone limit; (6) to accept certain interim limits for the discharge of nitrogen to Jamaica Bay; and (7) to develop a plan to address certain water quality standard impairments in Jamaica Bay, as part of the comprehensive resolution of the other nitrogen and design and treatment issues at the City's WPCPs. The Nitrogen Consent Judgment superseded the Nitrogen ACO, which became null and void upon its entry.

The City has been working toward meeting requirements of the Nitrogen Consent Judgment. The City has completed, among other things, the following requirements: (1) on or about January 30, 2007, the City retained Dr. David Stensel to serve as the Third Party Facilitator; (2) on or about May 18, 2006 the City paid \$5,300,000 to the New York State Environmental Facilities Corporation to fund the EBPs; (3) on or about January 1, 2007 the City submitted an approvable EBP Plan for incorporation into the Nitrogen Consent Judgment; (4) on or about July 1, 2009, the City initiated the trans-shipment of Bowery Bay and Tallman Island Sludges, and (5) on or about December 31, 2009 the City submitted an approvable Phase II Conceptual Plan, and committed in that Plan to submit a final approvable Basis of Design for the Phase II BNR upgrades by June 30, 2011.

J. DEC ISSUES MODIFIED SPDES PERMITS FOR THE UPPER EAST RIVER AND JAMAICA BAY WPCPS; NRDC APPEALS

In April 2006, pursuant to the Nitrogen Consent Judgment, DEC Staff revised draft SPDES permits addressing both nitrogen and combined sewer overflow (“CSO”)¹ issues for all 14 of DEP’s WPCPs. An issues conference was not held because the parties agreed that all remaining proposed issues could be addressed on paper. The Natural Resources Defense Council (“NRDC”), along with other intervenors, raised several issues for adjudication. By issues ruling dated March 16, 2007 (“2006 Nitrogen Issues Ruling”), the ALJ ruled in favor of NRDC on one issue, finding that the City of New York should be listed as a co-permittee with DEP on the SPDES permits. The ALJ ruled that none of the other issues raised by NRDC were substantive and significant. NRDC administratively appealed the 2006 Nitrogen Issues Ruling and the 2005 CSO Issues Ruling on the following rulings: (1) that the terms of the CSO Administrative Consent Order do not need to be explicitly set forth in the SPDES permits, (2) the draft SPDES permits do include narrative water quality standards, (3) the revised draft SPDES permits for the four WPCPs discharging to Jamaica Bay include provisions ensuring compliance with water quality standards, and (4) the draft SPDES permits and CSO Administrative Consent Order do not need to include further procedural safeguards. DEC and the City appealed the portion of the 2006 Nitrogen Issues Ruling dealing with the City as a co-permittee. In a ruling dated June 10, 2010, the Commissioner issued a decision upholding rulings (1) through (4) above, and reversing the co-permittee ruling. On August 16, 2010, NRDC and the other intervenors filed a proceeding under CPLR Article 78 challenging the Commissioner’s decision. On October 18, 2010, DEC issued final permits for the 13 WPCPs that were subject to the Commissioner’s decision.

K. THE 2006 WARDS ISLAND WPCP MODIFICATIONS

Subsequent to entry of the Nitrogen Consent Judgment, DEP determined that in order to implement the required upgrade work at the Wards Island WPCP, it would have to take aeration tanks out of service for upgrading for an extended period of time. During the period such aeration tanks would be out of service, the City anticipated that it would be unable to comply with its SPDES permit limits for carbonaceous biological oxygen demand (“CBOD”), total suspended solids (“TSS”) and wet weather flow. In addition, DEP planned to perform certain stabilization work to the Manhattan and Bronx Grit Chambers at the Wards Island WPCP, that while unrelated to the BNR work, would proceed concurrently with the BNR upgrade work. This grit chamber stabilization work included, among other things, replacing all of the

¹ A combined sewer system channels both sanitary wastewater (*i.e.*, from toilets, sinks, *etc.*) and precipitation runoff to wastewater treatment plants for combined treatment. A CSO occurs when the precipitation runoff adds too much volume to the inflow to the plants, overwhelming its capacity, and the stormwater input is therefore diverted to allow continued wastewater treatment. CSO facilities provide reservoirs to store stormwater runoff until the storm event passes and the stormwater can be routed to the treatment plants in controlled amounts that do not overwhelm capacity.

mechanical equipment in the channels of the grit chambers including the influent bar screens and grit collection equipment to allow these facilities to provide continued protection to equipment at the Wards Island WPCP and to allow the WPCP to continue to meet its SPDES permit requirements. DEP anticipated that during this grit chamber channel work the amount of flow that could be accepted through the Wards Island WPCP headworks during wet weather would be reduced. DEP's SPDES Permit for the Wards Island WPCP requires it to accept flow equal to 2 times its design flow, or 550 million gallons a day ("MGD").

To address these concerns, the City requested, and the State approved, certain modifications to the Nitrogen Consent Judgment concerning the Wards Island WPCP. By a joint letter submitted by the State and City, and endorsed by the Court on November 14, 2006 (the "Letter Modification"), the Nitrogen Consent Judgment was therefore modified by: (1) the addition of two sets of interim limits for CBOD and TSS for the Wards Island WPCP for the periods when three or four aeration tanks would be out of service; (2) addition of milestones for the start and completion of the grit chamber channel work in both the Manhattan and Bronx Grit Chambers; and (3) reduction of the required maximum flow through the Wards Island WPCP headworks during wet weather from 550 MGD to 500 MGD from the start of the grit chamber channel work until its completion. The Wards Island interim limits were incorporated into the Nitrogen Consent Judgment by addition of new Appendices E(1) and E(2). Pursuant to the Letter Modification, the additional milestones concerning the grit chamber channel work and reduced maximum flow requirement during wet weather were incorporated through addition of new Paragraph V.C of the Nitrogen Consent Judgment.

L. THE 2009 WARDS ISLAND AND JAMAICA BAY WPCP ORDERS

Beginning in or around September, 2008, the City and State began to discuss certain additional issues that had arisen under the Nitrogen Consent Judgment, as well as certain issues concerning nitrogen treatment at the City's Jamaica Bay WPCPs that were related to, but not covered by the Nitrogen Consent Judgment (the "2008-09 Discussions"). By this time the City had submitted modification requests for certain milestones to DEC and subsequently missed such milestones. The City additionally notified the State that it projected that it would not meet various additional upgrade milestones at the five WPCPs being upgraded pursuant to the Nitrogen Consent Judgment. The City asserted that its delays were attributable, in part, to various force majeure events. The State had and has not taken any final position on the validity of the City's force majeure claims. The State additionally asserted, during the course of the 2008-09 Discussions, that it had certain claims against the City for violations of water quality standards and New York State Tidal Wetlands Law arising from nitrogen discharges from the Jamaica Bay WPCPs that are not addressed in the Nitrogen Consent Judgment. The City contested those claims and these claims were not referenced in either the 2009 Wards Island or Jamaica Bay stipulations and orders, which are described below.

1. The 2009 Wards Island WPCP Order

By letters to the State dated November 21, 2008 and December 31, 2008, DEP requested

that the Nitrogen Consent Judgment be modified by reducing and extending the interim maximum flow levels through the Wards Island WPCP headworks during wet weather from 500 MGD to 413 MGD while the Bronx and Manhattan grit chamber work is ongoing. DEP was and is currently performing stabilization work at both grit chambers, unrelated to the BNR upgrades, but which is necessary to maintain the ability of the Wards Island WPCP to receive maximum flow during wet weather in accordance with the Wards Island WPCP's SPDES permit. DEP asserted that it could not meet this requirement because DEP discovered during a number of storm events that the Wards Island WPCP only had the capacity to accept 413 MGD during the grit chamber work. DEP asserted that its staff and construction workers at the Wards Island WPCP had been endangered by flooding of the grit chambers at flows above 413 MGD.

In its November 21, 2008 letter, DEP additionally requested extension of the interim limits for TSS and CBOD set forth in Appendix E(1) and E(2) of the Nitrogen Consent Judgment (as modified in the Letter Modification) as part of DEP's recovery plan for projected compliance delays for the BNR upgrade work at Wards Island WPCP.² DEP asserted that the BNR upgrade work at the Wards Island WPCP has been significantly delayed by force majeure events and unanticipated field conditions impacting aeration tank work. DEP expressed its intent to mitigate to the extent possible the overall construction delays to the BNR upgrade work at the Wards Island WPCP by implementing a recovery plan to upgrade four aeration tanks at a time instead of three, which DEP anticipates will accelerate the aeration tank upgrade work. Because taking four tanks off-line at a time instead of three would reduce treatment capacity, DEP asserted that extension of the interim limits for TSS and CBOD is necessary to support DEP's recovery plan.

The State agreed that it was and is in the long-term interest of the public, the environment, and worker safety to relax the maximum wet weather flow for the Bronx and Manhattan grit chambers at the Wards Island WPCP, and to extend the interim TSS and CBOD limits at the Wards Island WPCP to allow the City to recover time lost in meeting upgrade requirements. The State therefore agreed to the City's requested modifications, as part of the overall resolution of the issues raised in the 2008-09 Discussions.

In addition, the State agreed, as part of the overall resolution of the issues raised in the 2008-09 Discussions, to reduce the City's aggregate potential liability for current or future noncompliance with seven milestones under the Nitrogen Consent Judgment by \$37.5 million.³

² Interim limits relax the treatment standards applicable to normally functioning wastewater treatment facilities. DEC and other regulators typically agree to interim limits when wastewater treatment facilities are undergoing repair or upgrade, so that the owner/operator is not penalized for unavoidably reduced treatment capacity while undertaking work that is in the long-term best interest of public health and the environment.

³ The seven milestones are:

1. Completion of Construction of Wards Island (WI-78) by August 5, 2009.
2. Completion of Construction of Wards Island (WI-79) by December 31, 2010.

The 2008-09 discussions additionally included issues that had arisen under an administrative order with DEC concerning CSOs. On April 14, 2008, DEC and DEP had entered into a modification to an administrative order on consent, DEC Case No. CO2-20000107-8 (the “2005 CSO Order”) to resolve the City’s violations of the 2005 NYC CSO Order. Such modification was set forth in DEC Case No. CO2-20070101-1 (the “2008 CSO Order”). Among other things, both CSO Orders require the City to certify the completion of construction of various CSO facilities pursuant to plans and specification approved by DEC, in accordance with an agreed upon schedule of milestone dates. Compliance with such milestones is subject to stipulated penalties under the 2005 CSO Order. In addition, the 2005 CSO Order requires the City to fund up to four independent environmental monitors to assess compliance with the CSO Orders during construction and operation of the facilities. Under the 2008 CSO Order the City was required to certify construction completion of the Flushing Bay CSO Retention Facility by May 31, 2007. The City certified completion of this milestone on May 17, 2007, but excluded the odor control system from this certification. DEC disputed the completion certification, and on July 15, 2008 issued an NOV (the “Flushing NOV”), which assessed a stipulated penalty as of that date of \$5,400,000. The City timely commenced a challenge to the Flushing NOV pursuant to the 2008 CSO Order.

The City and State agreed to resolve the Flushing NOV and other issues that had arisen under the CSO Orders as part of the 2008-2009 Discussions. Pursuant to those discussions the State sought the ability to utilize the independent environmental monitors funded by the City under the 2005 CSO Order to also perform work on matters arising under the Nitrogen Consent Judgment.

As part of the resolution of the issues being addressed during the 2008-09 Discussions, the State and City agreed, with respect to the Wards Island WPCP, the CSO Orders, and the missed upgrade milestones at the five affected WPCPs, that: (1) the interim limits for TSS and CBOD at the Wards Island WPCP would be extended through December 31, 2012, with different limits applying depending on whether three or four aeration tanks are out of service; (2) the maximum allowable wet weather flow through the Wards Island WPCP headworks during wet weather while the grit chamber channel construction work is ongoing would be reduced from 500 MGD to 413 MGD for a period ending no later than December 31, 2012; (3) the Flushing NOV under the 2008 CSO Order would be resolved by the DEP paying a penalty of \$175,000 to DEC and completing a compliance schedule comprised of specific corrective actions; (4) the

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3. Completion of Construction of Wards Island (PO-87B Battery E) by December 1, 2008.
 4. Completion of Construction of Hunts Point by June 30, 2008.
 5. Completion of Construction of Tallman Island by December 31, 2010.
 6. Completion of Construction of Bowery Bay by December 31, 2011.
 7. Completion of Construction of 26th Ward by June 30, 2008.

The City asserted force majeure claims with respect to all of these milestones except No. 4, Completion of Construction of Hunts Point.

CSO independent environmental monitors would be allowed to work on all matters arising from the Nitrogen Consent Judgment, in accordance with section XI of the Nitrogen Consent Judgment and the Annual Nitrogen OEM Work Plan provided by DEC to DEP and the City by February 1st of every year; (5) the State agreed to reduce the City's potential liability for noncompliance with certain milestones under the Nitrogen Consent Judgment by \$37.5 million; and (6) upon agreement by the parties to the terms of (a) the Wards Island stipulation and order, (b) a companion stipulation and order modifying the Nitrogen Consent Judgment with respect to the Jamaica Bay WPCPs, and (c) the CSO order modification referenced herein, the parties would commence discussions regarding remaining outstanding matters concerning the Nitrogen Consent Judgment and the Jamaica Bay Comprehensive Plan. These terms were set forth in greater detail in the "Stipulation and Order Modifying the Nitrogen Consent Judgment Concerning the Wards Island Water Pollution Control Plant" (the "Wards Island WPCP Order"). The Wards Island WPCP Order was submitted to the Honorable Paul G. Feinman, who entered it on October 7, 2009.

2. The 2009 Jamaica Bay WPCP Modifications

Among other requirements, the Nitrogen Consent Judgment required all four Jamaica Bay WPCPs to meet two effluent discharge limits for nitrogen discharged to Jamaica Bay, with the second, more stringent limit of 45,300 lbs/day having gone into effect on January 1, 2009. All four WPCPs are subject to one zone limit for nitrogen discharges at any given time, although each plant has a separate SPDES permit. (Effluent discharges from the Jamaica WPCP are subject to SPDES Permit # NY0026115 (the "Jamaica SPDES Permit")). From its inception on January 1, 2009, the City has been in compliance with the 45,300 lbs/day zone limit.

Concurrently with the 2008-09 Discussions, the City was (and is now) in the process of planning and implementing a stabilization of the aeration and final settling tanks at the Jamaica WPCP. Stabilization refers to refurbishing and upgrading of the WPCP equipment as appropriate to ensure long-term compliance with SPDES Permit requirements. The City proposed integrating a BNR upgrade at the Jamaica WPCP into the stabilization work; performing such work during the stabilization would be both cost-effective and would reduce the duration of construction impacts on plant operation.

By letter to DEC dated February 14, 2007, DEP requested interim effluent discharge limits for TSS and CBOD for discharges from the Jamaica WPCP for certain periods over five years during the stabilization work. The City cited the need for relaxed limits during the periods when work on the aeration and final settling tanks necessitated their removal from operation in specific combinations that would reduce treatment capacity. If granted, the interim effluent limits sought by the City could additionally facilitate inclusion of the BNR upgrade in the stabilization work by addressing lost treatment capacity attributable to that work. In furtherance of the option of including a BNR upgrade, the City developed Change Order #JA-2G-87 ("the Change Order), modifying Jamaica Stabilization Contract # 2. The Change Order would add BNR upgrade work to Jamaica Stabilization Contract 2, allowing for the installation of BNR technology to reduce nitrogen discharges from the Jamaica WPCP to Jamaica Bay.

As part of the resolution of the issues addressed during the 2008-09 Discussions, the State agreed to the Jamaica WPCP interim limits for TSS and CBOD requested by the City. The City agreed to include a BNR upgrade in the stabilization work at the Jamaica WPCP, and to accept a reduced nitrogen discharge limit of 41,600 lbs/day for the four Jamaica Bay WPCPs, measured as a combined limit for all four Jamaica Bay WPCPs. These terms were set forth in greater detail in the “Stipulation and Order Modifying the Nitrogen Consent Judgment Concerning the Jamaica Bay Water Pollution Control Plants” (the “Jamaica WPCP Order”). The Jamaica WPCP Order was submitted to the Honorable Paul G. Feinman, who entered it on October 7, 2009.

M. THE 2009-10 DISCUSSIONS REGARDING REMAINING OUTSTANDING NITROGEN CONSENT JUDGMENT ISSUES AND THE JAMAICA BAY COMPREHENSIVE PLAN

Pursuant to the 2009 Wards Island Stipulation and Order, after its entry the State and City commenced discussions regarding remaining outstanding matters concerning the Nitrogen Consent Judgment and the Jamaica Bay Comprehensive Plan. In addition, on or about August 27, 2009, several citizens groups, the American Littoral Society, Jamaica Bay EcoWatchers, Natural Resources Defense Council, and New York/New Jersey Baykeeper (the “Citizens Groups”), sent the City a letter giving notice of their intent to commence an action pursuant to Section 505 of the CWA, 33 U.S.C. § 1365 (the “Notice Letter”). The Notice Letter alleged that the City has been violating, and continues to violate, conditions in the SPDES permits for each of four WPCPs that discharge to Jamaica Bay (26th Ward, Jamaica, Coney Island, and Rockaway). More particularly, the Notice Letter alleged that those WPCPs have been and are discharging (a) nitrogen and phosphorus in amounts that cause or contribute to violations of the water quality standards for nitrogen and phosphorus, (b) nitrogen, phosphorus, and BOD in amounts that cause or contribute to violations of the water quality standard for dissolved oxygen, and (c) ammonia and organic nitrogen in amounts that cause or contribute to violations of the water quality standard for ammonia in Jamaica Bay and its tributaries. The Notice Letter asserted that in any ensuing citizens suit the Citizens Groups would seek an order (1) declaring that the City is in violation the permits, (2) compelling the City to comply, (3) assessing civil penalties for violations from August 27, 2004 to the present, and (4) awarding attorneys fees and litigation costs. The City disputes these allegations.

Tripartite discussions ensued between and among the State, the City and the Citizens Groups. Those tripartite discussions particularly focused on ways in which nitrogen discharges from the City’s Jamaica Bay WPCPs could be reduced through enhanced nitrogen removal technology and treatment, additional studies and monitoring to assist in the nitrogen reduction effort, and environmental benefit projects to mitigate potential adverse impacts of nitrogen discharges on Jamaica Bay. The State and City continued their bi-party discussions of other outstanding issues that had arisen under the Nitrogen Consent Judgment.

On December 31, 2009, concurrent with the 2009-10 Discussions, the City submitted an

approvable Phase II Conceptual Plan, and committed in that Plan to submit a final approvable basis of design for the Phase II BNR upgrades by June 30, 2011, in accordance with the Nitrogen Consent Judgment.

At the conclusion of the discussions between the State and City, and between and among the State, City and Citizens Groups, the parties agreed, among other things, and as more specifically set forth below, that: (A) the City would: (1) implement additional BNR infrastructural improvements at its Jamaica Bay WPCPs; (2) accept stricter limits on nitrogen discharges to Jamaica Bay over time reflecting those improvements; (3) undertake additional studies and monitoring to track and further improve water quality in the Bay; (4) ensure a total of \$13,000,000 in funding for environmental benefit projects (“EBPs”) for salt marsh restoration in Jamaica Bay, and pay a \$2,000,000 penalty intended for the same purpose; and (5) agree to modification of the SPDES permits for its individual WPCPs to harmonize the permits to reflect the newly agreed upon terms and the anticipated amendments to the Nitrogen Consent Judgment; (B) the State would accept these commitments by the City in satisfaction of accrued and projected stipulated penalties, and potential claims by the State against the City for violations of ECL Article 25 (the Tidal Wetland Law) and ECL §17-0501 (contravention of water quality standards) in Jamaica Bay related to the discharge of nitrogen, ammonia, phosphorus and BOD that are not addressed in the Nitrogen Consent Judgment,⁴ and, in further consideration of the City’s commitments, agree to extend certain Nitrogen Consent Judgment upgrade milestones; and (C) the Citizens Groups would, in light of the aforementioned commitments by the City: (1) refrain from commencing a citizens suit pursuant to the CWA for the violations alleged in the Notice Letter; (2) not object to the aforementioned modifications to the City’s SPDES permits for its individual WPCPs; and (3) in any citizens suit alleging violations of the resulting SPDES permit terms, limit the relief sought to injunctive relief, costs and attorneys’ fees (i.e., not penalties).

The State and City agreed to effectuate the modifications of their respective rights and obligations under the Nitrogen Consent Judgment through this “First Amended Nitrogen Consent Judgment.”

N. SUMMARY

The State and City having each consented to the making and entering of this First Amended Nitrogen Consent Judgment, without further litigation, hearing or adjudication of any issues of fact or law, in order to: (1) continue and advance the upgrading of the Upper East River WPCPs in order to comply with the LIS TMDL-based nitrogen limits mandated for all dischargers to Long Island Sound; (2) harmonize the nitrogen limits in the SPDES permits for the City’s Jamaica Bay WPCPs with the nitrogen limits to be implemented through this First Amended Nitrogen Consent Judgment; (3) reduce nitrogen discharges from the City’s WPCPs to Jamaica Bay; and (4) protect and improve water quality and the environment in Long Island Sound and Jamaica Bay; and it being in the public interest:

⁴ The City disputes these potential claims by the State.

IT IS HEREBY ORDERED AND DECREED:

I. BINDING EFFECT

A. Binding Effect

The City is bound by, and agrees to follow and comply with, the terms, limits, provisions and requirements set forth in this First Amended Nitrogen Consent Judgment, including Appendices A through I, which are incorporated and made enforceable herein, and any amendments to the First Amended Nitrogen Consent Judgment or its appendices or documents that will be incorporated herein.

B. Prior Orders Superseded

This First Amended Nitrogen Consent Judgment supersedes the provisions of the Nitrogen Consent Judgment and any prior orders or stipulations modifying the Nitrogen Consent Judgment. To the extent any rights, obligations or requirements hereunder conflict with any rights, obligations or requirements under those other orders or stipulations, then the provisions of this First Amended Nitrogen Consent Judgment, including the milestones and effluent limits set forth in Appendices A through C, E, and F1 and F2 shall control.

II. CIVIL PENALTY AND EBPs

In resolution of (a) stipulated penalties that have accrued, or are currently projected would accrue under the Nitrogen Consent Judgment milestones, and (b) any claims the State may have for tidal wetland violations in Jamaica Bay due to nitrogen discharges from its Jamaica Bay WPCPs as of the Effective Date of this First Amended Nitrogen Consent Judgment; and in consideration of the extension of various upgrade milestones under the Nitrogen Consent Judgment, the City will pay the following in civil penalties and EBPs:

A. Payable Civil Penalty

The City shall pay a civil penalty in the sum of \$2,000,000 to the New York State Marine Resources Account within 60 days of the effective date of this First Amended Nitrogen Consent Judgment. These funds shall be used for Jamaica Bay saltwater marsh restoration projects in the interior of Jamaica Bay, including, but not limited to the restoration of Yellow Bar Hassock saltmarsh. The City shall forward a check made payable to the order of the "*New York State DEC Marine Resources Account*" to Assistant Attorney General Andrew Gershon, Environmental Protection Bureau, New York State Department of Law, 120 Broadway, New York, NY 10271, or such other person as the State shall designate in writing.

B. Environmental Benefit Projects

1. In addition to the civil penalty cited in Paragraph II.A. above, the City shall pay not less than \$10,025,000 for the performance of EBPs for the purpose of restoring saltwater marsh in the interior of Jamaica Bay, subject to the exception in Sub-Paragraph II.B.5 below. The City shall pay an additional \$3,000,000 for this purpose or secure \$3,000,000 from another non-federal source⁵ for this purpose, bringing the total required expenditures pursuant to this paragraph to \$13,025,000.⁶ The projects shall be done in accordance with DEC's EBP Policy. The City shall make these EBP payments in accordance with the following schedule:

- Within 60 days of the effective date hereof : \$1,025,000
- By August 31, 2011: \$3,000,000
- By December 31, 2012: \$2,000,000
- By December 31, 2013: \$4,000,000
- By December 31, 2014: \$3,000,000

2. The City shall make these payments by forwarding checks to the National Fish and Wildlife Foundation ("NFWF") for deposit into a dedicated sub-account within the Dissolved Oxygen ("DO") Fund (the "Jamaica Bay Sub-Account") to be used solely for the purpose of funding projects to restore saltwater marsh in the interior of Jamaica Bay. Alternatively, with respect to any non-City funds secured by the City in fulfillment of its obligations under this paragraph, the City shall have the funds paid to NFWF for deposit into a dedicated sub-account within the DO Fund (the "Jamaica Bay Sub-Account") to be used solely for the purpose of funding projects to restore saltwater marsh in the interior of Jamaica Bay, subject to the exception in Sub-Paragraph II.B.5 below. Prior to the date the first payment is due, the State shall confirm that the City should make the check payable to the National Fish and Wildlife Foundation (with a notation that the funds are to be directed to the Jamaica Bay Sub-Account), or otherwise advise the City as to any alternate recipient to whom the check should be payable, and also advise the City to whom the payment should be sent and at what address. The State shall enter into a separate cooperative agreement with NFWF (the "NFWF CA"), which shall provide that the funds shall be kept in this separate sub-account of the DO Fund and used exclusively to fund such projects. The NFWF CA shall further provide that: (1) any projects thereunder shall be designed and proposed by the Intergovernmental Workgroup on Marsh Restoration (the "IGW"), of which NFWF shall be a member, or any member

⁵ Funds that have been paid, or are payable, as a penalty or fine, or to fund an EBP or Supplemental Environmental Project, cannot be used to satisfy this funding obligation.

⁶ The EBPs to be funded pursuant to this Paragraph II.B are in addition to the EBPs funded and administered by the City pursuant to the Nitrogen Consent Judgment, which are addressed below in Paragraph II.C.

thereof or other stakeholder in consultation with the IGW;⁷ (2) any projects thereunder shall adhere to the requirements of the DEC EBP Policy as well as the EBP provisions of this First Amended Nitrogen Consent Judgment; (3) the State shall have final approval over the projects selected; (4) NFWF shall make disbursements from the Jamaica Bay Sub-Account to such recipients at such times and in such amounts as directed by the State to fund projects selected by the IGW pursuant to this Section; (5) NFWF shall not have responsibility for negotiating or otherwise arranging for grant agreements or other financing arrangements with recipients for performance of the projects selected; (6) the NFWF CA shall have a termination date of the earlier of ten years from the date of final payment by the City pursuant to this Paragraph, or payment of all funds from the Jamaica Bay Sub-Account, unless the State, in its sole discretion, decides to extend this time limit; (7) the funds may be used as matching funds for any federally funded project to restore wetlands; and (8) the State shall have the right to direct NFWF to pay any uncommitted funds remaining in the Jamaica Bay Sub-Account ten years after the date of final payment made hereunder (taking into account payments to NFWF for administrative and other costs pursuant to the NFWF CA) either: (a) to an alternate non-profit organization selected by the State to receive and administer that money pursuant to an agreement with the State, consistent with this Section, or (b) to the Marine Resources Account. In the event an alternative non-profit organization must be identified to receive and administer the EBP funds, the State shall provide the City an opportunity to propose alternative non-profit organizations to receive and administer the EBP funds and the State shall consider any City recommendations prior to making any determinations.

3. Nothing in this Section shall invest NFWF with any legal right to the receipt of the EBP funds paid by the City pursuant to this section. In the event that the State decides, in its sole discretion, not to enter into an agreement with NFWF in accordance with this Section, then the State shall designate an alternate non-profit organization or organizations to receive and administer the money pursuant to an agreement or agreements with the State, consistent with these provisions. If the State decides not to enter into an agreement with NFWF, then the State shall advise the City as early as practicable, and in any event prior to the date the City's first payment is due, that NFWF will not be receiving EBP funds pursuant to this Section. The State shall promptly notify the City if it designates an alternate non-profit organization or organizations to replace NFWF, and advise the City concerning any revision to the City's payment obligation(s). In the event an alternative non-profit organization must be identified to receive and administer the EBP funds, the State shall provide the City an opportunity to propose alternative non-profit organizations to receive and administer the EBP funds and the State shall consider any City recommendations prior to making any determinations.

⁷ The IGW is comprised of representatives from federal, state, and local agencies with jurisdictional interests in Jamaica Bay, including DEP, DEC, the United States Army Corps of Engineers, the Port Authority of New York and New Jersey, and the National Park Service. Its purpose is to review opportunities towards comprehensive efforts for marsh restoration in Jamaica Bay. The agencies have agreed to seek federal authorization and funding for marsh island restoration in Jamaica Bay.

4. The State shall make best efforts to work with and encourage NFWF, or any alternatively designated non-profit organization, to expend all of the funds paid by the City pursuant to this Section. The State shall only direct the payment of unspent or uncommitted funds to it pursuant to Paragraph II.B.2 above if the State, after consultation with the City, is unable to designate an alternate non-profit organization to receive and administer such funds pursuant to an MOU with the State, consistent with this Section. Should the City request that the term of the NFWF CA or other agreement entered into to hold and distribute EBP funds pursuant to this Section be extended beyond ten years, the State shall not unreasonably deny such request.

5. The EBP funds to be paid by the City pursuant to Paragraph II.B. are intended to fund projects to restore saltwater marsh in the interior of Jamaica Bay. However, should the City identify particular Jamaica Bay habitat restoration projects proposed by the IGW other than interior saltwater marsh restoration, then the City may propose that a specific allocation of the EBP funds be directed to such project. The State may approve the proposed use of the EBP funds, and direct NFWF, or any other designated non-profit organization holding the EBP funds, to fund the project, if the State determines that the project will benefit water quality in Jamaica Bay. No expenditure of funds pursuant this sub-paragraph shall fulfill any City obligation arising under any other administrative or judicial order.

6. Should the full \$13,025,000 not be expended or committed to an identified Jamaica Bay marsh restoration project or projects pursuant to this Section within ten years after the final payment is made, or such later date as agreed to by the State, then the State may direct that the remaining EBP funds be paid to the State as a civil penalty payable to the Marine Resources Account, to be used consistent with Paragraph II.A. above, by check made payable to the order of the "New York State Department of Environmental Conservation Marine Resources Account," and sent to AAG Andrew Gershon, or such other recipient as the State shall designate. The State shall provide the City with 30 days written notice before directing the transfer of any funds for payment as a civil penalty to the Marine Resources Account pursuant to this paragraph.

7. Any written or formal public oral statement, made by the City making reference to any EBP undertaken pursuant hereto shall include language stating that the project was undertaken as part of the resolution of an enforcement matter brought by the State for the applicable violation(s).

C. Completion of Outstanding EBP Obligations from the Nitrogen Consent Judgment

1. The City shall additionally complete its outstanding obligations originally imposed under Paragraph II.B and Appendix D of the Nitrogen Consent Judgment with respect to funding, planning and implementing EBPs to benefit the waters in and around New York City. More specifically, the City shall complete implementation of the EBP plan

submitted on or about January 1, 2007, and approved by the State on July 24, 2007, that was incorporated into the Nitrogen Consent Judgment as Appendix D thereto (the “Original EBP Plan”), in accordance with the schedule contained therein.⁸

2. EFC shall make payments from the EBP funds originally paid to it by the City pursuant to the Nitrogen Consent Judgment (the “Original EBP Fund”), in the form of check or warrant payable to the City or the consultant and/or contractor, as applicable, performing the EBPs pursuant to the Original EBP Plan, no later than 30 days following receipt of the State’s written approval.

3. EFC shall keep an amount of the accrued interest equal to its administrative expenses for administering the Original EBP Fund, which expenses shall not exceed \$6,000 annually. Upon the withdrawal of these funds, EFC shall provide a written statement of its costs to the State and City. Any interest not kept by EFC to pay the administrative expenses set forth herein shall be placed into the Original EBP Fund and used to perform the EBP projects set forth in the State-approved Original EBP Plan.

4. Should the City not expend or commit⁹ the full \$5,300,000 allocation for the EBP(s) by January 1, 2011, or such later date agreed to by the State in its sole discretion, then the remaining EBP funds shall be paid by EFC to the State as a payable civil penalty, by check made payable to the order of the “New York State Department of Environmental Conservation,” and sent to the address set forth in Paragraph II.A. above. Such payable civil penalty shall be paid within 30 days of EFC receiving written notice from the State.

5. Any written or formal public oral statement by the City making reference to an EBP undertaken in fulfillment of the Original EBP Plan shall include the following language: “This project was undertaken in connection with the settlement of an enforcement action taken by New York State and DEC for violations of New York State law and DEC regulations.”

6. The Quarterly Construction Reports required by Section XII below shall include a report on the status of the EBPs and funds expended on the EBPs during the prior quarter in fulfillment of the Original EBP Plan. The Quarterly Construction Report shall include a detailed EBP status and cost accounting of all funds expended, and general estimates of the costs expected to be incurred during the following quarter.

⁸ The City’s compliance with the schedule in the Original EBP Plan shall not be subject to stipulated penalties under this First Amended Nitrogen Consent Judgment.

⁹ To “commit” the EBP funds, the City shall encumber such funds through the issuance of a Memorandum of Agreement, a Notice, or Notices, to Proceed to Construction for a contract, or contracts, to complete all of the EBPs set forth in the Original EBP Plan.

III. MODIFICATION OF THE FOUR JAMAICA BAY WPCP SPDES PERMITS

A. Within 30 days of the effective date of this First Amended Nitrogen Consent Judgment, DEP shall submit to DEC a request to modify the four Jamaica Bay WPCP SPDES Permits to add to those permits the exact language in Appendix I hereto. These are the only modifications that DEP will or can request at that time.

B. DEC shall incorporate the exact language in Appendix I hereto into the Jamaica Bay SPDES permits, and notice the permit modifications for public comment in accordance with ECL Article 70 and 6 NYCRR Part 621. DEP and DEC stipulate that they will not object to the inclusion of these terms in the SPDES permits for the four Jamaica Bay WPCPs, and that these proposed modifications shall contain no other proposed changes to the SPDES permits for the four Jamaica Bay WPCPs.

C. Within 30 days of the effective date of this First Amended Nitrogen Consent Judgment, and concurrent with the modifications of the Jamaica Bay WPCP SPDES Permits described above in Paragraph III.A, DEC shall make a request for information (“RFI”), pursuant to 6 NYCRR Section 750-1.19(b), to DEP in order to proceed with other modifications to DEP’s SPDES Permits that DEC deems necessary.

D. Within 6 months of receiving DEC’s RFI, DEP shall respond to the RFI and submit a complete application for modification of the SPDES permits for the four Jamaica Bay WPCPs.

E. Within 12 months of DEP’s submission of a complete application, DEC shall draft and then notice for public review and comment, in accordance with NYS Environmental Conservation Law Article 70 and 6 NYCRR Part 621, modified SPDES permits for the four Jamaica Bay WPCPs. Among other conditions, these modified SPDES permits shall contain final water quality-based effluent limitations for total nitrogen for the four Jamaica Bay WPCPs.¹⁰

F. If circumstances beyond DEC’s control prohibit DEC from achieving the goals set forth in Paragraph III. B. (*i.e.* issuing the four Jamaica Bay WPCP SPDES Permits containing the Jamaica Bay SPDES Milestones and Performance-Based Interim Nitrogen Limits), or in Paragraphs III. C. and/or E. (*i.e.* further modifications), then DEC shall notify DEP of such delaying circumstances and DEC shall be excused from the requirements in Paragraphs III.B, C and E.

G. Incorporation of Performance-Based Interim Nitrogen Limits.

1. Upon the City’s compliance with each Jamaica Bay SPDES Milestone, which are additionally mandated hereunder and set forth in Appendix C.2, the Performance Based Interim Nitrogen set forth in Appendix C.2 shall be calculated utilizing the protocol set

¹⁰ As noted in Appendix C.2., Note (1), all references to “final” nitrogen effluent limits herein shall be to the limits to be developed through the binding permit administration and hearing process in accordance with 6 NYCRR Part 621.

forth in Appendix D.

2. The Performance-Based Interim Nitrogen Limits shall be self-executing. Upon their calculation by DEC, in accordance with the language set forth in the SPDES Permits and Appendix D, they shall be incorporated into this First Amended Nitrogen Consent Judgment and their numeric values inserted into the four Jamaica Bay SPDES Permits, without further modification of the First Amended Nitrogen Consent Judgment and the four Jamaica Bay SPDES Permits.

H. Nothing in this First Amended Consent Judgment shall diminish the right of DEC to propose any other necessary modification to the SPDES permits for the four Jamaica Bay WPCPs, not in conflict with the modifications contained in this Paragraph or in Section IV, or the City's right to challenge any such modification.

IV. SPDES PERMIT ADMINISTRATION AND HEARING PROCESS FOR THE JAMAICA BAY WPCPS

A. Within 6 months after Phase I post-construction water quality monitoring is complete pursuant to Paragraph VII.D.2, DEP shall submit to DEC a complete SPDES permit modification application, pursuant to ECL §70-0115 and 6 NYCRR 621.11, which shall contain a variance application in compliance with 6 NYCRR 702.17, in the event the City cannot meet a final water quality based effluent limitation for total nitrogen set forth in its SPDES Permits.

B. If DEC deems any SPDES permit modification application submitted by DEP pursuant to Section IV of this First Amended Nitrogen Consent Judgment incomplete, DEP shall have three months to revise and submit a complete SPDES permit modification application to DEC before any stipulated penalties shall accrue. During this three-month period, the interim limits set forth in this First Amended Nitrogen Consent Judgment which are in effect at the time DEP submitted the application shall continue to be applicable.

C. If DEC determines that the request for a variance satisfies the requirements of 6 NYCRR 702.17, DEC agrees to publicly notice, in accordance with ECL §70-0109 and 6 NYCRR 621.7, draft SPDES permits, with modifications, for each of the four Jamaica Bay WPCPs, within 6 months of DEP's submitting a complete application for a SPDES Permit modification and variance. The expedited hearing process described in Paragraph IV.H. below shall apply to these SPDES permit modifications and variance requests.

D. If DEC determines that the request for a variance does not satisfy the requirements of 6 NYCRR 702.17, and denies DEP's request for a SPDES permit modification, then the expedited hearing process described in Paragraph IV.H. below shall apply to that denial.

E. Any variance DEC issues shall be consistent with applicable DEC regulations and projected WPCP performance data, including accounting for reasonably anticipated population growth for

a period of five years. Except as provided in Paragraphs III.A and B, the City reserves all rights to challenge any SPDES Permit or variance proposed by DEC.

F. Except as set forth in paragraph IV.H. below, all time periods specified in ECL Article 70 and/or 6 NYCRR Part 621 shall apply. Pursuant to ECL §70-0109 and 6 NYCRR Section 621.14, any time period specified in Article 70 of the ECL and/or 6 NYCRR Part 621 may be extended for good cause by mutual written consent of the DEP and DEC.

G. DEC and DEP agree not to file any interlocutory appeals in the administrative process until after any adjudicatory hearing with respect to the SPDES Permits described herein in Section IV is complete. (See 6 NYCRR 624.8(d)(6)). In the event another party to the proceeding files an appeal prior to the conclusion of an adjudicatory hearing, DEC and DEP shall be released from the commitment to hold appeals until after any adjudicatory hearing is complete.

H. Regarding any adjudicatory SPDES Permit Hearing held pursuant to Paragraph IV of this First Consent Judgment, DEC agrees to the following time frame for the procedures set forth in 6 NYCRR Part 624:

1. Issues Ruling (6 NYCRR 624.4). The ALJ shall issue an Issues Ruling 30 days after the completion of the Issues Conference. The Issues Conference shall be considered completed no later than 30 days after the receipt of authorized written submittals or, in the event that no submittals are authorized, no later than 30 days after receipt of the Issues Conference transcript and the Issues Conference participants' corrections to the transcript.

2. Commissioner's decision on the Hearing Report (6 NYCRR 624.13). The Commissioner shall issue a decision 60 days after the parties are notified of the official closing of the Adjudicatory Hearing record, except that if the Hearing Report is circulated as a recommended decision, then 30 days after the close of the record, such event occurring at the expiration of the time allowed for comment on the recommended decision. 6 NYCRR 624.8(a)(5) defines the close of record. If the Hearing Report is circulated as a recommended decision, the Commissioner will schedule the time period for comments on the recommended decision. The schedule for comments and any replies on a recommended decision would be no greater than 60 days.

3. The requirements of sub-paragraph F shall not bind any participants to an administrative proceeding, other than DEC and DEP.

4. In the event of an administrative hearing, the parties retain all rights not specifically waived herein.

I. Nothing in this First Amended Nitrogen Consent Judgment shall restrict the right of the City, pursuant to the CWA, to submit a Use Attainability Analysis ("UAA") to propose changing the designated uses and/or water quality standards for Jamaica Bay. Any change in designated

use and/or water quality standards due to an approved UAA may provide a basis for a modification to the SPDES Permits then in effect for the four WPCPs discharging to Jamaica Bay. The parties reserve all rights to challenge any UAA proposed or issued.

J. Nothing in this First Amended Nitrogen Consent Judgment shall diminish the right of DEC to propose any other necessary modifications to the SPDES permits for the four Jamaica Bay WPCPs, not in conflict with the modifications contained in this Paragraph or in Section III, or the City's right to challenge any such modification.

V. IMPLEMENTATION OF THE UPPER EAST RIVER AND JAMAICA BAY NITROGEN UPGRADES

A. Phase I Modified BNR Facility Plan and Phase II Conceptual BNR Facility Plan for the Upper and Lower East River and Jamaica Bay WPCPs

In order to improve the nitrogen removal at the Upper East River and Jamaica Bay WPCPs, and, with respect to the Upper East River WPCPs, implement the nitrogen discharge reductions required under the LIS TMDL through that improved nitrogen removal process, the City is permanently enjoined and directed to upgrade those facilities in accordance with the schedule milestones, work projects, and interim and final effluent limits set forth in the Modified Phase I BNR Facility Plan and Phase II Conceptual BNR Facility Plan,¹¹ and Appendices A through H to this First Amended Nitrogen Consent Judgment. In addition to the major milestones set forth in Appendices A and B, the approved Modified BNR Facility Phase I Plan contained an approved schedule of minor milestones, the remainder of which outstanding minor milestones have been incorporated into Appendix A. In addition, any milestones proposed in the approved Phase II Conceptual BNR Facility Plan or Phase II Basis of Design Report shall be incorporated into Appendix A upon approval by the State. In performing the upgrades required hereunder the City shall strictly comply with, and be bound by, the schedules, timetables and provisions of Appendix A through C, irrespective of the availability of financial assistance from Federal, State or other sources.

B. Basis for Design for the Phase II Plan for the Upper and Lower East River WPCPs

1. As set forth in Appendix B, no later than June 30, 2011, the City shall submit an approvable Basis For Design Report for the Phase II BNR upgrades for review and approval by the State. The Basis for Design Report for the Phase II BNR Upgrades shall specify the final methods and WPCP upgrades, including but not limited to the selection of a carbon source and final design criteria for carbon addition facilities for improving the Phase 1 BNR WPCPs to achieve the combined Zone 8/9 LIS 15-year TMDL effluent limitation.

¹¹ The Phase II Conceptual BNR Facility Plan submitted on or about December 31, 2009, as amended on June 24, 2010, is approved upon execution of this First Amended Nitrogen Consent Judgment.

2. Any milestones set forth in the approved Phase II Basis for Design Report, shall, upon approval, be incorporated by reference into Appendix A. The Phase II BNR Basis of Design Report shall:

- a. propose specific projects and practices necessary to achieve compliance with the final effluent limits as set forth in Appendix C.1.
- b. incorporate findings of the on-going Applied Research Program.
- c. identify enforceable compliance milestones for the Phase II Plan nitrogen reduction program.
- d. require that construction of all Phase II Plan components shall be completed and operational in accordance with Appendix A.
- e. recommend an ongoing infrastructure review process to ensure that the Upper East River WPCPs have the long-term capability and necessary component redundancy and reliability to consistently meet the interim effluent limits set forth in Appendix C.1.

C. BNR Upgrades for the Four Jamaica Bay WPCPs

In order to reduce the nitrogen discharges to Jamaica Bay, the City shall upgrade the four Jamaica Bay WPCPs in accordance with the milestone schedule set forth in Appendix B (“26th Ward WPCP Upgrade Schedule and Jamaica Bay Milestones”) and Appendix C2 (“Jamaica Bay Interim and Final Limits”). The milestone schedules incorporate upgrade work for 26th Ward WPCP required under the 2006 Nitrogen Consent Judgment, and for the Jamaica Bay WPCP required under the 2009 Stipulation and Order Modifying the Nitrogen Consent Judgment, as well as newly agreed upon upgrade work now required under this First Amended Nitrogen Consent Judgment. As set forth in Appendix B, these upgrades under this First Amended Nitrogen Consent Judgment include, but are not limited to the following:

1. 26th Ward WPCP - Commence Operation of Interim Centrate Treatment with Carbon Addition – The City shall retrofit Aeration Tank (“AT”) #3 with a carbon feed system capable of providing full de-nitrification to the centrate being generated at the 26th Ward WPCP’s dewatering facility (“Interim Carbon Addition”). The City projects that Interim Carbon Addition will reduce nitrogen discharges by approximately 3,000 lbs/day during the periods when AT#3 is in separate centrate treatment mode. Under this configuration, AT #3 would not be available for mainstream treatment, although the City expects that at current flows and loads the 26th Ward WPCP will still be in continued compliance with 26th Ward’s SPDES permit limits for conventional pollutants. The City does not anticipate that flows and loads through 2014 will increase beyond the capacity of the two aeration tanks remaining in ordinary service (ATs #1 and 2). However, if unexpectedly high flows/loads are experienced at any of the four WPCP’s discharging to Jamaica Bay,

the City may use AT#3 for mainstream treatment. In addition, if either AT#1 or AT#2 need to be taken out of service for maintenance (which is not currently anticipated), the City may convert AT#3 from separate centrate treatment to mainstream treatment. In the event that equipment critical to the operation of the interim chemical feed system fails, DEP shall not be required to use AT#3 for separate centrate treatment until the chemical feed system is repaired. In such case DEP shall use all best efforts to effectuate any repairs required to resume operation of the chemical feed system in an expedited manner.

2. 26th Ward WPCP - Commence Operation of Permanent Separate Sidestream Centrate Treatment – The City shall design and build a permanent separate sidestream facility at the 26th Ward WPCP to treat the annual average centrate flows from all four WPCPs discharging to Jamaica Bay. Until the permanent chemical treatment facility is operational, any centrate that is in excess of the capacity of the separate sidestream treatment facility shall be treated through AT#3 with interim carbon, to the extent practicable.

3. Submit Enhanced Jamaica Bay Ambient Monitoring Plan – The City shall submit an approvable enhanced ambient monitoring plan to the State by April 1, 2010 that increases the number of existing monitoring locations in the navigable channels from nine to 11. The additional stations will be sited at N-9A Coney Island at Flashing Red Buoy No. 2, approx. 420 yards west of Coney Island Outfall, Depth 18 ft; Lat. 40N 34' 04", Long. 73W 56' 08". J-10 Paerdegat Basin approx. 150 yards southeast of bridge at mouth of Paerdegat Basin. Depth 20 ft; Lat. 40N 37' 18", Long. 73W 53' 41". The Enhanced Jamaica Bay Ambient Monitoring Plan shall evaluate the feasibility of, and where practical require installation of, continuous (remote) real time monitoring stations.

4. 26th Ward WPCP – Submit Approvable Sludge Optimization Plan – The City shall submit an approvable sludge optimization plan (the “Sludge Optimization Plan”) to the State by September 30, 2010. This plan shall evaluate measures for optimizing treatment of sludge, including, but not limited to, use of existing sludge storage tanks for temporary storage during periods of peak flow. The Sludge Optimization Plan shall also address the continued equalization of the centrate feed rate after December 2014, so that, to the extent practicable, the separate side-stream centrate treatment demonstration facility’s nitrogen-removal capacity is optimized.

5. Jamaica WPCP – Cease Operation of Sludge Dewatering – The City shall send the centrate generated from the Jamaica WPCP to AT #3 at the 26th Ward WPCP for treatment until the separate sidestream treatment system at the 26th Ward WPCP is in operation. Thereafter, the City shall use the separate sidestream centrate treatment facility to treat the centrate from the Jamaica WPCP. Any centrate flow in excess of the capacity of the sidestream centrate treatment facility shall be treated through AT #3 with interim carbon, to the extent practicable, prior to completion of the permanent chemical facilities. However, the City shall maintain the dewatering facility at the Jamaica WPCP for use in case of an operational necessity (e.g. maintenance requirements, equipment malfunction or unexpected higher loadings). DEC shall use its best professional

judgment to assure that loading anomalies, due to the operation of the Jamaica dewatering facility or other loading variations, are not calculated into Performance-Based Interim Nitrogen Limits.

6. 26th Ward WPCP – Submit Approvable Update on Sludge Optimization Plan – The sludge optimization plan for 26th Ward shall include:

- a. Flow data indicating the effectiveness of the optimization plan in equalizing centrate flow;
- b. The percentage of time by dewatering operating-days, hours or other metric, when the feed rate of centrate exceeded 1.2 MGD or the actual flow capacity for the separate side-stream centrate treatment demonstration facility;
- c. Measures to optimize nitrogen removal for the centrate flow that exceeds the capacity of the separate side-stream centrate treatment demonstration facility. The goal is to maintain all three aeration tanks for mainstream wastewater treatment after separate sidestream centrate treatment is on-line. The measures evaluated shall include, but not be limited to, a centrate equalization tank (i.e. a temporary holding tank), use of one or more barges (such as out-of-service sludge barges) or existing sludge storage tanks for temporary centrate storage, addition of chemicals, additional dewatering operating shifts, timing of the acceptance of incoming sludge or other management practices. The plan shall include measures necessary to maximize, to the extent practicable, the percentage of total centrate generated by the four WPCP's discharging to Jamaica Bay that will be treated as follows:
 - i. Using interim carbon treatment in AT #3, prior to operation of the separate sidestream treatment system; and
 - ii. Using the separate sidestream centrate treatment system, after that system is in operation.

The City shall provide a copy of the plan to the citizen groups simultaneous with submission to the State and shall provide the Citizen Groups a copy of the final approved plan. The City shall be required to implement the plan upon approval by the State.

D. BNR Operation and Maintenance (O&M) Plans

1. All facilities constructed pursuant to this First Amended Nitrogen Judgment shall be operated in accordance with the preliminary BNR O&M Plans submitted in accordance with the schedules contained in Appendices A and B hereto. The preliminary BNR O&M plans shall contain details for wet weather operations. The preliminary BNR O&M Plans shall also include an initial optimization program pursuant to which the City shall operate the Phase I Upper East River and Jamaica Bay facilities for a pilot period

of six months at each WPCP, beginning upon completion of Phase I construction at the Upper East River facilities, or upon completion of construction or operation, as set forth in Appendices A and B, of the Jamaica Bay facilities, to evaluate and establish the maximum and optimal nitrogen removal rates for that facility. Thereafter, the City shall make all best efforts to operate all WPCPs at optimal performance irrespective of the interim nitrogen limits and achieve overall nitrogen removal performance within the *Combined East River Construction Bulge Curve*, as set forth in the Modified Phase I BNR Facility Plan, and the Jamaica Bay interim effluent limits as set forth in Appendix C.

2. The City shall revise its preliminary BNR O&M Plans based on the results of the initial optimization program, and submit final BNR O&M Plans to the State for approval within six months after the completion of the pilot period set forth above in Paragraph D.1.

3. Upon approval of the BNR O&M Plans by the State, the City shall operate its facilities in accordance with the approved BNR O&M Plans.

E. As set forth in Appendix A, all Modified Phase II Conceptual BNR Facility Plan construction activities shall be completed by July 1, 2016. As set forth in Appendix B, all construction activities for the Jamaica Bay WPCPs shall be completed by December 31, 2020. The City shall comply with, and be bound by, the schedules, timetables, limits and provisions of this First Amended Nitrogen Consent Judgment and its appendices irrespective of the availability of financial assistance from Federal, State or other sources.

F. Interim Limits for Non-Nitrogen Parameters

In order to facilitate the BNR and certain other upgrade work at four of the WPCPs that are subject to this First Amended Nitrogen Consent Judgment, the following interim limits for certain non-nitrogen parameters shall apply:

1. Jamaica WPCP. The interim effluent limits and monitoring requirements for the Jamaica WPCP that were originally implemented pursuant to the Jamaica WPCP Order, and are now set forth in Appendix E hereto, shall remain in effect.

2. Wards Island WPCP.

The following interim limits that were originally implemented pursuant to the Wards Island WPCP Order, and are now set forth in Appendix F hereto, shall remain in effect:

a. Interim Wet Weather Flow. While the grit chamber channel work at the Wards Island WPCP is ongoing with respect to both the Manhattan and Bronx Grit Chambers, but no later than December 31, 2013, the Wards Island WPCP shall be physically capable of receiving a minimum of 420 MGD to be calculated

as average wet weather flow in accordance with the procedures set forth in the approved WWOP. This interim wet weather flow level shall supersede the flow levels through the plant headworks during wet weather set forth in Section VII. “Best Management Practices for Combined Sewer Overflows” item 3. “Maximize Flow to WPCP” of the Wards Island WPCP SPDES permit #NY0026131:

i. DEP shall maintain the physical capability of receiving a minimum of 420 MGD to be calculated as average wet weather flow at all times the grit chamber gates are pre-positioned in accordance with the DEC-approved WWOP.

ii. Upon the earlier of December 31, 2013 or the date that DEP provides notice of complete construction for milestone 9 in Appendix A of this First Amended Nitrogen Consent Judgment, the limit for the flow levels during wet weather shall be the limits set forth in Section VII.3. of the Wards Island WPCP SPDES Permit (#NY0026131).

b. Wards Island WPCP Interim Effluent Limits. The interim effluent limits and monitoring requirements for the Wards Island WPCP set forth in Appendix F1 and F2 hereto shall remain in effect.

3. Tallman Island WPCP. The interim effluent limits and monitoring requirements for the Tallman Island WPCP set forth in Appendix G shall apply as set forth therein.

4. Bowery Bay WPCP. The interim effluent limits and monitoring requirements for the Bowery Bay WPCP set forth in Appendix H shall apply as set forth therein.

VI. COMPREHENSIVE WATER QUALITY PLANNING FOR JAMAICA BAY

In order to examine possible alternative methods of meeting applicable water quality standards for Jamaica Bay, the Nitrogen Consent Judgment required the City to undertake and complete the Comprehensive Water Quality Studies for Jamaica Bay, as approved by the State (the “Jamaica Bay Studies”). On October 31, 2006 the City submitted a Comprehensive Plan for Jamaica Bay in accordance with Appendix B of the Nitrogen Consent Judgment. The October 2006 Comprehensive Plan has been updated and will be supplemented by an addendum to be submitted no later than October 31, 2010 in accordance with Appendix B. Upon approval by the State, these documents will comprise the Approved Final Jamaica Bay Comprehensive Plan.

To be approvable, the Final Comprehensive Jamaica Bay Plan shall summarize and integrate the information obtained from the Jamaica Bay Eutrophication Project, Use Standards and Attainability Study, and Outfall Relocation Study, and provide recommendations and an implementation schedule for improving water quality in Jamaica Bay either through treatment or non-treatment. Once the Final Comprehensive Jamaica Bay Plan, as amended, is approved by the State, DEC may propose a modification of the SPDES permits for the Jamaica Bay WPCPs,

to require implementation of the Comprehensive Jamaica Bay report. This provision does not constitute a waiver of any of the City's rights in the SPDES permit process.

VII. STUDIES AND WATER QUALITY MONITORING

The City shall continue or undertake various studies and monitoring to enhance the parties' and public's understanding of the impacts of discharges from the City's WPCPs on water quality in Jamaica Bay and other receiving waters. The intent of these studies and monitoring is to further efforts to improve water quality in those waters. In conducting these studies and monitoring the City shall strictly comply with, and be bound by, the schedules, timetables and provisions of Appendix B, irrespective of the availability of financial assistance from Federal, State or other sources.

A. Intergovernmental Workgroup on Marsh Restoration

DEP shall continue its ongoing commitment to chair the IGW.

B. City-Wide Biosolids Centrate Facility Report

By December 31, 2012, the City shall submit a report to the State describing DEP's City-wide biosolids centrate operations (the "Centrate Report"). The Centrate Report shall include a description of long-term programmatic needs to address:

1. The current and projected amounts of sludge generated by each of the 14 WPCPs (daily, monthly, annually).
2. The current and projected amount of sludge processed by each of the Dewatering Facilities (daily, monthly, annually).
3. The current and projected amounts of biosolids and centrate generated by each of the Dewatering Facilities (daily, monthly, annually).
4. The peak capacity of each of the dewatering facilities (hourly, daily, monthly, annually) as they are currently configured.
5. A listing of the WPCPs that are expected to continue dewatering going forward and the reasons for the determination.
6. The concentrations and mass loadings associated with centrate at each dewatering facility. (CBOD, TSS, NH₃, TKN, pH, Alkalinity)
7. The centrate treatment operations at each WPCP, along with current and expected total nitrogen and ammonia-removal efficiencies.

8. Anticipated upgrades to the dewatering facilities to manage centrate and biosolids loadings.
9. Anticipated modifications to biosolids disposal that would modify the amount or characteristics of the centrate.
10. Anticipated sludge processing at facilities other than NYCDEP WPCPs.

The State may provide comments on the Centrate Report to the City. To the extent that the City proposes to undertake any action pursuant to the Centrate Report that requires DEC approval in accordance with DEC's regulations, the City shall obtain such approval prior to undertaking such action.

C. Jamaica Bay Feasibility Study

Within 12 months after the start of Phase I post-construction monitoring, as defined in the following Paragraph, DEP shall commence a feasibility study designed to evaluate the latest nitrogen-removal technologies, and optimization techniques for existing infrastructure, to identify potential measures to reduce nitrogen discharges from Jamaica Bay WPCPs and improve DO water quality in Jamaica Bay (the "Jamaica Bay Feasibility Study"). The Jamaica Bay Feasibility Study may include bench-scale testing of one or more technologies. The City shall allocate up to \$1,000,000 for the Jamaica Bay Feasibility Study. The City shall make a draft of the Jamaica Bay Feasibility Study available for public comment within two years of initiating it. The City shall release the final study to the public six months after the draft is made available. The City shall concurrently provide copies of the final study to the Citizens Groups. The City will be able to use the results of the Feasibility Study to assist in determining which technologies, if any, may be appropriate for further upgrades, or to support other regulatory decisions.

D. Enhanced Jamaica Bay Water Quality Monitoring

1. Pre-Construction Ambient Water Quality Monitoring

DEP shall use the vessel Kestrel or similar-sized vessel to survey five areas of Jamaica Bay that are in shallower waters than currently monitored twice per month for DO, nutrients, CHL-A, and ammonia. DEP shall increase the number of existing monitoring locations in the navigable channels from 9 to 11. The additional stations shall be sited at N-9A Coney Island at Flashing Red Buoy No. 2, approx. 420 yards west of Coney Island Outfall, Depth 18 ft; Lat. 40N 34' 04", Long. 73W 56' 08". J-10 Paerdegat Basin approx. 150 yards southeast of bridge at mouth of Paerdegat Basin. Depth 20 ft; Lat. 40N 37' 18", Long. 73W 53' 41". The City shall submit an approvable enhanced ambient monitoring plan incorporating the above commitments (the "Pre-Construction Monitoring Plan") to the State by April 1, 2010. The Pre-Construction Monitoring Plan shall evaluate the feasibility of, and where practical, require installation of, continuous

(remote) real time monitoring stations. Subject to State approval of the plan, DEP shall implement the enhanced monitoring by June 1, 2010, or within 30 days of the State's approval of the plan, whichever is later. The plan was approved by letter dated May 4, 2010 from DEC to DEP. DEP shall provide quarterly reports of monitoring results to the citizen groups within 60 days following the end of the quarter.

2. Post-Construction Ambient Water Quality Monitoring

DEP shall conduct post-construction monitoring in two phases, Phase I and Phase II, each triggered by completion of certain major upgrade milestones at the Jamaica Bay WPCPs. The purpose of the post-construction monitoring is to: (a) determine the efficacy of the implemented nitrogen controls; (b) quantify the extent of compliance or non-compliance with water quality standards, including numeric and narrative standards; and (c) assist in the validation/recalibration, to the extent necessary, of the Jamaica Bay Eutrophication Model (JEM). As detailed below, Phase I post-construction monitoring shall be conducted after the commencement of operation of the 26th Ward Level 3 BNR upgrade, in accordance with a Phase I post-construction monitoring plan (the "Phase I Post-Construction Monitoring Plan"). Phase II post-construction monitoring shall be conducted after construction completion of the Rockaway and Coney Island level 1 BNR upgrades, in accordance with a Phase II post-construction monitoring plan (the "Phase II Post-Construction Monitoring Plan").

a. The Phase I and Phase II Post-Construction Monitoring Plans shall each include: (1) ambient water quality monitoring for DO, nutrients, Chl-A, and ammonia; (2) evaluation of the efficacy of biological monitoring for a specific period of time to assess the impacts and trends on Jamaica Bay's ecological health from the water quality improvements resulting from the Jamaica Bay WPCP upgrades, and if efficacious, implementation of biological monitoring; (3) the collection of sufficient data to evaluate the extent of compliance or non-compliance with water quality standards (including numeric and narrative standards) and attainment of designated uses applicable to Jamaica Bay; and (4) the collection of sufficient data to determine the need to re-validate the Jamaica Bay water quality model and sufficient data to ensure that, if efforts to re-validate the model indicate that the model should be re-calibrated, such re-calibration will be possible.¹² The Phase I and Phase II Post-Construction Monitoring Plans shall each additionally address: (1) whether to include all or any of the monitoring locations included in the pre-construction ambient water quality monitoring plan; and (2) whether to include continuous (remote) real time monitoring stations as part of Post-Construction Monitoring Plans.

b. To assist in formulating the Phase I and Phase II Post-Construction Monitoring Plans by making recommendations to DEP, the City and State shall work with the

¹² DEC and DEP shall also review any changes to the model suggested by the Post-Construction Monitoring Technical Panel.

Citizens Groups to establish a technical advisory group (“Post-Construction Monitoring Technical Panel”). This shall consist of three members, one each from, or designated by, the City, State and the Citizen Groups. The Post-Construction Monitoring Technical Panel shall make recommendations as to the formulation of Phase I Post-Construction Monitoring Plan and concurrently, to the extent practicable, provide input into the design for Phase II Post-Construction Monitoring Plan. The Post-Construction Monitoring Technical Panel shall consider each of the factors enumerated in Paragraph D.2.A. above in making its recommendations for the Post-Construction Monitoring Plans. The Post-Construction Monitoring Technical Panel shall submit its recommendations in a report to the City, State and Citizens Groups six months prior to the date by which the City is required to submit the approvable Phase I Post-Construction Monitoring Plan to the State.

c. The City shall prepare Phase I and Phase II Post-Construction Monitoring Plans in accordance with the time frames set forth in Appendix B. In preparing the Plans, the City shall consider the Technical Panel’s recommendations, and, for any such recommendation not adopted, provide an explanation to why the recommendation was not included in the respective Plan, as submitted to the State. In the event the Post-Construction Monitoring Technical Panel fails to submit its recommendations 6 months prior to the date by which the City is required to submit the approvable Phase I Post-Construction Monitoring Plan, then the City shall not be required to consider the recommendations in the Phase I Post-Construction Monitoring Plan or in the Phase II Post-Construction Monitoring Plan.

d. Six months prior to commencement of operation of the 26th Ward Level 3 BNR facilities, the City shall submit an approvable Phase I post-construction monitoring plan to the State for review and approval, concurrently providing a copy to the Citizens Groups. The City shall make any changes the State determines are necessary for final approval, with the State’s determination subject to review pursuant to Section XX below. The City shall provide the Citizen Groups with a copy of the Phase I Post-Construction Monitoring Plan once approved by the State, if it has been amended in response to State comments, or otherwise inform the Citizens Groups that the Plan was approved as submitted.

e. The City shall conduct post-construction monitoring in accordance with the Phase I Post-Construction Monitoring Plan beginning within six months of receiving State approval of the Plan, or commencement of operation of 26th Ward BNR Level 3, whichever is later. The monitoring shall continue for three years.

f. The City shall submit the Phase II Post-Construction Monitoring Plan to the State six months prior to construction completion of Coney Island Level 1 BNR. The City shall conduct post-construction monitoring in accordance with the Phase II Post-Construction Monitoring Plan beginning within six months of receiving

State approval of the Plan, or construction completion of Coney Island BNR Level 1, whichever is later. The monitoring shall continue for three years.

g. The City shall provide to the State and the Citizen Groups copies of quarterly reports of the post-construction monitoring results within 60 days following the end of the quarter.

VIII. DESIGNATION OF JAMAICA BAY AS A NO DISCHARGE ZONE

DEP and DEC shall take immediate and cooperative steps toward creation of a vessel waste “No Discharge Zone” (“NDZ”) for all of Jamaica Bay. DEP shall prepare an NDZ petition that identifies the need for greater protection and enhancement of the waters of the Bay, evaluates vessel population and usage in the Bay and demonstrates that there are adequate waste discharge (“pumpout”) facilities serving the Bay to support an NDZ designation. DEP shall submit this petition to DEC by November 30, 2010. DEC shall review the petition, seek any appropriate revisions, and, upon approval, DEC shall submit the petition to EPA for its consideration and final determination to establish the NDZ.

IX. INTERIM NITROGEN EFFLUENT LIMITS AND PARAMETERS

A. The City shall meet the aggregate nitrogen interim limits for the Upper East River (Zone 8) and Lower East River (Zone 9) WPCPs as a combined zone limit as set forth in Appendix C.1. While this First Amended Nitrogen Consent Judgment is in effect with respect to the Upper East River WPCPs, the terms and effluent limits of this First Amended Nitrogen Consent Judgment shall constitute the enforceable aggregate total nitrogen limits for the Upper and Lower East River WPCPs, and supersede any nitrogen effluent limits set forth in any corresponding SPDES Permits (subject to Sections XVI and XIX).

B. The City shall meet the aggregate nitrogen interim limits for the Jamaica Bay WPCPs, as set forth in Appendix C.2. While this First Amended Nitrogen Consent Judgment is in effect with respect to the Jamaica Bay WPCPs, the effluent limits set forth in Appendix C.2 herein shall constitute the enforceable aggregate total nitrogen limits for the Jamaica Bay WPCPs, and supersede any final nitrogen effluent limits set forth in any corresponding SPDES Permits (subject to Sections XVI and XIX). The aggregate nitrogen interim limits for the Jamaica Bay WPCPs shall terminate, and the City shall be required to comply with the SPDES Permit final aggregate effluent limit for the Jamaica Bay WPCPs (subject to Sections XVI and XIX), upon termination of this First Amended Nitrogen Consent Judgment with respect to the Jamaica Bay WPCPs in accordance with Paragraph XXI.B below.¹³

¹³ The final aggregate nitrogen effluent limit for the four Jamaica Bay WPCPs that will go into effect upon termination of this First Amended Nitrogen Consent Judgment with respect to the Jamaica Bay WPCPs, pursuant to Paragraph XXI.B below, shall remain in effect for the duration of the term of the Jamaica Bay WPCP SPDES Permits.

X. DEFINITIONS

While implementing the schedule milestones set forth in Appendices A and B, and the Phase I and II Plans incorporated thereto, the City shall adhere to the following definitions:

A. “Design Completion:”

Design shall be considered complete upon the City’s submission of approvable plans and specifications, a preliminary design CPM, and a Critical Equipment List, to the State and the Environmental Facilities Corporation (“EFC”) for review. Within 60 days of the City’s submittal, the State or EFC shall provide in writing either approval or comments on the submittal requiring re-submission by the City. Any such comments must be addressed and the submission resubmitted to the State and EFC within 60 days. If either the State or EFC disapproves the City’s resubmittal, the City shall be in violation of Appendix A or B to this First Amended Nitrogen Consent Judgment. In the event that the State or EFC fails to respond in writing within 60 days of receipt, of either the submittal or re-submittal, the City’s submission shall be deemed approved. For purposes of this provision the date of the City’s submission and the State’s or EFC’s written response shall be the actual date of mailing, personal delivery or electronic transmission.

B. “Approvable:”

1. Plans and Specifications

In order to be approvable, plans and specifications must be certified by a professional engineer currently licensed in New York State, and shall contain the four elements of the Wicks Law, as set forth in Paragraph VI.C. where applicable.

2. Preliminary Critical Path Method (“CPM”)

In order to be approvable, a preliminary CPM must contain an analysis by the design engineer of sequential and parallel tasks to be conducted at each WPCP pursuant to this First Amended Nitrogen Consent Judgment, for purposes of identifying critical junctions in the project schedule and avoiding conflicts that could lead to delays.

3. Critical Equipment List

In order to be approvable, a critical equipment list must consist of an inventory and description of the equipment and structures that will need to remain in service during construction for operation of each WPCP. The critical equipment list is the basis from which the engineer will develop the CPM schedule for construction.

C. “Notice to Proceed to Construction (“NTPC”):”

Pursuant to the Wicks Law, all contracts for the erection, construction, reconstruction, or alteration of buildings, when the entire cost of such work shall exceed \$3,000,000, consist of four elements: “G (general construction),” “P (plumbing),” “E (electrical)” and “H (heating, ventilation and air conditioning).” NTPC milestones shall be met when, at a minimum, the “G” element is noticed to proceed to construction. The noticing of any and/or all the other elements of a contract shall not be considered compliance with an NTPC milestone, until the “G” element is noticed to proceed to construction.

D. “Construction Completion:”

Construction shall be considered complete when the process-related equipment and facilities are constructed in accordance with the approved plans and specifications, and are placed in operation to meet the applicable interim effluent limits. In addition to the foregoing, the City shall make all best efforts to place in operation all treatment units and associated automatic controls as soon as they are operable in order to achieve greater removals as soon as possible. Any dispute regarding the City’s compliance with the best efforts clause shall be resolved by the dispute resolution provisions set forth in Section XX.

E. “Operational”:

As used with reference to the Jamaica Bay WPCPs, this term shall mean that all the necessary treatment systems are placed in operation and being operated in accordance with the DEC-approved Preliminary BNR O&M Plans. As used with reference to the Jamaica Bay WPCPs, this term does not mean “construction completion” as defined in X.D above. The approvable preliminary BNR O&M Plan shall identify all process-related critical equipment necessary to optimize nitrogen removal during the six-month pilot period and which will be necessary to comply with this definition of “operational.”

F. “BNR O&M Plans” submitted pursuant to this First Amended Consent Judgment shall contain all WPCP operational procedures to establish process controls, set points, and chemical addition requirements, as applicable, to maintain the stability and optimize the efficiency of the BNR process.

G. “Level 1” for BNR treatment shall include, at minimum: (1) construction of baffle walls in the aeration tanks; (2) installation of mixers in the anoxic zones; and (3) installation of froth control system(s). Level 1 shall be operated in accordance with BNR O&M Plan submitted and approved pursuant to Paragraph V.D of this First Amended Nitrogen Consent Judgment.

H. “Level 2” for BNR treatment shall include, at minimum, in addition to the Level 1 upgrade elements: (1) upgrading the process air capacity based on the existing WPCP’s footprint; (2) upgrading the return activated sewage (“RAS”) system based on the existing WPCP’s footprint; (3) multiple lines of defense for froth control; and (4) Pass D wet weather controls in aeration tanks. Level 2 shall be operated in accordance with BNR O&M Plans submitted and approved

pursuant to Paragraph V.D of this First Amended Nitrogen Consent Judgment.

I. “Level 3” for BNR treatment shall include, at minimum, in addition to the Level 2 upgrade elements: (1) chemical addition including all appurtenances necessary to commence operation which will include construction of both supplemental carbon and alkalinity facilities; and (2) permanent separate sidestream centrate treatment. Level 3 shall be operated in accordance with BNR O&M Plans submitted and approved pursuant to Paragraph V.D of this First Amended Nitrogen Consent Judgment.

XI. THIRD-PARTY FACILITATOR

A. The City shall continue the retention of the Independent Third-Party Facilitator (the “Facilitator”) as provided for in the First Amended Nitrogen Consent Judgment to work with the parties proactively to avoid any disputes concerning the implementation of this First Amended Nitrogen Consent Judgment and to assist the parties in resolving any disputes that they might have concerning any State Determination, in accordance with Section XX below. While entry of this First Modified Consent Judgment is without prejudice to the City’s continued retention of Dr. David Stensel, who is serving in that capacity as of the date of entry, in the event the City needs to replace Dr. Stensel, it shall take such steps as are necessary to solicit qualified individuals to serve as the Facilitator, subject to the City’s procurement rules, as expeditiously as possible after the effective date of this First Amended Nitrogen Consent Judgment. To be qualified, an individual must be an environmental engineering professional with experience in the building or management of large wastewater construction projects and wastewater treatment facilities who holds a professional engineering license. The City shall offer payment terms sufficient to attract qualified candidates and adequately compensate the candidate who is selected for the work that will be required hereunder. The State shall have the right to interview and approve or disapprove any candidate, for any reason. The terms of retention shall include agreement by the Facilitator to abide by the terms of this First Amended Nitrogen Consent Judgment that apply to his or her duties and responsibilities. Once selected, the Facilitator shall serve for the duration of this First Amended Nitrogen Consent Judgment, or until he or she resigns or is terminated by agreement of the parties. In the event the Facilitator resigns or is replaced, then a replacement shall be retained in accordance with the procedures outlined in this paragraph. The City shall be responsible for paying compensation and all the expenses of the Facilitator.

B. The Facilitator shall serve as chairperson of the quarterly progress meetings required by Paragraph XII.D. below, receive copies of all progress reports and important correspondence and maintain such contact with the parties, consultants and others involved in planning, design, and construction as he or she deems necessary to understand thoroughly the status of the projects as they advance.

C. The Facilitator shall attempt to anticipate and avoid potential problems that may adversely impact upon progress in planning, design, or construction of the projects pursuant to the terms of this First Amended Nitrogen Consent Judgment. In carrying out his/her responsibilities under this paragraph, the Facilitator may, upon adequate notice, require written submissions from the

parties and/or compel attendance at further meetings, as the Facilitator deems necessary.

D. The Facilitator shall copy all correspondence and other written communications to all parties, in accordance with Paragraphs XXII.G. & H., and shall provide reasonable notice to the parties of any physical inspections or site visits he/she plans to conduct.

XII. PROJECT ADMINISTRATION

A. The City shall submit quarterly construction reports (“Quarterly Reports”) to the State and the Facilitator. The Quarterly Reports shall describe the actions which have been taken toward achieving compliance with this First Amended Nitrogen Consent Judgment during the previous three-month period, including:

1. A list of the City’s construction contracts necessary to fulfill the requirements of this First Amended Nitrogen Consent Judgment, including compliance with all milestones. This list shall identify, by percentage, the amount of the contract that has been completed.
2. A detailed description of: (a) the work performed pursuant to this First Amended Nitrogen Consent Judgment during the reporting period, including the status of all milestones; (b) all anticipated activities for the next three-month period; and (c) pursuant to Paragraph II.C.6. above, the status and cost report for all EBPs under the Original EBP Plan required by this First Amended Nitrogen Consent Judgment.
3. Information regarding unresolved delays encountered or anticipated that may affect the future schedule for implementation of the City’s obligations under the First Amended Nitrogen Consent Judgment, and efforts made to mitigate and/or cure those delays or anticipated delays;
4. A description of community relations activities during the reporting period and the activities anticipated for the next three months;
5. Any changes in key personnel;
6. An accounting of the progress in implementing the EBPs, and the funds remaining;
7. Until May 2019:
 - a. A listing of any days when AT#3 at the 26th Ward WPCP was used for treating sewage rather than centrate, and vice versa; and
 - b. A listing of days when the Jamaica Bay dewatering facilities were used, the approximate amount of sludge processed at the Jamaica Bay dewatering facilities, the location at which the sludge was produced, and any increased influent loadings attributable to transshipments. Such reporting shall commence within 30 days of the effective date of this First Amended Nitrogen Consent Judgment and

be included in the next applicable quarterly report.

8. Any other issues with the potential to materially affect the projects set forth in this First Amended Nitrogen Consent Judgment.

B. The Quarterly Reports shall include an executive summary that summarizes the information required by the preceding paragraph. The City shall choose the format for the first executive summary, and shall modify the format in accordance with any subsequent reasonable requests by the State.

C. From the effective date of the First Amended Nitrogen Consent Judgment, up until all requirements of this First Amended Nitrogen Consent Judgment have been met, the City shall submit these Quarterly Reports to the State and the Facilitator by the 30th day of the month following the end of a quarterly period. The quarterly periods are defined as January 1st - March 31st, April 1st - June 30th, July 1st - September 30th, and October 1st - December 31st.

D. The City shall provide copies of the Quarterly Reports to the Citizens Groups.

E. In addition to the Quarterly Reports, the Facilitator and representatives of the parties shall hold quarterly progress meetings to discuss and resolve any problems that may arise in the planning, design and construction of the upgrades set forth in this First Amended Nitrogen Consent Judgment. As necessary, responsible staff of the City involved in an aspect of the City's compliance with this First Amended Nitrogen Consent Judgment shall attend progress meetings.

F. Within 30 days of the effective date of this First Amended Nitrogen Consent Judgment, the City shall designate a Project Manager who reports to an executive officer of the City who will be responsible for assuring that the Upper East River and Jamaica WPCP upgrades, and Jamaica Bay Studies proceed as smoothly and efficiently as possible, and that the City complies with the terms of this First Amended Nitrogen Consent Judgment (the "Project Manager"). The City shall notify the State of such designation. The Project Manager shall have, at a minimum, the following duties:

1. Coordinating the City's activities among its departments and agencies in order to expedite compliance with the terms of this First Amended Nitrogen Consent Judgment, and ensuring that appropriate representatives of other City departments and/or agencies attend the quarterly meetings;
2. Assisting in the procurement of additional consultants for the City;
3. Attending all quarterly meetings;
4. Filing all necessary reports in a timely manner;

5. Detecting problems that might delay the City’s implementation of this First Amended Nitrogen Consent Judgment and taking all necessary steps to overcome the effects of such problems, including but not limited to, promptly notifying the State;
6. Submitting to the State a written certification of compliance, within 15 days after each milestone in the appendices has been met.

XIII. STIPULATED PENALTIES

A. If the City fails to meet any of the major or minor milestone dates set forth in Appendices A and B, the State shall have judgment against the City, consistent with the terms of Paragraph XIII.F. below, and the City consents to entry of a judgment, for a stipulated penalty in the amounts set forth below, for each day of violation:

<u>PERIOD OF NON-COMPLIANCE</u>	<u>PENALTY PER-DAY</u>
1 st day through 30 th day	\$ 3,000
31 st day through 60 th day	7,500
Each day beyond the 60 th day	15,000

1. The milestones set forth in Appendices A and B, and the approved Modified Phase I and Phase II Plans, shall be classified as either major or minor schedule milestones. Major schedule milestones shall be those milestones so designated in Appendices A and B, and minor schedule milestones shall be all so designated in Appendices A and B and other milestones set forth in the approved Long Island Sound BNR Phase I Plan, Long Island Sound Phase II BNR Conceptual Plan, the approved Long Island Sound BNR Phase II Basis of Design Report, or the approved Jamaica Bay Comprehensive Report.

a. Violations of Minor Milestone Associated with Particular WPCP Upgrades: Stipulated penalties that accrue as a result of the City’s failure to comply with minor schedule milestones associated with particular WPCP upgrades shall be paid into an interest-bearing escrow account established by the City with EFC (the “Minor Milestone Escrow Account”), which shall be established when the City first pays a penalty for a minor milestone violation hereunder. EFC shall establish separate sub-accounts in the name of each WPCP that is subject to this First Amended Nitrogen Consent Judgment, upon the payment of a penalty for the first minor milestone violation concerning that WPCP. Any penalties assessed for subsequent minor milestone violations associated with the same WPCP upgrade shall be deposited to that sub-account. If the City complies with the next major milestone for that WPCP, then the funds in the Minor Milestone Escrow Account sub-account for that WPCP shall be released by EFC to the City, upon the written approval of the State. If the City fails to comply with the next major milestone for a WPCP for which a minor milestone escrow sub-account has been established, which then contains funds, then the funds in the sub-account shall be released by EFC to the State, upon written direction by the State, as a payable

penalty. However, if (a) the City fails to comply with the next major milestone for that WPCP, and (b) the City requests initiation of a Compliance Window, then the funds in the sub-account shall be paid into the Major Milestone Escrow Account for that WPCP, and disposed of in accordance with Sub-paragraph b below.

b. Major Milestone Violations

i. Compliance Window: If the City fails to meet, or anticipates that it will fail to meet a major milestone, it may provide written notification of that occurrence or anticipated occurrence to the State on or before such milestone date and request initiation of the Compliance Window. The City's written notice of actual or anticipated violation shall be based on a CPM and include a good faith estimate as to when the City will meet the major milestone. In the event the City does not request the initiation of a Compliance Window, the State shall be free to take such actions as are available hereunder as it deems appropriate to enforce against any violation of a major milestone.

ii. Compliance Escrow Payment: Within 30 days of requesting initiation of the Compliance Window, the City shall forward to EFC a "compliance escrow payment" calculated in accordance with the penalty schedule in this paragraph and based on the City's estimated date of compliance with the milestone date, or the date six months after the milestone date, whichever is sooner.

iii. "Major Milestone Escrow Account": Upon receipt of a compliance escrow payment, EFC shall deposit these funds into a sub-account of an interest-bearing escrow account established by the City with EFC ("Major Milestone Escrow Account") in the name of the WPCP that is the subject of the missed Major Construction Milestone. The Major Milestone Escrow Account shall be established either upon the first submittal by the City of a compliance escrow payment for a missed major milestone or the deposit of penalty money from a WPCP sub-account of a Minor Milestone Escrow Account. EFC shall establish separate sub-accounts within the Major Milestone Escrow Account in the name of each WPCP that is subject to this First Amended Nitrogen Consent Judgment.

c. If the City complies with a major milestone (i) within six months of the milestone date for which written notice requesting initiation of the Compliance Window for the milestone was provided to the State, and (ii) the City complied with the interim limits set forth in Appendix C, during the Compliance Window period, then any funds that have been deposited into the Major Milestone Escrow Account sub-account for the subject WPCP shall be released by EFC to the City, upon the written approval of the State.

d. If the City either (i) fails to comply with the major milestone within six months of the milestone date for which written notice requesting initiation of the Compliance Window for the milestone was provided to the State, or (ii) fails to comply with the interim effluent limits set forth in Appendix C during that time, then any funds that have been deposited into the Major Milestone Escrow Account sub-account for the subject WPCP shall be released by EFC to the State, and the amount of the City’s compliance escrow payment shall be applied to any penalty due from the City for the missed major milestone, upon the written direction of the State. The City shall be liable for any stipulated penalty amount due for the violation of a major milestone violation that exceeds the amount of the compliance escrow payment.

2. Upon the release of any funds from the Major or Minor Milestone Escrow Accounts, EFC shall be entitled to retain an amount of the accrued interest equal to EFC’s administrative expenses for administering the account from which the payment was made, and shall provide a written statement of its costs to the parties.

B. For all other events of non-compliance with any terms of this First Amended Nitrogen Consent Judgment, including failure to comply with minor schedule milestones not associated with particular WPCP upgrades (except for non-compliance with interim effluent limits, which is addressed in Paragraph XIII.C. below),¹⁴ the State shall have a judgment against the City, consistent with the terms of Paragraph XIII.F. below, and the City consents to entry of a judgment, for a stipulated penalty in the amounts set forth below, for each day of violation:

<u>PERIOD OF NON-COMPLIANCE</u>	<u>PENALTY PER-DAY</u>
1 st day through 30 th day	\$ 1,000
31 st day through 60 th day	3,000
Each day beyond the 60 th day	6,000

C. 1. If the City fails to meet the combined nitrogen limits set forth in either Appendix C.1. or C.2, including any performance-based limits, the State shall have judgment against the City, consistent with the terms of Paragraph XIII.F. below, and the City consents to entry of a judgment, for a stipulated penalty in the amount of \$50,000 per violation. For purposes of this paragraph, a violation of the limits set forth in either Appendix C.1. or C.2. shall be considered one violation for the month in which the average exceeds the applicable limit. If the applicable Appendix C.1. or C.2. limit is violated the next month, it shall be considered a new and separate violation for that month. Each additional month of violation shall constitute a separate monthly violation until such time as the City achieves compliance with the applicable Appendix C.1. or C.2 limit. Concurrent violations of the limits set forth in Appendix C.1. and Appendix C.2. constitute two separate and distinct violations.

¹⁴ As noted above, the City’s compliance with the schedule set forth in the Original EBP Plan is not subject to stipulated penalties pursuant to this Section.

2. If the City fails to meet the applicable interim effluent limits for CBOD and TSS or the interim minimum flow levels for the Jamaica or Wards Island WPCPs, set forth in Appendix E or Appendix F1 or F2, or Paragraph V.F.2, as applicable, the State shall have judgment against the City, consistent with the terms of Paragraph XIII.F. below, and the City consents to entry of a judgment, for a stipulated penalty in the amount of \$15,000 per violation. For Appendices E, F1 and F2, each additional month of violation shall constitute a separate monthly violation until such time as the City achieves compliance with the applicable Appendix E or F limit.

D. In the event that the City violates any interim effluent limit as a direct or indirect result of any missed milestone set forth in either Appendix A or B of this First Amended Nitrogen Consent Judgment, for which a penalty is also paid pursuant to Paragraph XIII.A. above, the City shall also be liable for its failure to meet interim effluent limits under Paragraph XIII.C. above.

E. In the event that a discharge, action or inaction by the City violates a limit or other requirement of this First Amended Nitrogen Consent Judgment which is recited in both a decretal paragraph and corresponding appendix provision, the City shall only be liable, and subject to penalty for, a single violation for violating those corresponding requirements. This provision is not intended to override, nor supersede, Paragraph XIII.D., above.

F. Any judgment against the City pursuant to this Section shall be due and payable upon 30 days notice to the City. Notice to the City shall be provided in the form of a State Determination, as defined in Section XX, below. Interest shall accrue on any stipulated penalty not paid when due, at a judgment rate not to exceed 9% per annum, non-compound, or such other judgment interest rate as General Municipal Finance Law Section 3-a or any successor law shall establish. The City shall have 14 business days from receipt of a State Determination to challenge that Determination, by invoking the dispute resolution provisions set forth in Section XX, below. Commencement of a timely challenge by the City shall preclude the State from entering judgment on the subject violation pending a resolution of that challenge in accordance with the dispute resolution provisions. If the City does not timely challenge a State Determination under this First Amended Nitrogen Consent Judgment, the City hereby consents to the State's entering a judgment in the amount specified in the State Determination, with interest, without further notice. By mutual written agreement, the parties may agree to extend any time period by which a challenge must be made.

G. Unless expressly set forth herein, this First Amended First Amended Nitrogen Consent Judgment does not relieve the City from any legally binding obligation to pay penalties for any violations of SPDES permit parameters or requirements at any of the City's WPCPs.

XIV. FORCE MAJEURE

A. The City shall not be in default of the provisions of this First Amended First Amended Nitrogen Consent Judgment to the extent that its non-compliance is directly attributable to an

Act of God, war, terrorism, insurrection, strike, judicial injunction, material default by contractor or supplier, failure of a federal or state agency or authority to issue any necessary permit or approval in a timely fashion where, in accordance with applicable law or regulations, the City has timely submitted a complete application and all necessary supporting information and is otherwise entitled to such permit or approval, the catastrophic condition or other circumstance is entirely beyond its control, and the City has made all good faith efforts to comply with the provisions of this First Amended First Amended Nitrogen Consent Judgment at issue (“force majeure”). If such a force majeure event occurs, the City shall be entitled to an extension of the schedule milestone(s), limited to the period of time that such event placed compliance with a provision of this First Amended First Amended Nitrogen Consent Judgment beyond the City’s control. Penalties for failure to satisfy any First Amended Nitrogen Consent Judgment requirement can be excused only under the terms of this decretal paragraph, and only where the City shows that it took all steps reasonably necessary to avoid or mitigate the delay, and that it strictly complied with the notice requirements of this paragraph, and that the delay is limited to an amount of time equal to the period of delay directly attributable to the force majeure. As a condition precedent to obtaining any relief under this provision, the City shall notify the State in writing that a force majeure event has occurred no later than 20 days after the date the City knew or should have known of the occurrence of any force majeure event. Failure to give the required notice within such 20-day period constitutes a waiver of the ability to evoke force majeure as a defense to stipulated penalties. Within 60 days after the date the City knew or should have known of the occurrence of the noticed force majeure event, the City shall provide, with respect to that asserted force majeure event, a supplemental writing describing the measures taken and to be taken by the City to prevent or minimize any compliance delays arising from the event. In the 60-day notice the City shall request an appropriate extension or modification of the applicable deadlines under this First Amended Nitrogen Consent Judgment, to the extent that they have been identified at the time of such notice. The City shall use all best efforts and exercise all due diligence to identify this information in the 60-day notice. Failure to provide the required supplemental submission within such 60-day period shall constitute a waiver of the ability to evoke force majeure as a defense to stipulated penalties.

B. Whenever a milestone is missed, pursuant to a force majeure event or otherwise, the City shall exercise its best efforts to recoup all lost time, including where appropriate, the payment of extraordinary expenses for overtime, double shifts, or additional contractors or consultants, or alternative methods to the extent allowable under local law.

C. A duly asserted force majeure claim by the City shall be preserved until such time as the State issues an NOV, or otherwise seeks to impose liability on the part of the City for failing to meet any milestone that is subject to the City’s force majeure claim. At such time the City may assert the claim as a defense. Alternatively, the City may demand, at any time after it has duly asserted a force majeure claim by timely filing the requisite initial notice and supplemental 60-day notice, that the State issue a State Determination, as defined in Section XX below, as to whether the State agrees that the cited event was a force majeure. The City’s demand shall specify the duration of the delay that it attributes to the asserted force majeure event. The State shall issue the State Determination within 60 days. However, in the event the State requests

additional information from the City concerning the asserted force majeure event, then its 60 days to issue the Determination shall run from its receipt of such information. If the State issues a State Determination rejecting the claim, or any aspect of it, such as the amount of delay attributable to the asserted force majeure event, then the City may only dispute the State Determination pursuant to the dispute resolution provisions, Section XX below.

D. All force majeure claims asserted by the City as of January 21, 2010 are resolved by entry of this First Amended Nitrogen Consent Judgment, including the milestone modifications herein, without final determination or admission as to their validity by the State. The City may nevertheless continue to assert the following two alleged force majeure claims, subject to the conditions below:

1. Wards Island (WI-79) Poor Concrete and Expansion Joint Conditions, submitted June 14, 2007. DEP has identified 36 months of delay directly caused by this alleged force majeure event, based on 9 months per battery of aeration tanks. This 36-month delay was factored into the modifications of the Wards Island WPCP upgrade milestones included herein. Construction has been completed on Wards Island Battery A, and DEP has implemented a recovery plan that is currently ongoing for Batteries B, C and D. The City may claim additional excusable delays under this force majeure claim only with respect to Batteries B, C and D, and only if the City can demonstrate that any such claimed additional delays are directly attributable to an unforeseen and unforeseeable event or condition concerning the concrete or expansion joints in those batteries that meets the standard for a force majeure, and that such event or condition was neither identified nor reasonably identifiable as of July 20, 2010.

2. Bowery Bay (BB-59) Poor Concrete and Expansion Joint Conditions, submitted June 29, 2009. DEP has identified a potential delay directly caused by this alleged force majeure event at the Bowery Bay WPCP. Although this potential delay was not factored into the modifications of the Bowery Bay WPCP upgrade milestones included herein, the milestones were extended six months to accommodate other delay factors identified by the City. The City has implemented a recovery plan for the repair of the concrete and expansion joints in the aeration tanks (“tanks”) as necessary. Implementation of the recovery plan is complete for the North Battery (tanks 7, 8, 9,10) and is proceeding for the South Battery in two groups of three tanks (tanks 3, 4, 5 and 1, 2, 6). The recovery plan is currently being implemented in tanks 3, 4, and 5 and is projected to require 5,000 person-hours to complete necessary concrete and expansion joint repairs. The City may claim additional excusable delays under this force majeure claim only with respect to South Battery tanks 1 through 6, and only if the City can demonstrate that any such claimed additional delays are directly attributable to an unforeseen and unforeseeable event or condition concerning the concrete or expansion joints in those tanks that meets the standard for a force majeure, and that such event or condition was neither identified nor reasonably identifiable as July 20, 2010.

The City shall continue to provide the information required under Paragraph XIV.A. on these two alleged force majeure in the quarterly reports and meetings pursuant to Section XII of this First Amended Nitrogen Judgment.

XV. ENVIRONMENTAL MONITORS

A. The City shall fund an environmental monitor, as a full-time position to provide independent environmental monitoring services for the construction to be conducted pursuant to this First Amended Nitrogen Consent Judgment. The environmental monitor shall be a DEC employee monitor who holds the title of New York State Civil Service Environmental Engineer II and is duly licensed in New York State (“Environmental Engineer II”) (herein referred to as the “on-site Environmental Monitor” or “OEM”). The OEM shall be funded at a level sufficient to employ an Environmental Engineer II. The City shall fund the OEM for the period of time commencing with the entry of this First Amended Nitrogen Consent Judgment until termination of the First Amended Nitrogen Consent Judgment as provided in Section XXI.

B. The OEM

1. Pursuant to the terms of the Nitrogen ACO, an interest-bearing account to fund an environmental monitor was previously established by the City with the DEC. Additional funds required to support the monitoring requirements for this First Amended Nitrogen Consent Judgment shall be provided to the DEC for funding of environmental compliance activities related to the upgrade of the City’s WPCPs required by this First Amended Nitrogen Consent Judgment. These additional funds are to be placed in a non-interest-bearing account. These funds are to be based on the annual Environmental Monitor service costs for this First Amended Nitrogen Consent Judgment which are equivalent to those of an Environmental Engineer II, including the salary and overhead costs described below. The City has deposited \$173,000 for the State fiscal year of 2010-2011. Subsequent annual payments shall be made for the duration of this First Amended Nitrogen Consent Judgment to maintain an account balance sufficient to meet the next year’s anticipated expenses.

a. The OEM shall have a secure workstation at a location to be determined (not to be funded by the City), but shall also be provided a secure office space at one of the Upper East River WPCPs. The OEM’s time shall be devoted exclusively to the requirements of this First Amended Nitrogen Consent Judgment, except that the OEM may also be utilized as needed to perform the tasks set forth in Section VI of the Newtown Creek Second Modified Judgment on Consent.

b. The OEM shall be authorized to observe conditions at the Upper East River and Jamaica Bay WPCPs, and the Newtown Creek WPCP, when needed, pursuant to the preceding paragraph, to inquire concerning conditions that, in the OEM’s judgment, could constitute a violation of applicable laws, rules or regulations, and to inform the appropriate regulatory agency of such conditions. It shall not be a defense to any enforcement action against the City that the OEM was acting

outside the scope of his or her duties.

2. The City shall continue to be billed annually, as under the Nitrogen Consent Judgment, for each State fiscal year period beginning April 1 annually. Payments shall be due within 30 days of receipt of a DEC bill.
3. Annual service costs for the OEM to be covered by this fund include: salary (including inflation and salary increases), fringe benefits, indirect costs, and non-personal service costs at levels equivalent to fund an Environmental Engineer II.
4. The parties acknowledge that the costs of the OEM may increase or decrease on an annual basis, due to any increases or decreases in the costs set forth in the preceding paragraph. Therefore, DEC may revise the required annual payment, by February 1 of each year. Any such revision by DEC shall be limited to increases or decreases in the costs of monitoring services to DEC set forth in the preceding paragraph for an Environmental Engineer II. The annual revision may take into account factors such as inflation, negotiated salary increases or decreases and, changes in operating hours and procedures, including changes to the fringe and indirect cost rates, and changes to the non-personal service costs. Any monitor funds remaining as of the date of termination of this First Amended Nitrogen Consent Judgment shall be returned to the City.
5. In the annual work plan required by Paragraph XV.B.6. below, DEC shall provide the City with a written explanation of the basis for any proposed revision to the annual payment based on the annual service costs set forth in Paragraph XV.B.3. above, with any such revision made pursuant to Paragraph XV.B.4. above. The City shall have an opportunity to review and comment on DEC's explanation for the proposed revision to the annual payment amount. The City may dispute only the amount of any proposed revision in accordance with Section XX below.
6. By February 1st of each year this First Amended Nitrogen Consent Judgment is in effect, DEC shall provide the City with an annual work plan for activities that the OEM shall undertake pursuant to the First Amended Nitrogen Consent Judgment during the year. The City shall have 30 days from receipt of the work plan to review, comment, and provide suggested changes to such plan to DEC. DEC shall review any suggested changes in good faith and in accordance with Section XIX, and the City may challenge the State's determination in accordance with the provisions set forth in Section XX.
7. In addition to the activities listed in the Annual Work Plan the duties of the OEM shall at minimum include, but not be limited to:
 - a. Review all submissions under this First Amended Nitrogen Consent Judgment for accuracy and responsiveness;
 - b. Review and approve plans and specifications submitted by the City as required by this First Amended Nitrogen Consent Judgment;

- c. Conduct frequent inspections at the Upper East River and Jamaica Bay WPCPs to assess the City's compliance with this First Amended Nitrogen Consent Judgment;
- d. Schedule and participate in informational meetings related to this First Amended Nitrogen Consent Judgment;
- e. Maintain records and reports of all monitoring and compliance activities, including quarterly reports. Distribute information to the City's technical, legal and administrative staff as appropriate;
- f. Attend quarterly progress meetings; and
- g. Monitor compliance with all applicable laws, rules and regulations as they pertain to the activities pursuant to this First Amended Nitrogen Consent Judgment.

8. If a proposed revision of the annual cost amount is disputed in accordance with Section XX herein, the payment due within 30 days of the City's receipt of the bill shall be the same as the payment made for the previous year. The payment of any remaining funds set forth in a revision shall be determined by the pending resolution of the amount disputed.

- a. Within 30 days of written notice by DEC that a payment is due (subject to Paragraph XV.B.8. above), payment shall be forwarded to DEC. Payment should be sent to:

NYS Department of Environmental Conservation
Bureau of Revenue Accounting
625 Broadway, 10th floor
Albany, NY 12233- 5012
Attention: Principal Accountant

- b. Upon termination of this First Amended Nitrogen Consent Judgment and payment of any outstanding costs, the unexpended balance shall be returned to the City.

9. Failure to make the required payments shall be a violation of this First Amended Nitrogen Consent Judgment. The State reserves all rights to take appropriate action to enforce the above payment provisions.

10. Each OEM shall, when present at the Upper East River or Jamaica Bay WPCPs, abide by all of the City's health and safety and operational requirements and policies; provided, however, that this Paragraph shall not be construed as limiting the OEMs'

powers as otherwise provided for by law, and shall not result in the OEM being subject to less stringent health and safety requirements than State and Federal health and safety requirements.

11. The OEM shall receive from the City all general safety training that is normally given to new site employees. This training shall be a supplement to the mandatory safety training that the OEM receives from DEC.

12. The City shall furnish to the OEM a current site policy and procedures manual for health and safety issues. Within 15 days of any revision to the health and safety plan, the City shall notify DEC and each OEM, in writing, of such modification.

a. The OEM shall summarize the activities he or she conducted each month in a detailed monthly summary, which shall be provided to the City within 15 days of the end of each month. The monthly summary shall reflect when/if the OEM is utilized to perform tasks set forth in Section VI of the Newtown Creek Second Modified Judgment on Consent.)

b. The independent environmental monitors funded by the City pursuant to the CSO Order shall be allowed to work on all matters arising from the First Amended Nitrogen Consent Judgment, in accordance with the Section and the Annual Nitrogen OEM Work Plan provided by DEC to DEP and the City by February 1st of every year.

XVI. RESERVATION OF RIGHTS

A. Nothing contained in this First Amended Nitrogen Consent Judgment shall be construed as a release or waiver by the State of its rights to: (1) seek injunctive relief to abate any violation of law or this First Amended Nitrogen Consent Judgment; (2) seek stipulated penalties and entry of judgment in the Supreme Court for the County of New York as provided in Section XIII above; (3) seek penalties and other relief for any violations of law or, other Orders and/or permits except to the extent that this First Amended Nitrogen Consent Judgment supplants those Orders or permits; (4) reallege the violations listed in this First Amended Nitrogen Consent Judgment to obtain injunctive relief or damages in support of natural resource damage claims; (5) seek penalties and other relief for any criminal liability for any violations listed in this First Amended Nitrogen Consent Judgment; or (6) seek to modify, suspend, or revoke any DEC-issued permit. The DEC reserves its rights to seek the imposition of more stringent nitrogen limits than those set forth in this First Amended Nitrogen Consent Judgment through the SPDES permit process, to the extent required to do so under applicable law. The City reserves its rights to contest the imposition of such limits through that process, except that the City waives its right to contest the imposition of such limits on the grounds that such limits are inconsistent with the limits set forth in this First Amended Nitrogen Consent Judgment. Should DEC seek imposition of more stringent nitrogen limits through the SPDES permit process or through modification of this First Amended Nitrogen Consent Judgment, the City reserves its right to request to supplement the

Phase I Plan and/or modify the Phase II Plan and seek additional time under this First Amended Nitrogen Consent Judgment to comply with any such revised nitrogen limits. However, until such time as the nitrogen interim effluent limits established in this First Amended Nitrogen Consent Judgment are modified in accordance with this paragraph and Section XIX below, the limits in this First Amended Nitrogen Consent Judgment shall remain the enforceable aggregate total nitrogen limits for the Upper and Lower East River WPCPs and the Jamaica Bay WPCPs, and supersede any inconsistent nitrogen limits set forth in any corresponding SPDES Permits. Nothing herein shall be deemed to limit the City's ability to challenge any final nitrogen effluent limit (including any final water-quality based aggregate nitrogen effluent limit) proposed by DEC for inclusion in the Jamaica Bay WPCP SPDES permits, as referenced in this First Amended Consent Judgment.

B. Except as expressly set forth herein, nothing contained in this First Amended Nitrogen Consent Judgment shall be construed as a release or waiver of the City's right to oppose and defend against injunctive relief, imposition of penalties, damages, or any other imposition of liability by the DEC or the State. Nothing contained in this First Amended Nitrogen Consent Judgment shall be construed as a waiver by the City of its rights to seek a modification of any permit or order. The City expressly retains the right to challenge any regulations.

C. The State reserves all such rights as it has to require the City to take any additional measures required to protect human health or the environment, including, but not limited to, the right of the DEC Commissioner or his/her designee to exercise any summary abatement powers, whether at common law, or granted pursuant to statute or regulation, against the City or any other party.

D. Except as expressly set forth herein, nothing set forth in this First Amended Nitrogen Consent Judgment shall be read as relieving the City of any of its obligations pursuant to any permits, orders on consent, or other binding orders to which it is subject.

XVII. INDEMNITY

The City shall indemnify and hold harmless the State, DEC, EFC and any of their employees or contractors for any and all claims, actions, damages, and costs resulting from the City's acts, or from actions taken by the State in fulfillment or attempted fulfillment of the provisions of this First Amended Nitrogen Consent Judgment to the extent that they are not caused by intentional, negligent or reckless acts of the State, DEC, EFC or any of their employees or contractors.

XVIII. ACCESS

For the purpose of ensuring compliance with this First Amended Nitrogen Consent Judgment, the City shall allow duly authorized representatives of the State, DEC and/or EFC, with proper identification, full access to the Upper East River, Lower East River or Jamaica Bay WPCPs without prior notice in order for the State, DEC, and/or EFC to inspect and determine the status of the City's compliance with this First Amended Nitrogen Consent Judgment. Upon the arrival of the State, DEC, and/or EFC's authorized representative, he or she shall contact the WPCPs

plant superintendent or his/her designee and shall allow the plant superintendent or his/her designee to accompany him or her on the inspection so long as that request does not delay the commencement of the inspection or otherwise interfere with such inspection.

XIX. MODIFICATION

A. The parties agree that each shall give due consideration in good faith to any request by the other for a modification of this First Amended Nitrogen Consent Judgment, based on, among other factors, science, technology or public health. If the parties agree to any revisions to this First Amended Nitrogen Consent Judgment, this may be so stipulated, and entered upon approval by the Court. If one party seeks a revision, and the other party does not agree to the change, then either party may seek appropriate relief by invoking the dispute resolution provisions in Section XX. The Court may impose such a unilaterally sought modification of this First Amended Nitrogen Consent Judgment only if the party seeking to impose the unilateral modification demonstrates that the non-consenting party's rejection of the proposed modification is arbitrary and capricious.

B. This First Amended Nitrogen Consent Judgment, its annexed appendices, and any document that is incorporated herein by operation of this First Amended Nitrogen Consent Judgment shall constitute the entire agreement of the parties, with respect to the subject matter hereof. No obligation of the State or City shall be deemed to have been waived or otherwise modified without the express written consent of the State or City.

C. Any modification to a State-approved plan that may materially affect the process, construction schedule, or performance of the Upper East River upgrades or the Jamaica Bay upgrades shall be submitted to the State for approval in advance of implementation.

XX. DISPUTE RESOLUTION

The State and the City recognize that in the course of the design, construction and modification of the nitrogen upgrades provided for herein, and in the course of the design and implementation of the other aspects of the nitrogen program to be developed hereunder, disputes may arise between the parties regarding the appropriateness of any disapproval by the State of a required submittal by the City, conditions attached to the State's approval of a required submittal, whether the State has appropriately rejected a modification requested by the City pursuant to Section XIX, whether a force majeure event has in fact occurred, any other determination by the State under this First Amended Nitrogen Consent Judgment, or the City's compliance with the terms of this First Amended Nitrogen Consent Judgment. In the event such a dispute arises, it shall be resolved as follows:

A. If the State disapproves a submittal required by the City under this First Amended Nitrogen Consent Judgment, approves a required submittal with conditions that the City deems unacceptable, makes any other determination that the City has violated this First Amended Nitrogen Consent Judgment, issues a determination rejecting a City claim of force majeure, or

any aspect thereof, or declines to agree to a First Amended Nitrogen Consent Judgment modification requested by the City pursuant to Section XIX, then the State shall issue a written determination (“State Determination”) to the City setting forth the basis for disapproval of the submittal, conditional approval of the submittal, other basis for determining that the City has violated this First Amended Nitrogen Consent Judgment, or basis for not agreeing to a requested modification or rejecting a force majeure claim, or any aspect thereof. If the City disputes the State Determination, the City may seek to resolve the dispute by requesting informal negotiations with the State. Upon such a request by the City, the State and the City shall make reasonable efforts to resolve the dispute through informal negotiations. The State shall make all good faith efforts to meet with and/or discuss the dispute in question with the City, as soon as practicable, and the parties shall make reasonable efforts to resolve the dispute through informal negotiations. Unless both parties agree in writing otherwise, the time to conclude informal negotiations shall terminate 45 days from the day the City receives the State Determination.

B. If the City disputes a State Determination and requests informal negotiations pursuant to the preceding paragraph, then either party may request the participation of the Facilitator in those negotiations. The Facilitator shall have the power to convene a reasonable number of mediation sessions, as she or he deems necessary, and to review any documents concerning the disputed State Determination that are not privileged. The parties shall make all good faith efforts to meet with and/or discuss the dispute in question with the Facilitator, and to provide the Facilitator with copies of requested non-privileged documents concerning the disputed State Determination, if requested, as soon as practicable. The Facilitator shall have the power to request that each party prepare one additional document for each State Determination under dispute explaining that party’s position, and shall have the discretion to limit the length and scope of submission(s) as he or she sees fit. Prior to the conclusion of the mediation process either party may request that the Facilitator prepare a concise written report summarizing the dispute and analyzing and discussing the merits of the parties’ respective positions (“Facilitator Report”). Unless both parties agree in writing otherwise, the time to conclude informal negotiations involving the Facilitator shall terminate 60 days from the day the City receives the State Determination. However, in the event either party requests the preparation of a Facilitator Report, then the Facilitator shall submit his or her Facilitator Report to the parties in electronic format (facsimile or e-mail) within 14 days of the conclusion of any informal negotiation in which he or she participates.

C. Upon receipt of a Facilitator Report, the State shall promptly forward a copy thereof to the DEC Commissioner and the City shall promptly forward a copy to the DEP Commissioner. Each Commissioner shall in good faith review the Report and confer with his or her respective staff and then his or her counterpart Commissioner, with reasonable promptness, in order to attempt to informally resolve any outstanding issues (“Commissioner-Level Discussions”). Unless otherwise specifically extended in writing to a specific date by the respective Commissioners, the Commissioner-Level Discussions shall terminate 30 days from the date the Facilitator Report was issued electronically. Either Commissioner shall have the right to terminate Commissioner-Level Discussions by written communication to his or her counterpart ending the process.

D. The City shall also have the right to challenge a State Determination in an Article 78 proceeding in New York State Supreme Court for New York County. To do so, and notwithstanding CPLR § 217 (or any successor rule), the City must commence the Article 78 proceeding within 45 days of receiving the State Determination, within 60 days of receiving the State Determination if the City invokes informal negotiation and either party requests participation of the Facilitator, but no party requests a Facilitator Report, or, if either party requests a Facilitator Report, within 10 days of the later of: (a) the issuance by either Commissioner of a written communication terminating the Commissioner-Level Discussions; (b) 30 days from the Facilitator's issuance of the Facilitator Report; or (c) such later date as the Commissioners shall agree upon in writing as the date by which the Commissioner-Level Discussions shall terminate. If such a proceeding is commenced, any State Determinations hereunder shall be deemed to be final agency actions. If the City does not commence an Article 78 proceeding within the appropriate timeframe set forth above, then the City shall waive the right to challenge the Determination and the assessment of any penalties associated with that Determination. The parties may agree, in writing and on a case-by-case basis, to extend the period within which the City must commence an Article 78 proceeding to challenge a particular State Determination. The periods for informal negotiation and for the City to commence an Article 78 proceeding shall run concurrently. The City's dispute resolution options under this First Amended Nitrogen Consent Judgment shall be limited to the informal negotiations outlined above and bringing an Article 78 proceeding in New York State Supreme Court for New York County. The City shall have no right to any formal administrative review of a State Determination.

E. In any Article 78 proceedings challenging a State Determination, service of the petition and accompanying papers commencing the proceeding and all subsequent papers shall be made by the City on the State by serving the counsel identified in Paragraph XXII.G. below or to such other individuals as the State shall designate pursuant thereto. Service on those individuals shall be deemed valid service on the State. Neither party shall submit, cite, discuss or otherwise make references to any Facilitator Report or any other statement or communication by the Facilitator in any Article 78 proceeding hereunder. The parties shall treat as confidential and not disseminate beyond the DEC, EFC, DEP, New York City Law Department and the New York State Department of Law, including outside consultants working for these parties on the projects required hereunder, any Facilitator Report or any other statement or communication by the Facilitator concerning the parties' respective rights and obligations hereunder. The parties shall make reasonable efforts to limit dissemination of the Facilitator Report or any other statement or communication by the Facilitator concerning the parties' respective rights and obligations hereunder within these agencies to individuals who are involved with, or have supervisory responsibilities encompassing, the implementation and enforcement of this First Amended Nitrogen Consent Judgment, as well as support staff utilized by such individuals and outside consultants working on the projects required hereunder.

F. If, in the case of a City challenge to a State Determination disapproving a submittal required under this First Amended Nitrogen Consent Judgment or approving a required submittal with

conditions that the City considers unacceptable, the submittal is found to have been approvable as submitted, then no penalties or interest may be assessed and subsequent milestone dates shall be extended appropriately, as agreed upon by the City and State or as otherwise determined by the Court. If the submittal is found to have been properly disapproved, then penalties and interest shall be assessed from 14 business days after the date all parties entitled to receive the State Determination in accordance with Paragraph XXII.H. below have received it pursuant to Paragraph XXII.J. below. Subsequent milestone dates shall not be extended, unless otherwise agreed upon by the State and City, or ordered by the Court, for good cause shown by the City.

G. If, in the case of a City challenge to a State Determination rejecting a First Amended Nitrogen Consent Judgment modification requested by the City pursuant to Section XV above, the State Determination is found to be arbitrary and capricious, then no penalties or interest may be assessed and subsequent milestone dates shall be extended appropriately, as agreed upon by the City and State or as otherwise determined by the Court. If the State Determination rejecting the modification is upheld, then penalties and interest shall be assessed from 14 business days after the date any violation occurred that would not have been a violation if the State had approved the modification request. Subsequent milestone dates shall not be extended, unless otherwise agreed upon by the State and City, or ordered by the Court, for good cause shown by the City.

H. In any Article 78 proceeding brought by the City pursuant to this Section in which the City asserts a claim of force majeure as a defense to a State Determination assessing liability, or challenging a State Determination rejecting a force majeure claim in response to a City demand for such a determination, then the City shall bear the burden of proving that the State's rejection of the claim was arbitrary and capricious. If, in any such case, the State Determination is found to be arbitrary and capricious, then no penalties or interest may be assessed, and subsequent milestone dates shall be extended appropriately, as agreed upon by the City and State, or as otherwise determined by the Court, if the City demonstrates that the force majeure materially affects the City's ability to meet subsequent milestones. If the City does not demonstrate that the force majeure materially affects the City's ability to meet subsequent milestones, then no subsequent milestone shall be extended, regardless of whether the State Determination is found to be arbitrary and capricious. If the City's claim of force majeure is rejected, then penalties and interest shall be assessed from 14 business days after the date that the violation at issue occurred. Subsequent milestone dates shall not be extended.

I. In the case of any other challenge by the City to a determination by the State issued hereunder (including, but not limited to, a challenge to a State Determination that the City has violated a nitrogen effluent limit, failed to submit a quarterly construction report on time, failed to make a monitor payment, or failed to submit any other report required hereunder on time), if the State's Determination is upheld then penalties and interest shall be assessed from 14 business days after the date that the violation that is the subject of the City challenge occurred. Regardless of whether or not the State's determination is upheld, the bringing of such a challenge by the City, pursuant to this paragraph, shall in no way result in an extension of any milestone dates under this First Amended Nitrogen Consent Judgment.

J. The State shall have the right to enforce any judgment assessed against the City pursuant to Section XIII above, and any other obligation of the City hereunder, in New York State Supreme Court for New York County. The City consents to the State commencing an action in that Court to enforce any such judgment or other obligation, and that service of the papers commencing the action on counsel identified in Paragraph XXII.H. below, shall be deemed valid and complete service on the City.

XXI. TERMINATION

A. This First Amended Nitrogen Consent Judgment shall terminate with respect to the Upper East River Plants after the City certifies in writing that it has completed all the milestones in Appendices A and C.1, and the State has concurred with this certification in writing.

B. The First Amended Nitrogen Consent Judgment shall terminate with respect to the Jamaica Bay WPCPs after all three of the following have occurred: (1) DEC has issued DEP modified SPDES permits that contain a final aggregate nitrogen limit for the four Jamaica Bay WPCPs for the duration of the permits' terms, which may include a variance, in accordance with Section IV above, reflecting the final water quality-based effluent limitations for total nitrogen for the four Jamaica Bay WPCPs; (2) the effective date of the last Performance-Based Interim Nitrogen Limit to be calculated pursuant to Appendix D and take effect under Appendix C.2. hereto (and additionally take effect in the SPDES Permits for the four Jamaica Bay WPCPs); and (3) completion of the Post-Construction Ambient Water Quality Monitoring required pursuant to Paragraph VII.D.2 above. Notwithstanding the foregoing, the City may submit a request to the Court to terminate the First Amended Nitrogen Consent Judgment at any earlier time if the City demonstrates compliance with water quality standards.

C. This First Amended Nitrogen Consent Judgment shall terminate with respect to the penalty and EBP provisions (Section II above) after all funds paid pursuant to Paragraph II.B have been spent in accordance with that paragraph, or paid to the State as a civil penalty pursuant to Sub-paragraph II.B.5, and all of the City's outstanding obligations from the Nitrogen Consent Judgment have been completed pursuant to Paragraph II.C.

XXII. GENERAL PROVISIONS

A. All references to days herein are to calendar days unless otherwise specified.

B. The paragraph or section headings set forth in this First Amended Nitrogen Consent Judgment are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this First Amended Nitrogen Consent Judgment.

C. To comply with any milestone set forth in this First Amended Nitrogen Consent Judgment, its appendices, and any document that is incorporated herein by operation of this First Amended

Nitrogen Consent Judgment, all documents must be submitted by the City by the required milestone dates and in final form. For submittals in accordance with design completion milestones, “final form” means under the signature and seal of a professional engineer currently licensed to practice in New York State and for all other technical submittals to comply with a milestone “final form” means under the signature of a professional engineer currently licensed to practice in New York State.

D. This First Amended Nitrogen Consent Judgment, its annexed appendices, and any document that is incorporated herein by operation of this First Amended Nitrogen Consent Judgment shall apply to, and be binding upon the parties, their officers, agents, servants, employees, successors and assigns, and each of them, and upon all persons, firms and corporations acting under, through or for, in active concert or participation with, the parties.

E. No communication by the State shall constitute a modification, approval or alteration of any obligation of, or required conduct by, the City under this First Amended Nitrogen Consent Judgment, other than a formal written communication expressly identified by the State author as such.

F. This document is a judicial consent judgment, not a SPDES or NPDES permit issued pursuant to ECL Article 17, Title 8, or 33 U.S.C. § 1342, respectively. The parties agree to remain subject to the jurisdiction of this Court for the sole purpose of enforcement of the requirements of this First Amended Nitrogen Consent Judgment, and any disputes arising under its terms.

G. All technical submittals to the State required by this First Amended Nitrogen Consent Judgment shall be made, one copy unless otherwise designated, as follows:

DEC Region 2 Water Engineer
47-40 21st Street
Long Island City, NY 11101
(Two copies)

Joseph DiMura
Director, Water Compliance, Division of Water
625 Broadway, 4th floor
Albany, NY 12233-3500
(Two copies)

Environmental Facilities Corporation
625 Broadway, Albany NY 12233
Att: C. Webber

All communications and modification requests to the State under this First Amended Nitrogen Consent Judgment, other than technical submittals, shall be made to the above parties and to:

Chief, Water Bureau
DEC Office of General Counsel
625 Broadway, Albany, NY 12233-5500

AAG Andrew Gershon
Environmental Protection Bureau
New York State Department of Law
120 Broadway
New York, NY 10271

The State reserves the right, upon written notice to the City, to designate additional or different individuals or addressees for communication or to request that technical submissions be additionally made to AAG Gershon and/or the DEC Water Compliance Counsel.

H. All responses to submittals, and any other correspondence regarding technical issues that are sent to the City, shall be provided to:

Deputy Commissioner, Bureau of Wastewater Treatment
NYCDEP
59-17 Junction Blvd.
Corona, NY 11368

Deputy Commissioner, Bureau of Engineering Design and Construction
NYCDEP
59-17 Junction Blvd.
Corona, NY 11368

Designated First Amended Nitrogen Consent Judgment Project Manager
NYCDEP
59-17 Junction Blvd.
Corona, NY 11368

All other writings transmitted under this First Amended Nitrogen Consent Judgment shall be submitted to:

William Plache, Esq.
New York City Law Department
Office of the Corporation Counsel
100 Church Street
New York, NY 10007

and to:

Marcella Eckels, Esq.
NYCDEP
Bureau of Legal Affairs
59-17 Junction Blvd.
Flushing, NY 11373

Any written communications required to be transmitted under this First Amended Nitrogen Consent Judgment to the Citizens Groups shall be submitted to:

Lawrence Levine, Esq.
Brad Sewell, Esq.
Natural Resources Defense Council
40 West 20th Street
New York, NY 10011

I. The caption of this action is amended by substituting Caswell F. Holloway, as Commissioner of the New York City Department of Environmental Protection.

J. Date of receipt. A transmittal shall be deemed to have been received on the first business day after transmission if sent electronically or by hand delivery, on the second business day after transmission if sent by overnight delivery service, and on the first business day after the fifth day after mailing if sent by regular mail.

K. All referenced provisions of law or regulation shall include any successor law or regulation that may replace the referenced law or regulation during the life of this First Amended Nitrogen Consent Judgment.

XXIII. RELEASE

Subject to Paragraph XVI, completion by the City of all work, and payment of all funds, required under this First Amended Nitrogen Consent Judgment shall settle all claims by the State pertaining to: (1) violations of each of the following of which the State had actual knowledge or notice as of June 1, 2010: the Nitrogen ACO; the 2006 Nitrogen Consent Judgment; the Wards Island WPCP Letter Modification; the Wards Island WPCP Order; and the Jamaica WPCP Order; and (2) discharges of nitrogen, phosphorus, BOD, and ammonia from the Jamaica Bay WPCPs prior to the effective date of this First Amended Nitrogen Consent Judgment. Upon completion of the work, and payment of all funds required hereunder, the State hereby releases the City of liability for stipulated or statutory civil penalties for all such violations and discharges, subject to Section XVI. This release shall not apply to any claims that are subject to a pending NOV or other pending enforcement action by the State.

XXIV. EFFECTIVE DATE

The effective date of this First Amended Nitrogen Consent Judgment is the date it is entered by the Court. The parties hereto consent to entry of this First Amended Nitrogen Consent Judgment without further notice.

For the City of New York and Commissioner Caswell Holloway and the New York City Department of Environmental Protection:

Michael Cardozo
Corporation Counsel of the City of New York

By: Wm S Plache 4/22/2011
William Plache Date
Assistant Corporation Counsel

Caswell F. Holloway
Commissioner of the New York City Department of Environmental Protection

By: Caswell F. Holloway 04-22-11
Caswell F. Holloway Date
Commissioner

FILED
JUN 27 2011
COUNTY CLERK'S OFFICE
NEW YORK
entered as a judgment

For the State of New York:

ERIC T. SCHNEIDERMAN
Attorney General of the State of New York

By: Andrew J. Gershon
Andrew J. Gershon
Assistant Attorney General

4/27/11
Date

For the New York State Department of Environmental Conservation:

JOSEPH MARTENS
Commissioner

By: Joseph Martens
Joseph Martens
Commissioner

4/21/11
Date

SO ORDERED:

ENTER
SO ORDERED
4/27
PAUL G. FEINMAN
J.S.C. J.S.C. 5/5/11

FILED
JUN - 9 2011
COUNTY CLERK'S OFFICE
NEW YORK

Norman Goodman
clerk of the court

FILED
JUN 27 2011
COUNTY CLERK'S OFFICE
NEW YORK
rendered AS AS
judgment

APPENDIX A

UPPER EAST RIVER WPCPS UPGRADE SCHEDULE MILESTONES (1)

Milestone	Date	Major or Minor
1. Submit Preliminary Approvable BNR O&M Plan for each of the following: Bowery Bay, Hunts Point, Tallman Island and Wards Island WPCPs, Supplemental Carbon Addition Facilities at the Wards Island Battery E Demonstration Facility, SHARON Demonstration Facility and Supplemental Carbon Facilities at the Hunts Point WPCP. (As of the effective date the City has submitted Preliminary Approvable BNR O&M Plans for Wards Island Battery E, Hunts Point WPCP, and SHARON.)	6 months prior to Construction Completion in accordance with Section V.D.1.	Minor
2. Hunts Point WPCP - Construction Completion in accordance with the Phase I Plan	August 31, 2010	Major
3. Submit Final Approvable BNR O&M Plan for each of the following: Bowery Bay, Hunts Point, Tallman Island and Wards Island WPCPs, Supplemental Carbon Addition Facilities at the Wards Island Battery E Demonstration Facility, SHARON Demonstration Facility and Supplemental Carbon Facilities at the Hunts Point WPCP	6 months after completion of the pilot period in accordance with Section V.D.2.	Minor
4. Wards Island WPCP - Construction Completion and Operation of Aeration Tank 13 with Supplemental Carbon	October 31, 2010	Major
5. Wards Island WPCP - Construction Completion and Operation of the SHARON Process or a State-approved equivalent separate centrate treatment process with Supplemental Carbon	October 31, 2010	Major
6. Wards Island WPCP - Submit revised WWOP	January 31, 2011	Minor
7. Submit Phase II Basis of Design Report for all Upper East River WPCPs	June 30, 2011	Minor
8. Submit Preliminary Phase II BNR O&M Plans for the facilities as set forth in the approved Phase II Plan.	Will be determined by the Phase II Basis of Design Report.	Minor
9. Submit Final Phase II BNR O&M Plans for the facilities as set forth in the approved Phase II Plan	Will be determined by the Phase II Basis of Design Report.	Minor
10. Complete Design of Hunts Point Supplemental Carbon Facility	June 30, 2011	Minor
11. Wards Island WPCP - Construction Completion and Operation of DCS System for Aeration Tank 13	December 31, 2011	Major
12. Wards Island WPCP - Construction Completion of SHARON Train 2	December 31, 2011	Major
13. NTP to construct Supplemental Carbon Facility at Hunts Point WPCP	March 31, 2012	Minor
14. Bowery Bay WPCP - Construction Completion in accordance with the Phase I Plan	June 30, 2012	Major
15. Tallman Island WPCP - Construction Completion in accordance with the Phase I Plan	January 31, 2013	Major
16. Wards Island Contract #78 – Complete Construction of Manhattan and Bronx Grit Chamber Channel Work	December 31, 2013	Major

17. Wards Island WPCP- Construction Completion in accordance with the Phase I Plan	October 31, 2013	Major
18. Hunts Point WPCP - Construction Completion of Carbon-Addition and Operation of Carbon Addition Facilities	June 1, 2014	Major
19. Construction Completion of Phase II Facility Plan for all Upper East River WPCPs	July 1, 2016	Major
20. Compliance with Final Effluent Limits as set forth in Appendix C	January 1, 2017	Major

(1) The Phase I Plan was approved by DEC as of February 1, 2006, the effective date of the Nitrogen Judgment. Upon approval of the Phase II Plan, all milestones set forth in that Plan shall be incorporated by reference herein as minor milestones.

APPENDIX B

26th WARD WPCP UPGRADE SCHEDULE & JAMAICA BAY MILESTONES⁽¹⁾

Milestone	Explanatory Notes, if any	Date	Major or Minor
1. Submit Preliminary Approvable BNR O&M Plan in accordance with Paragraph V.D.1. for each of the 26th Ward, Jamaica, Coney Island, Rockaway WPCPs		6 months prior to Construction Completion or Operation of facilities listed in Appendix B whichever is first.	Minor
2. Submit Final Approvable BNR O&M Plan in accordance with Paragraph V.D.2. for each of the 26th Ward, Jamaica, Coney Island, Rockaway WPCPs		6 months after the completion of the pilot period as set forth in Paragraph V.D.1.	Minor
3. Submit Enhanced Jamaica Bay Ambient Monitoring Plan	City shall use a small DEP vessel, Kestrel (or similar sized vessel), to survey five areas that are in shallower waters than currently monitored twice per month for DO, nutrients, CHL-A, and ammonia.	April 1, 2010	Minor
4. Rockaway WPCP - Complete four ATs in service Pilot Study	City shall conduct a 60 to 90-day pilot study in which AT#2 at the Rockaway WPCP is placed back into service. This pilot study shall commence after January 1, 2010 and be completed by May 31, 2010. City shall measure the additional nitrogen removals to determine the effectiveness of the use of AT#2. City shall also determine the additional cost of the use of AT#2 in terms of money, energy use and emissions. Based on the results of the pilot study, City shall determine whether or not to continue this mode of operation for AT#2.	May 31, 2010	Minor
5. 26 th Ward WPCP - Commence Operation in accordance with the Phase I Plan		June 1, 2010	Minor
6. Commence Enhanced Jamaica Bay Monitoring in accordance with approved Ambient Monitoring Plan	City shall implement the enhanced Monitoring Plan (approved by DEC May 4, 2010) and provide quarterly reports of monitoring results to the Citizen Groups.	June 4, 2010	Minor
7. 26 th Ward WPCP – Construction Completion in accordance with the Phase I Plan		July 31, 2010	Major
8. Rockaway WPCP - Submit Final Report on AT# 2 Pilot	City shall submit a final report to State and the Citizen Groups evaluating the usage of AT#2, which shall include an evaluation of the pilot	August 31, 2010	Minor

Milestone	Explanatory Notes, if any	Date	Major or Minor
	and the basis for City's determination of whether to continue using AT#2 beyond the pilot period. City shall provide a copy of the report to the Citizen Groups simultaneous with submission to State.		
9. 26 th Ward WPCP - Submit Approvable Sludge Optimization Plan	City shall submit an approvable plan to State for optimizing the existing sludge handling and processing facilities at the 26 th Ward WPCP, so that, to the extent practicable, sludge is received, stored and dewatered in a manner that equalizes the centrate feed rate (i.e. minimizes centrate fluctuations) to AT#3, in order to improve nitrogen-removal effectiveness between December 2011 and December 2014.	September 30, 2010	Minor
10. 26 th Ward WPCP – Propose milestone dates for design completion and construction completion for Permanent Separate Sidestream Centrate Treatment	Upon approval by the State these milestone dates shall be incorporated herein as the dates for the following two milestones.	September 30, 2010	Minor
11. 26 th Ward WPCP – Design Completion of Permanent Separate Sidestream Centrate Treatment		October 31, 2011	Minor
12. Submit Amended Comprehensive Jamaica Bay Plan	City shall submit an approvable updated Comprehensive Plan with addendum.	October 31, 2010	Major
13. 26 th Ward WPCP - Construction Completion of Permanent Separate Sidestream Centrate Treatment		June 30, 2015	Major
14. Jamaica WPCP - Cease Operation of Sludge Dewatering	City shall cease using the Jamaica WPCP dewatering facility and send all of its sludge to the 26th Ward WPCP.	December 31, 2011	Minor
15. 26 th Ward WPCP - Commence Operation of Interim Centrate Treatment with Carbon Addition	City shall commence operating 26th Ward Aeration Tank (AT) #3 as a separate centrate tank with carbon addition to treat Jamaica Bay sludges, as well as any sludges shipped in from outside Jamaica Bay. The City shall continue such operation until 26 th Ward separate centrate treatment is operational.	December 31, 2011	Major
16. City–Wide Biosolids Centrate Facility Report	City shall submit a report to State describing its City–Wide Bio-Solids Centrate operations in accordance with Paragraph VII.B.	December 31, 2012	Minor

Milestone	Explanatory Notes, if any	Date	Major or Minor
17. 26 th Ward WPCP - Propose milestone dates for design completion and construction completion for Level 3 BNR Upgrade, including Permanent Chemical Addition Facilities.	Upon approval by the State these milestone dates shall be incorporated herein as the dates for the following two milestones.	December 31, 2012	Minor
18. 26 th Ward WPCP - Design Completion of Level 3 BNR Upgrade, including Permanent Chemical Addition Facilities.		TBD	Minor
19. 26 th Ward WPCP – Submit Approvable Update on Sludge Optimization Plan		September 30, 2013	Minor
20. Rockaway and Coney Island WPCPs – Submit Approvable Facility Plan, Level 1 BNR upgrade	City shall submit, for State approval, a Facility Plan to construct Level 1 BNR facilities at the Rockaway and Coney Island WPCPs.	January 31, 2014	Minor
21. Submit Approvable Phase I Post-Construction Monitoring Plan	City shall conduct post-construction monitoring in two phases, Phase I and Phase II. The purpose of the post-construction monitoring is to determine the efficacy of the implemented nitrogen controls; quantify the extent of compliance or non-compliance with water quality standards including numeric and narrative standards; and to assist in the validation/recalibration to the extent necessary of the Jamaica Bay Eutrophication Model (JEM).	6 months prior to commencement of operation of the 26 th Ward Level 3 BNR facilities	Minor
22. 26 th Ward WPCP - Commence Operation of Permanent Separate Sidestream Centrate Treatment.	City shall commence operating an approximately 1.2 MGD Separate Sidestream Centrate Treatment facility to remove ammonia from centrate stream.	December 31, 2014	Major
23. Commence Phase I Post-Construction Monitoring	Phase I post-construction monitoring shall be conducted after the commencement of operation of the 26 th Ward level 3 BNR upgrade. The monitoring shall continue for 3 years.	Within 6 months of State approval of Phase I Plan or upon operation of Level 3 BNR at the 26 th Ward WPCP, whichever is later	Minor
24. Jamaica WPCP - Commence Operation of Level 2 BNR Upgrade		December 31, 2014	Major
25. Jamaica WPCP - Construction Completion		June 30, 2015	Major

Milestone	Explanatory Notes, if any	Date	Major or Minor
of Level 2 BNR Upgrade			
26. 26 th Ward WPCP - Commence Operation of Level 3 BNR Upgrade, including Permanent Chemical Addition Facilities.		December 31, 2015	Minor
27. 26 th Ward WPCP - Construction Completion of Level 3 BNR Upgrade, including Permanent Chemical Addition Facilities.		TBD	Major
28. Rockaway WPCP – Submit Approvable Design Report for Level 1 BNR Upgrade		January 31, 2016	Minor
29. Coney Island WPCP – Submit Approvable Design Report for Level 1 BNR Upgrade		December 31, 2016	Minor
30. Rockaway WPCP – Notice to Proceed to Construction		January 31, 2017	Minor
31. Commence Jamaica Bay Feasibility Study	The Feasibility Study shall be designed to evaluate the latest nitrogen-removal technologies, and optimization techniques for existing infrastructure to identify potential measures to reduce nitrogen discharges from Jamaica Bay WPCPs and improve DO water quality in Jamaica Bay.	Within 12 months after the start of Phase I post-construction monitoring.	Minor
32. Coney Island WPCP – Notice to Proceed to Construction		December 31, 2017	Minor
33. Rockaway WPCP – Construction Completion Level 1 BNR Upgrade.		December 31, 2019	Major
34. Submit Approvable Phase II Post-Construction Monitoring Plan	See notes to Milestone 21 above	6 months prior to construction completion of Coney Island Level 1 BNR	Minor
35. Coney Island WPCP – Construction Completion Level 1 BNR Upgrade.		December 31, 2020	Major
36. Commence Phase II Post-Construction Monitoring	Phase II post-construction monitoring shall be conducted after construction completion of the Coney Island Level 1 BNR upgrades. The monitoring shall continue for 3 years.	Within 6 months of State approval of Phase II Plan or upon construction completion of Coney Island BNR Level 1, whichever is later.	Minor

APPENDIX C1

Upper and Lower East River Interim and Final, LIS TMDL-derived Nitrogen Limits (1)

Effective Date of Limit	Combined Nitrogen Limits for Zone 8 and 9 (2)
December 1, 2009	101,075 lbs/day
July 1, 2010	86,375 lbs/day
July 1, 2012	77,275 lbs/day
August 1, 2014	52,275 lbs/day
January 1, 2017	44,325 lbs/day (3)

Notes: (1) All interim and final total nitrogen effluent limits are based on aggregate 12-month rolling averages. Beginning on the effective date of each interim limit, the aggregate 12-month rolling average shall be calculated as prescribed by 6 NYCRR section 750-1.2(92), and reported on the monthly discharge Monitoring Reports, subject to the following: a) For the first month after the limit effective date, only the first month is to be included in such calculation; and; b) For each month following the limit effective date and until 12 months have passed, the calculation shall begin with the limit effective date and include every month that follows the limit effective date until there are 12 months. For the final limit effective January 1, 2017, there shall be no restart of the 12-month rolling average and the 12 month rolling average limit shall be based on the preceding 12 months.

(2) The Combined Nitrogen Limits for Zones 8 and 9 are based on a ratio of 4:1. The City shall calculate compliance with the Combined Nitrogen Limits for Zones 8 and 9 as the sum of the Zone 8 WPCPs' Aggregate discharge plus one-quarter of the Zone 9 WPCPs' Aggregate discharge.

(3) This limit includes a 650 lbs/day reduction to offset the Combined Sewer Overflow (CSO) total nitrogen (TN) contribution. The 650 lbs/day offset represents a 58.5% reduction based on the CY2003 calculated CSO TN discharge. This CSO offset may need to be recalculated in the future using the same methodology to account for changes in future CSO TN discharges that may result from new CSO abatement facilities and/or increased wet weather captures at the WPCPs.

APPENDIX C2

Jamaica Bay WPCPs Interim and Final Nitrogen Limits (1)

Effective Date of Limit	Combined Nitrogen Limit for Jamaica Bay WPCPs
January 1, 2009	45,300 lbs/day
November 1, 2009	41,600 lbs/day
January 1, 2012 (19 months after commencement of operation of the Level 2 upgrade at the 26th Ward WPCP on June 1, 2010)	TBD based on actual aggregate performance by the Jamaica Bay WPCPs (2)
19 months after operation of the interim chemical addition facility for AT#3 at the 26th Ward WPCP	TBD based on actual aggregate performance by the Jamaica Bay WPCPs (2,3,4)
19 months after the last of commencement of operation of: (a) the permanent chemical addition facilities at the 26th Ward WPCP; (b) separate side-stream treatment facility at the 26th Ward WPCP; or (c) the Level 2 BNR upgrade at the Jamaica WPCP.	TBD based on actual aggregate performance by the Jamaica Bay WPCPs (2,3)
19 months after the last of: (a) construction completion of the Level 1 BNR upgrade at the Coney Island WPCP; or (b) construction completion of the Level 1 BNR upgrade at the Rockaway WPCP.	TBD based on actual aggregate performance by the Jamaica Bay WPCPs (2,5)
<p><u>Notes:</u> The performance-based interim nitrogen limits shall be expressed as step-down aggregate combined limits for all four WPCPs discharging to Jamaica Bay, and such step-downs shall be established, except as otherwise noted, in accordance with the protocol established by Appendix D of the First Amended Nitrogen Consent Judgment.</p>	
(1) A final nitrogen limit shall be addressed through the binding permit administration and hearing process.	
(2) Performance-based limits to be determined in accordance with Appendix D.	
(3) If needed, development of this step-down shall account for the ongoing or planned Level 1 BNR construction at Coney Island and Rockaway WPCPs.	
(4) Results for the days when equipment that is critical for operation of the interim chemical addition facility for AT#3 is out of service, or when AT#1, AT#2 or AT#3 are out of service, shall not be included in the calculation of the 12-month rolling average for that month.	
(5) Such step-down shall include population growth for a period of 5 years.	

APPENDIX D

Method for Calculating Performance-Based Combined Nitrogen Interim Effluent Limits for Jamaica Bay WPCPs

1. Upon commencement of operation of Level 2 BNR at the 26th Ward WPCP, commencement of operation of Interim Centrate Treatment with Carbon Addition at the 26th Ward WPCP, commencement of operation of both Level 3 BNR at the 26th Ward WPCP and Level 2 BNR at the Jamaica WPCP, and certification of construction completion of both Level 1 BNR at the Rockaway WPCP and Level 1 BNR at the Coney Island WPCP, respectively, the City shall begin 6-month startup operational periods. After each such 6-month operational period, the City shall undertake a 12-month performance evaluation to establish new interim nitrogen step-down limits.

2. The City shall submit the performance data from the performance evaluation period to the State within 30 days of the end of the 12-month performance period. The State shall calculate Performance-Based Interim Effluent Limits using the actual monthly aggregate total nitrogen loadings from the four DEP facilities that discharge into Jamaica Bay WPCPs, consistent with TOG 1.3.3. In calculating the Performance-Based Interim Effluent Limits, the State shall utilize the 95th percentile of the 12 data points collected during the period. The 12 monthly data points shall represent each of the twelve months during the performance period.¹⁵

¹⁵ In applying this methodology in calculating the interim step-down aggregate nitrogen limit to be calculated 19 months after commencement of operation of the interim chemical addition facility for AT#3 at the 26th Ward WPCP, results for the days when equipment that is critical for operation of the interim chemical addition facility for AT#3 is out of service, or when AT#1, AT#2 or AT#3 are out of service, shall not be included in the calculation of the 12-month rolling average for that month. In applying this methodology in calculating the interim step-down aggregate nitrogen limit to be calculated 19 months after the last of commencement of operation of: (a) the Level 3 BNR upgrades at the 26th Ward WPCP, or (b) the Level 2 BNR upgrade at the Jamaica WPCP, performance data will be adjusted to incorporate any projected performance impacts due to ongoing or planned Level 1 BNR construction at the Coney Island and Rockaway WPCPs, if necessary. In applying this methodology in calculating the interim step-down aggregate nitrogen limit to be calculated 19 months after the last of: (a) construction completion of the Level 1 BNR upgrade at Coney Island WPCP; or (b) construction completion of the Level 1 BNR upgrade at the Rockaway WPCP, the 95th percentile value calculated pursuant to this methodology shall be adjusted to account for the projected change in nitrogen discharges associated with projected population growth in each of the four Jamaica Bay drainage areas. These projected discharges will be calculated using the estimated populations five years after the completion of the performance evaluation period. The projected increases in the influent nitrogen loadings to each WPCP resulting from those population increases will be multiplied by the nitrogen removal efficiencies of each WPCP during the performance period to determine the anticipated increases in effluent nitrogen loadings. These projected effluent nitrogen increases due to projected population growth will be added by DEC to the interim effluent nitrogen limit calculated pursuant to this methodology. DEP will provide the population growth data and removal

3. DEP shall make best efforts in operating the WPCPs during the Performance Evaluation Period (and while interim limits are in place).

4. DEC agrees to use best professional judgment to assure that loading anomalies due to the operation of the Jamaica dewatering facility, or other loading variations, are not calculated into the step-down limit.

efficiencies to DEC within 30 days of the end of performance period.

**APPENDIX E - JAMAICA WPCP - SPDES No. NY0026115
INTERIM EFFLUENT LIMITS AND MONITORING**

The following interim limits and monitoring requirements shall be in effect when one aeration tank and two final setting tanks are out of service for construction.

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[x] All Year [] Seasonal from to	Jamaica Bay	July 1, 2009 - July 31, 2013	August 1, 2013

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				Foot Notes
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Influent	Effluent	
CBOD ₅	Monthly Average	33	mg/l	21000	lbs/d	1/Day	24 Hour Composite	X	X	(1)
Solids, Suspended	Monthly Average	36	mg/l	25000	lbs/d	1/Day	24 Hour Composite	X	X	(1)

FOOTNOTES:

(1) Effluent shall not exceed 22 % and 21 % of influent values for CBOD₅ & TSS respectively. During periods of wet weather which causes plant flows over the permitted flow for a calendar day, the CBOD₅ and TSS influent and effluent results for that day shall not be used to calculate 30 day arithmetic mean percent removal limitations. However, all concentrations shall be used in calculation of the arithmetic mean value concentration limitations. All other effluent limitations remain in full effect.

(2) The Limits set forth herein supersede the 6-hour maximum and daily CBOD and TSS limits of 50 mg/l in SPDES Permit #0026115.

**APPENDIX F1 - Wards Island WPCP - SPDES No. NY0026131
INTERIM EFFLUENT LIMITS AND MONITORING WHEN THREE TANKS OUT OF SERVICE**

These limits shall be in effect during any time period through September 1, 2012 when three aeration tanks are out of service for construction.

*In Batteries A-D, each aeration tank battery consists of three aeration tanks. Battery E consists of one aeration tank.

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[x] All Year [] Seasonal from to	East River	November 1, 2006 - April 30, 2007; December 1, 2008 - January 31, 2009; September 1, 2012 - December 31, 2012 (when three aeration tanks* are out of service)	January 1, 2013

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				Foot Notes
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Influent	Effluent	
Flow, Total	12 monthly rolling average	275	MGD			Continuous	Recorder		X	(1),(3)
Flow, Total	30 day arithmetic mean	Monitor	MGD			Continuous	Recorder		X	(3)
CBOD ₅	Monthly Average	25	mg/l	57000	lbs/d	1/Day	24 Hour Composite	X	X	(2)
Solids, Suspended	Monthly Average	30	mg/l	69000	lbs/d	1/Day	24 Hour Composite	X	X	(2)

FOOTNOTES:

- (1) The 12-month rolling average is defined as the average of the current month with the eleven previous months. The 12-month rolling average shall be calculated using total effluent flow. Any upgrade of the treatment plant will include the installation of the necessary equipment to monitor influent flow.
- (2) Effluent shall not exceed 20 % and 20 % of influent values for CBOD₅ & TSS respectively. During periods of wet weather which causes plant flows over the permitted flow for a calendar day, the CBOD₅ and TSS influent and effluent results for that day shall not be used to calculate 30 day arithmetic mean percent removal limitations. However, all concentrations shall be used in calculation of the arithmetic mean value concentration limitations. All other effluent limitations remain in full effect.
- (3) During the effective period of these interim limits, the minimum flow through the secondary treatment works during wet weather shall be 310 MGD.
- (4) The Limits set forth herein supersede the 6-hour and daily maximum CBOD and TSS limits of 50 mg/l in SPDES Permit #0026131.

APPENDIX F2 - Ward Island WPCP - SPDES No. NY0026131

INTERIM EFFLUENT LIMITS AND MONITORING WHEN FOUR TANKS OUT OF SERVICE

These limits will be in effect during any time period through September 1, 2012 when four aeration tanks are out of service for construction.

*In Batteries A-D, each aeration tank battery consists of three aeration tanks. Battery E consists of one aeration tank.

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[x] All Year [] Seasonal from to	East River	May 1, 2007 - November 30, 2008 and February 1, 2009 - August 31, 2012; (when four aeration tanks* are out of service)	September 1, 2012

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				Foot Notes
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Influent	Effluent	
Flow, Total	12 monthly rolling average	275	MGD			Continuous	Recorder		X	(1),(3)
Flow, Total	30 day arithmetic mean	Monitor	MGD			Continuous	Recorder		X	(3)
CBOD ₅	Monthly Average	25	mg/l	57000	lbs/d	1/Day	24 Hour Composite	X	X	(2)
Solids, Suspended	Monthly Average	30	mg/l	69000	lbs/d	1/Day	24 Hour Composite	X	X	(2)

FOOTNOTES:

(1) The 12-month rolling average is defined as the average of the current month with the eleven previous months. The 12-month rolling average shall be calculated using total effluent flow. Any upgrade of the treatment plant will include the installation of the necessary equipment to monitor influent flow.

(2) Effluent shall not exceed 25 % and 25 % of influent values for CBOD₅ & TSS respectively. During periods of wet weather which causes plant flows over the permitted flow for a calendar day, the CBOD₅ and TSS influent and effluent results for that day shall not be used to calculate 30 day arithmetic mean percent removal limitations. However, all concentrations shall be used in calculation of the arithmetic mean value concentration limitations. All other effluent limitations remain in full effect.

(3) During the effective period of these interim limits, the minimum flow through the secondary treatment works during wet weather shall be 275 MGD.

(4) The Limits set forth herein supersede the 6-hour and daily maximum CBOD and TSS limits of 50 mg/l in SPDES Permit # 0026131.

**APPENDIX G - Tallman Island WWTP - SPDES No. NY0026239
 INTERIM EFFLUENT SEASONAL LIMITS AND MONITORING WHEN THE WEST BATTERY IS OUT OF SERVICE**

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[] All Year [x] Seasonal from	East River	November 1, 2010 - April 30, 2011; November 1, 2011 - December 31, 2011; (when the West Battery is out of service)	December 31, 2011

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				Foot Notes
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Influent	Effluent	
Solids, Suspended	Monthly Average	35	mg/l	20000	lbs/d	1/Day	24 Hour Composite	X	X	(1)
Solids, Suspended	7 day arithmetic mean	60	mg/l	30000	lbs/d	1/Day	24 Hour Composite	X	X	(2) (3)

FOOTNOTES:

(1) Effluent shall not exceed 20 % and 25 % of influent values for CBOD₅ & TSS respectively. During periods of wet weather which causes plant flows over the permitted flow for a calendar day, the CBOD₅ and TSS influent and effluent results for that day shall not be used to calculate 30 day arithmetic mean percent removal limitations. However, all concentrations shall be used in calculation of the arithmetic mean value concentration limitations. All other effluent limitations remain in full effect.

(2) Beginning July 1, 2010 and continuing all year long through construction completion of the West Battery FSTs the following effluent limitations shall have a monitoring requirement only -
 (A) Daily Maximum effluent TSS limit
 (B) 6 consecutive hours of effluent TSS limit

(3) The interim limit for the 7 day arithmetic mean for TSS shall be effective all year.

**APPENDIX H - Bowery Bay WWTP - SPDES No. NY0026158
 INTERIM EFFLUENT SEASONAL LIMITS AND MONITORING WHEN THREE TANKS ARE OUT OF SERVICE**

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[] All Year [x] Seasonal from	East River	November 1, 2010 - April 30, 2011; November 1, 2011 - April 30, 2012; (when three aeration tanks are out of service)	April 30, 2012

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				Foot Notes
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Influent	Effluent	
Solids, Suspended	Monthly Average Minimum (%) Percent Removal	80%	Percent Removal	N/A	N/A	1/Day	24 Hour Composite	X	X	(1),(2)

FOOTNOTES:

(1) Effluent shall not exceed 15 % and 20 % of influent values for CBOD₅ & TSS respectively. During periods of wet weather which causes plant flows over the permitted flow for a calendar day, the CBOD₅ and TSS influent and effluent results for that day shall not be used to calculate 30 day arithmetic mean percent removal limitations. However, all concentrations shall be used in calculation of the arithmetic mean value concentration limitations. All other effluent limitations remain in full effect.

(2) Beginning July 1, 2010 and continuing all year long through the completion of aeration tank work the following effluent limitations shall have a monitoring requirement only -

- (A) Daily Maximum effluent TSS limit
- (B) 6 consecutive hours of effluent TSS limit

APPENDIX I

TO BE PLACED IN THE SECTION ENTITLED “SCHEDULES OF COMPLIANCE” IN THE EXISTING SPDES PERMITS FOR THE JAMAICA BAY WPCPS, AS A NEW SUB-SECTION

BNR Upgrades

Action Code	Outfall Number(s)	Compliance Action	Due Date
	All	The Permittee shall commence operation of Level 2 BNR at the Jamaica WPCP [1, 5]	December 31, 2014
	All	The Permittee shall commence operation of Level 3 BNR at the 26 th Ward WPCP [2, 5]	December 31, 2015
	All	The Permittee shall complete construction of Level 1 BNR at the Rockaway WPCP [3, 4]	December 31, 2019
	All	The Permittee shall complete construction of Level 1 BNR at the Coney Island WPCP [3, 4]	December 31, 2020

[1] Level 2 BNR is defined to include, at minimum, in addition to the elements of Level 1: (1) upgrading the process air capacity based on the existing WPCP’s footprint; (2) upgrading the return activated sewage (“RAS”) system based on the existing WPCP’s footprint; (3) multiple lines of defense for froth control; and (4) Pass D wet weather controls in aeration tanks.

[2] Level 3 BNR is defined to include, at minimum, in addition to the elements of Level 2 BNR: (1) chemical addition including all appurtenances necessary to commence operation which will include construction of both supplemental carbon and alkalinity facilities; and (2) permanent separate sidestream centrate treatment.

[3] Level 1BNR is defined to include, at minimum: (1) construction of baffle walls in the aeration tanks; (2) installation of mixers in the anoxic zones; and (3) installation of froth control system(s).

[4] As used in the schedule of compliance for BNR upgrades, “complete construction” means that the process-related equipment and facilities are constructed in accordance with the approved plans and specifications, and are placed in operation to meet the applicable interim effluent limits. (Submission and approval of plans and specifications are governed by the terms of a consent judgment in *New York City Department of Environmental Protection, Christopher O. Ward, as Commissioner of the New York City Department of Environmental Protection, and the City of New York, Petitioners v. Erin M. Crotty, as Commissioner of the New York State Department of Environmental Conservation, and the New York State Department of Environmental Conservation*, Respondents, Index No. 04-402174 (Sup. Ct. N.Y.Cty.), entered **XXXXX**, 2010 (the “First Amended Nitrogen Consent Judgment”).

[5] As used in this schedule of compliance for BNR Upgrades, “commence operation” means that all the necessary treatment systems are placed in operation and being operated in accordance

with the DEC approved Preliminary BNR O&M Plans. The term does not mean “construction completion” as defined above. (Submission and approval of Preliminary O&M Plans are governed by the First Amended Nitrogen Consent Judgment.)

TO BE PLACED IN LIEU OF FN #1 IN THE SECTION ENTITLED “Jamaica Bay WPCPs (Jamaica, Rockaway, Coney Island, 26th Ward) No-Net Increase Effluent Limits and Monitoring for Nitrogen” IN THE EXISTING SPDES PERMITS FOR THE JAMAICA BAY WPCPS

1. Interim nitrogen effluent limits and a compliance schedule to meet the final nitrogen effluent limits for the Jamaica Bay WPCPs¹ are included in *New York City Department of Environmental Protection, Christopher O. Ward, as Commissioner of the New York City Department of Environmental Protection, and the City of New York, Petitioners v. Erin M. Crotty, as Commissioner of the New York State Department of Environmental Conservation, and the New York State Department of Environmental Conservation*, Respondents, Index No. 04-402174 (Sup. Ct. N.Y. Cty.), entered **XXXXXX**, 2010 (the “First Amended Nitrogen Consent Judgment”), and are incorporated herein. The interim nitrogen effluent limits in the First Amended Nitrogen Consent Judgment and this SPDES Permit (“Performance-Based Limits”) are based on the actual future performance of the four Jamaica WPCPs, as described below in Paragraph 2. The interim nitrogen effluent limits are:

Table: Total Nitrogen – Interim Effluent Limits

Effective Date	Jamaica Bay Limits- These interim limits are step-down aggregate limits for all four Jamaica Bay WPCPs, expressed as a 12 month rolling average.
EDPM	41,600 lbs/day
January 1, 2012 (19 months after commencement of operation of the Level 2 upgrade at the 26th Ward WPCP on June 1, 2010).	Performance-Based Limit.
19 months after commencement of operation of the interim chemical addition facility for AT#3 at the 26 th Ward WPCP. ²	Performance-Based Limit. ³
19 months after the last	Performance-Based Limit. ⁴

¹ The four WPCPs discharging to Jamaica Bay are the Rockaway, Coney Island, Jamaica and 26th Ward WPCPs.

² The requirement to commence operation of the interim chemical addition facility is set forth in the First Amended Nitrogen Consent Judgment.

³ For purposes of applying the methodology in Exhibit A, results for the days when equipment that is critical for operation of the interim chemical addition facility for AT#3 is out of service, or when AT#1, AT#2 or AT#3 are out of service, shall not be included in the calculation of the 12-month rolling average for that month.

⁴ Applying the methodology in Exhibit A, performance data will be adjusted to incorporate any projected

Effective Date	Jamaica Bay Limits- These interim limits are step-down aggregate limits for all four Jamaica Bay WPCPs, expressed as a 12 month rolling average.
of commencement of operation of: (a) the Level 3 BNR upgrades at the 26 th Ward WPCP, or (b) the Level 2 BNR upgrade at the Jamaica WPCP.	
19 months after the last of: (a) construction completion of the Level 1 BNR upgrade at Coney Island WPCP; or (b) construction completion of the Level 1 BNR upgrade at the Rockaway WPCP.	Performance-Based Limit. ⁵

2. Each Performance-Based Limit is a combined interim nitrogen effluent limit for all four WPCPs discharging to Jamaica Bay, expressed as a 12-month rolling average, and calculated except as otherwise noted in notes c, d, and e of this table, in accordance with the protocol set forth in Appendix D of the First Amended Nitrogen Consent Judgment and Exhibit A to this permit. Upon calculation by DEC of the numeric value of each Performance-Based Limit, DEC shall provide written notice to the Permittee of the results of such calculation. Such writing from DEC shall include a replacement permit page with the calculated Performance-Based Limit. This replacement page shall be automatically deemed as substituted into the permit in place of the existing page.

3. To assist DEC in calculating the Performance-Based Limits, 30 days prior to the calculation of each Performance-Based Limit, the Permittee will provide data to DEC identifying the volume of sludge and estimated total nitrogen concentration, and the volume of centrate and estimated total nitrogen concentration, generated by each of the four WPCPs discharging to Jamaica Bay. For the purposes of applying the methodology in Exhibit A to this Permit, performance data will be adjusted by subtracting the estimated increase in nitrogen discharges attributable to any volume of sludge and/or centrate that was treated by one of the four Jamaica Bay WPCPs, but generated

performance impacts due to ongoing or planned Level 1 BNR construction at the Coney Island and Rockaway WPCPs, if necessary.

⁵ To calculate the Performance-Based Limit, the 95th percentile value calculated pursuant to the methodology in Exhibit A shall be adjusted to account for the projected change in nitrogen discharges associated with projected population growth in each of the four Jamaica Bay drainage areas. These projected discharges will be calculated using the estimated populations five years after the completion of the performance evaluation period. The projected increases in the influent nitrogen loadings to each WPCP resulting from those population increases will be multiplied by the nitrogen removal efficiencies of each WPCP during the performance period to determine the anticipated increases in effluent nitrogen loadings. These projected effluent nitrogen increases due to projected population growth will be added by DEC to the interim effluent nitrogen limit calculated pursuant to the methodology in Exhibit A, to establish a Performance-Based Limit. DEP will provide the population growth data and removal efficiencies to DEC within 30 days of the end of performance period.

anywhere other than one of those four WPCPs.

TO BE INSERTED AS “EXHIBIT A” TO THE EXISTING SPDES PERMITS FOR THE JAMAICA BAY WPCPs

Method for Calculating Performance-Based Combined Nitrogen Interim Effluent Limits for Jamaica Bay WPCPs

1. Upon commencement of operation of Level 2 BNR at the 26th Ward WPCP; commencement of operation of the interim chemical addition facility for AT#3 at the 26th Ward WPCP; commencement of operation of both Level 3 BNR at the 26th Ward WPCP and level 2 BNR at the Jamaica WPCP; and certification of construction completion of both level 1 BNR at the Rockaway and Coney Island WPCPs, respectively, the Permittee shall begin a 6-month startup operational period. After each such 6-month operational period, the Permittee shall undertake a 12-month performance evaluation to establish new interim nitrogen step-down limits.

2. The Permittee shall submit the performance data from the performance evaluation period to DEC within 30 days of the end of the 12-month performance period. DEC shall calculate Performance-Based Limits using the actual monthly aggregate total nitrogen loadings from the four Permittee facilities that discharge into the Jamaica Bay WPCPs, consistent with TOG 1.3.3. In calculating the Performance-Based Limits, DEC shall utilize the 95th percentile of the 12 data points collected during the period.¹ The 12 monthly data points shall represent each of the twelve months during the performance period.

3. The Permittee shall make best efforts in operating the WPCPs during the 6 month Operational and 12 month Performance Evaluation Periods (and while interim limits are in place).

4. DEC shall use its best professional judgment to assure that loading anomalies, due to the operation of the Jamaica dewatering facility or other loading variations, are not calculated into the Performance-Based Limits.

¹ The factors set forth in notes c, d, and e of Footnote 1 of the section of this permit entitled “Jamaica Bay WPCPs (Jamaica, Rockaway, Coney Island, 26th Ward) No-Net Increase Effluent Limits and Monitoring for Nitrogen” shall apply to this calculation.