NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTEWATER TREATMENT
DEC Case # CO2 - 20000107-8 as modified by DEC Case # CO2-2007-0101-1

Combined Sewer Overflow Order on Consent

Quarterly Progress Report – Fourth Quarter 2010

January 2011

City of New York
Department of Environmental Protection
Bureau of Engineering Design & Construction

CSO Order on Consent
DEC Case # CO2 - 20000107-8 as modified by DEC Case # CO2-2007-0101-1

QUARTERLY PROGRESS REPORT

FOURTH QUARTER 2010
(**October 1 – December 31**)

January 30, 2010

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1.0 Executive Summary

The Combined Sewer Overflow "CSO" Order on Consent, DEC Case # CO2-20070101-1 (the "Order"); was entered into by the City of New York ("City") and the New York State Department of Environmental Conservation ("DEC") on January 14, 2005 and modified on April 14, 2008 and on September 3, 2009. Pursuant to Section IV, Paragraph A of the Order, the City shall submit quarterly status reports to DEC ("Quarterly Reports"). The Quarterly Reports shall describe the actions that have been taken toward achieving compliance with this Order during the past three-month period. This Quarterly Report sets forth the status of and progress by the New York City Department of Environmental Protection ("DEP") in complying with the milestones set forth in the Order during the period from **October 1, 2010 to December 31, 2010.**

Critical Events This Quarter:

The following critical events occurred this quarter:

1) DEP Certified Construction Completion of the Outer Harbor, Inner Harbor, and Jamaica Tributaries Regulator Improvements – Automation on December 30, 2010. A copy of the letter is included in Appendix A.

2) DEP Certified Final Design Completion of the Tallman Island Wet Weather Maximization on December 29, 2010. Justification for changes in the scope of work and plans was submitted by DEP to DEC on December 8, 2010. Plans and specifications were submitted with the certification on December 29, 2010. A copy of the letter is included in Appendix A.

3) DEC accepted the May 3, 2010 Certificate of Construction Completion for 26th Ward Drainage Area Sewer Cleaning and Evaluation on December 13, 2010. The DEC final inspection occurred on October 5, 2010.

4) DEC accepted the September 30, 2010 Notice to Proceed to Construction for the Jamaica Tributaries Destratification Facility on October 13, 2010.

5) On October 1, 2010 DEC issued a Notice of Violation on the milestone for the 26th Ward Wet Weather Expansion, Final Design, Submit Form 2A SPDES Application. DEP responded to the NOV on October 8, 2010. On December 30, 2010 DEP submitted a feasibility plan for the wet weather expansion in accordance with the commitment made in the May 5, 2010 "omni" modification request letter. DEP proposed replacing the wet weather expansion with a combination of high level sewer separation and green infrastructure. A technical memo that evaluated these alternatives was provided to DEC on December 30, 2010.

6) On November 1, 2010, DEP requested an extension on submission of all dredging permit applications for Gowanus Canal to one year after the completion of EPA's Superfund Remedial Investigation / Feasibility Study and Record of Decision. DEC denied the request in a November 10, 2010 letter. Based on discussions with DEC on November 30, 2010 DEP resubmitted the request on December 1, 2010 to extend the milestone to one year after the EPA Remedial Investigation. DEC approved the modification request on December 15, 2010.

7) On December 14, 2010, DEP submitted a follow-up to DEC's December 7, 2010 letter regarding the Newtown Creek Modification Request submitted as part of the May 5, 2010 "omni" letter. DEP stated its intention to proceed with enhanced aeration in East Branch, Dutch Kills and portions of Newtown Creek.

8) DEP submitted the Hutchinson River Sampling Plan to DEC on October 15, 2010 per agreement during the September 14, 2010 Technical Meeting. DEC provided comments on November 19, 2010 and DEP responded in a letter dated December 20, 2010.

9) On November 18, 2010 DEC provided comments on the Hutchinson River LTCP Scoping Document submitted by DEP on September 30, 2010. A response is being prepared.

10) An application for Variance of WQBEL for the Paerdegat Basin CSO Retention Facility was submitted by DEP to DEC on December 30, 2010 as requested by DEC.

11) DEP submitted two (2) Waterbody/Watershed Facility Plan Reports. The updated Westchester Creek WWFP was submitted on November 30, 2010 per DEC's January 20, 2010 letter. The Flushing Bay WWFP was submitted on December 30, 2010 per DEC's April 8, 2010 letter.

12) DEP submitted three (3) extension requests for LTCP milestone dates. On November 29, 2010, DEP requested that the milestone date for the Bronx River LTCP be extended to June 30, 2014. On December 2, 2010, DEP requested that the milestone date for the Coney Island Creek LTCP also be extended to June 30, 2014. For the Gowanus Canal LTCP, DEP submitted a request on December 2, 2010 to extend the LTCP date to November 30, 2015. These submittals were made in accordance with discussions between DEC and DEP.

13) DEP provided the following information as requested by DEC: a CSO Consent Order Organizational Chart (October 29, 2010); a list of items required for operation of the Paerdegat Basin CSO Facility (November 5, 2010); additional technical information regarding the flooding at the Old Douglaston Pump Station which is associated with the Alley Creek CSO Facility (November 22, 2010); and responses to DEC's questions from the December 10, 2010 teleconference on Flushing Bay (December 23, 2010).

Major Actions This Quarter:

DEP continued to make progress in the planning, design and construction of its CSO facilities during this quarter, as documented in this report. As stipulated by the Order, DEP and DEC held a Quarterly Progress Meeting on **December 2, 2010 at the 26th Ward WWTP** to discuss issues related to the Order and to review milestones met during the last quarter.

Table 1 presents the milestones that occurred this quarter. For each milestone listed in Table 1 below, either met or postponed, written notification was submitted by DEP to DEC. Table 2 presents milestones from the reporting quarter that are under consideration for potential modification.

Major Actions Next Quarter:

Table 3 shows milestones to be met next quarter. The following major actions are expected to occur between **January 2011 and March 2011**:

Hold the next Quarterly Progress Meeting between DEC and DEP at DEP offices in Kingston on February 28, 2010.

Table 1 – Milestones This Quarter (Oct 2010 - Dec 2010)

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	MILESTONE DATE	ACTION REQUIRED	STATUS
Outer Harbor	Regulator Automation	Dec 2010	Construction Completion	Certified 12/29/10
Inner Harbor	Regulator Automation	Dec 2010	Construction Completion	Certified 12/29/10
Jamaica Tributaries	Regulator Automation	Dec 2010	Construction Completion	Certified 12/29/10
Inner Harbor	Dredging Gowanus Canal	Dec 2010	Submittal of All Permit Applications	Mod Request Submitted, Accepted
Flushing Bay	Tallman Island WWTP	Dec 2010	Final Design Completion including CPM analysis	Certified 12/29/10
Newtown Creek	CSO Storage Facility	Nov 2010	Initiate Final Design	Mod Request Submitted

Table 2 – Milestones this Quarter to be Considered for Potential Modification

LOCATION / PROJECT AREA	ITEM DESCRIPTION	MILESTONE DATE	ACTION REQUIRED	REASON FOR MODIFICATION
Inner Harbor	Dredging of Gowanus Canal	Dec 2010	Submittal of All Permit Applications	Gowanus Canal added to Superfund List
Newtown Creek	CSO Storage Facility	Nov 2010	Initiate Final Design	Alternative Approach Developed

Table 3 – Milestones Next Quarter (Jan 2011-Mar 2011)

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	MILESTONE DATE	ACTION REQUIRED	STATUS
Bronx River	Drainage Basin Specific LTCP	Jan 2011	Submittal of Bronx River LTCP	Modification Request submitted
Inner Harbor	Drainage Basin Specific LTCP	Jan 2011	Submittal of Gowanus Canal LTCP	Modification Request submitted
Coney Island Creek	Drainage Basin Specific LTCP	Jan 2011	Submittal of Coney Island Creek LTCP	Modification Request submitted

Table 4 – Milestones with Force Majeures and Modification Requests Outstanding

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	ACTION(S)	REASON FOR ACTION(S)	MILESTONE DATE	STATUS
Alley Creek	Drainage Basin Specific LTCP	Modification Request	LTCP process to be defined	Submittal Apr 2010	Modification Request submitted
Alley Creek	CSO Retention Facility	Force Majeure And Modification Request	Sewer condition; Job action by Electrical Union	Construction Completion Dec 2009**; Mod to Feb 2011 requested**	Notice of Force Majeure and Modification Request submitted; Construction in progress
Outer Harbor	**Regulator Automation**	**Modification Request**	**Force Majeure**	**Construction Completion Dec 2010**	**Certified 12/29/2010**
Inner Harbor	Flushing Tunnel Modernization	Force Majeure	Property access limitations	Construction Completion Dec 2014	Resolved; lost time being recovered
Inner Harbor	**Regulator Automation**	**Modification Request**	**Force Majeure**	**Construction Completion Dec 2010**	**Certified 12/29/2010**
Bronx River	**Drainage Basin Specific LTCP**	**Modification Request**	**LTCP process to be defined**	**Submittal Jan 2011**	**Modification Request submitted**
Coney Island	**Drainage Basin Specific LTCP**	**Modification Request**	**LTCP process to be defined**	**Submittal Jan 2011**	**Modification Request submitted**
Gowanus Canal	**Drainage Basin Specific LTCP**	**Modification Request**	**LTCP process to be defined**	**Submittal Jan 2011**	**Modification Request submitted**
Jamaica Tributaries	**Regulator Automation**	**Modification Request**	**Force Majeure**	**Construction Completion Dec 2010**	**Certified 12/29/2010**
Newtown Creek	Aeration Zone II Sewer Modifications Storage Facility	Modification Request	Cost-Effective Alternative	Jun 2010* Jun 2009* Nov 2010*	Modification Request submitted
Hutchinson River	CSO Storage Facility	Modification Request	Cost-Effective Alternative	Design Completion Jun 2010	Water quality sampling program under development
Jamaica Bay	26th Ward Wet Weather Expansion	Modification Request	Cost-Effective Alternative	Design Completion Jun 2010	Modification Request submitted 5/5/2010; **Follow-up submitted 12/30/2010**

*Next upcoming Milestone date for each item, i.e.: Final Design Completion for Aeration Zone II and Sewer Modifications; and Initiate Final Design for the Storage Facility.

2.0 Construction Contracts

The Order contains milestones and schedules governing the planning, design and construction of DEP's Citywide CSO Program. Numerous CSO related facilities will be constructed to reduce combined sewage discharges to the receiving waters surrounding the City. The table below provides a list of construction contracts, identified in Appendix A of the Order, necessary to fulfill the requirements of the Order. This table identifies, by percentage, the estimated amount of construction that has been completed.

Table 5 – Construction Contracts and their Status

WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	PROJECTED COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED[1]
Alley Creek	Outfall and Sewer System Improvements	Dec 2002	Dec 2006	Completed	100%	100%
	CSO Retention Facility	Dec 2006	Dec 2009[2]	Feb 2011	100%	**98%**
Outer Harbor	Regulator Improvements – Fixed Orifices	Feb 2006	Jul 2008	Completed	100%	100%
	Regulator Improvements – Automation	Nov 2007	Jun 2010[6]	**Completed**	100%	**100%**
	Port Richmond Throttling Facility	Jun 2006	Nov 2009 as modified	Completed	100%	100%
Inner Harbor	Regulator Improvements – Fixed Orifices	Feb 2003	Apr 2006	Completed	100%	100%
	Regulator Improvements – Automation	Nov 2007	Jun 2010[6]	**Completed**	100%	**100%**
	In-Line Storage	Aug 2007	Aug 2010	Completed	100%	100%
	Gowanus Flushing Tunnel Modernization	Feb 2010	Sep 2014	Sep 2014	**18%**	**20%**
	Gowanus Pump Station Reconstruction	Feb 2010	Sep 2014	Sep 2014	**18%**	**20%**
	Dredging of Gowanus Canal	TBD[3]	TBD[3]	TBD[3]	-	-
Paerdegat Basin	Influent Channel	Feb 1999	Feb 2002	Completed	100%	100%
	Foundations and Substructures	Jun 2002	Dec 2009	Completed	100%	100%[4]
	Structures and Equipment	Sep 2005	May 2011	Apr 2011	**93%**	**88%**
	Dredging of Paerdegat Basin	TBD[3]	TBD[3]	TBD[3]	-	-
Flushing Bay	Reroute and Construct Effluent Channel	Jun 1995	Jun 1996	Completed	100%	100%
	Relocate Ball fields	Apr 1995	Aug 1995	Completed	100%	100%
	Storage Tank	Jul 1997	Aug 2001	Completed	100%	100%
	Mechanical Structures	Mar 2002	Sep 2009	Completed	100%	100%
	Tide Gates	Dec 2000	Apr 2002	Completed	100%	100%

WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	PROJECTED COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED[1]
	Manual Sluice Gates	Feb 2004	Jun 2005	Completed	100%	100%
	Tallman Island WWTP Conveyance Improvements	Dec 2011	Jul 2015	Jul 2015	-	-
Jamaica Tributaries	Meadowmere & Warnerville DWO Abatement	Jun 2006	Jul 2009 as modified	Completed	100%	100%[4]
	Expansion of Wet Weather Capacity of Jamaica WWTP	Jun 2012	Jun 2015	TBD[5]	-	-
	Destratification Facility	Sep 2010	Mar 2012	**Mar 2012**	**17%**	**1%**
	Regulator Automation	Nov 2007	Jun 2010[6]	**Completed**	100%	**100%**
Coney Island Creek	Avenue V Pumping Station Upgrade	Nov 2005	Apr 2011	**April 2012**	**94%**	**60%**
	Avenue V Force Main	Jul 2007	Jun 2012	**July 2011**	**69%**	**97%**
Newtown Creek	Aeration Zone I	Dec 2005	Dec 2008	Completed	100%	100%
	Aeration Zone II	Jun 2011	Jun 2014	TBD[5]	-	-
	Relief Sewer / Regulator Modification	Jun 2010	Jun 2014	TBD[5]	-	-
	Throttling Facility	Jun 2009	Dec 2012	Dec 2012	**43%**	90%
	CSO Storage Facility	Dec 2015	Dec 2022	TBD[5]	-	-
Westchester Creek	Phase I (Influent Sewers)	Jun 2011	Jun 2015	TBD[5]	-	-
	CSO Storage Facility	Dec 2015	Dec 2022	TBD[5]	-	-
Bronx River	Floatables Control	Jun 2009	Jun 2012	Jun 2012	**50%**	**28%**
Hutchinson River	Phase I of the Storage Facility	Jun 2011	Jun 2015	TBD[5]	-	-
	Future Phases	Dec 2016	Dec 2023	TBD[5]	-	-
Jamaica Bay	Spring Creek AWPCP Upgrade	Mar 2003	Apr 2007	Completed	100%	100%
	26th Ward Drainage Area Sewer Cleaning and Evaluation	Jun 2008	Jun 2010	Completed	100%	100%
	Hendrix Creek Dredging	Feb 2010	Feb 2012	Jun 2011	**42%**	**9%**
	26th Ward Wet Weather Expansion	Jun 2011	Dec 2015	TBD[5]	-	-
	Rockaway WWTP Conveyance Improvements		Dec 2017	Dec 2017	-	-

Notes:
(1) Percentage Construction Completion is tracked based on cost incurred.
(2) A modification to the completion date from 12/31/2009 to 11/30/2010 was submitted to DEC on 10/30/2009.
(3) Dredging NTP 3 years from effective date of permit; completion within 5 years of EDP.
(4) CSO Consent Order elements completed and a Certification of Construction Completion has been submitted.
(5) Item to be replaced or enhanced through Modification Request Process.
(6) A request for modification to the completion date from 06/30/2010 to 12/31/2010 was submitted to DEC on 04/30/2010.

3.0 Detailed Description of Work Performed

3.1. Alley Creek CSO

The Alley Creek CSO Facilities Planning area consists of the drainage area of CSO Outfall TI-008, which discharges into Alley Creek at a location just south of Northern Boulevard on the west bank of Alley Creek. Little Neck Bay and Alley Creek receive discharges from 31 stormwater outfalls, as well as CSO Outfall TI-008; however, discharges from CSO Outfall TI-008 were determined to be the primary cause of water quality degradation within Alley Creek. CSO Outfall TI-008 serves a drainage area of approximately 1,975 acres within the Tallman Island Wastewater Treatment Plant (WWTP) service area in the Borough of Queens. The Alley Creek Drainage Area Improvements/CSO Abatement Facilities Project, which has been designated as Phase I of the comprehensive Alley Creek CSO Abatement Facilities Plan, is being constructed in two stages:

1. Alley Creek Drainage Area Improvements (Phase I, Stage 1, Contract ER-AC1) and,
2. Alley Creek CSO Abatement Facilities (Phase I, Stage 2, Contract ER-AC2)

This section reports on the progress of Phase I, Stages 1 and 2 of the Alley Creek CSO Abatement Facilities Plan.

Phase I, Stage 1 (Contract ER-AC1) includes the construction of additional water mains, stormwater sewers and combined sewers, a double-barrel outfall sewer, an outfall structure, and a 5 million gallon CSO storage facility to substantially reduce street flooding and sewer surcharging; and to abate CSO discharges into Alley Creek within the CSO Outfall TI-008 drainage area.

Phase I, Stage 2 (Contract ER-AC2) includes activation of the 5 MG CSO storage facility, upgrading the Old Douglaston Pumping Station to enhance the station's reliability to pump the captured combined sewage to the interceptor system for conveyance to the Tallman Island WWTP for treatment, rehabilitation of the CSO Outfall TI-008 structure, and restoration of a 1.51-acre area surrounding CSO Outfall TI-008 to include restoration/creation of wetlands and replacement of invasive vegetation with indigenous plantings as mitigation for the area disturbed as a result of rehabilitation of the outfall structure.

Work Performed During This Quarter

Construction

- Alley Creek CSO Abatement Facilities – Phase I, Stage 2, Contract ER-AC2
  - Activities continued for Contract ER-AC2. The principal work included the testing of the Air Treatment Unit, final site restoration, training of DEP operations personnel, programming of the Instrumentation and Control equipment at the Old Douglaston Pumping Station (ODPS) and at the Tallman Island WWTP, and Operations walk-thru for acceptance of the pump station. Construction of Contract ER-AC2 is currently **98** percent complete.

- The Contractor reactivated the Interim Pumping Station (IPS) in July 2010 after a flooding event in the permanent station (the ODPS). Operation of the permanent station was discontinued after completion of the startup testing due to ongoing flooding concerns during severe rainfall events. The IPS will continue to be used until ventilation ductwork and gas monitoring sensors in the permanent station is relocated.
- **Construction progress meetings were held on October 1, November 5 and December 10, 2010 at the Engineer's Field Office for Contract ER-AC2.**
- **Issues and Tasks meetings were held on October 22, November 19, and December 17, 2010 at the Engineer's Field Office for Contract ER-AC2.**

Missed/Modified Milestones

- The DEP submitted a request to the DEC on October 30, 2009 for a modification to the existing Milestone Date of December 31, 2009 to a new proposed Milestone Date of November 30, 2010. The basis of this request, the unexpectedly deteriorated condition of the influent sewer to the Old Douglaston Pumping Station, was reported to DEC in a Force Majeure letter dated November 20, 2007 and updated on August 20, 2008, February 3, 2009**,** and July 1, 2010.
- DEP submitted a Notice of Force Majeure for the Alley Creek CSO Retention Facility on February 8, 2010 related to a job action by Electrical Union Local 3 from January 20 through 22, 2010. DEC responded to DEP's Force Majeure Notice on April 9, 2010, requesting additional information. DEP provided supplemental information as requested on April 30, 2010. DEP issued a letter to DEC defining items required for certification of Construction Completion along with a CPM schedule on July 1, 2010.
- Due to the flooding condition, DEP issued a letter to the DEC dated September 30, 2010 requesting that the Consent Order milestone date be extended to February 28, 2011. **On October 18, 2010, DEC requested additional technical information on the September 30, 2010 modification request. DEP responded to the DEC request on November 22, 2010.**

Anticipated Activities for Next Quarter

Construction

- Alley Creek CSO Abatement Facilities – Phase I, Stage 2, Contract ER-AC2
  - Construction under Contract ER-AC2 will continue, primarily focusing on **remaining change order work required for** activating the Old Douglaston Pump Station and the CSO Facility. Other activities will include start up, adjusting instrumentation and controls settings along with developing Standard Operating Procedures.
  - Monthly construction progress and Issues and Tasks meetings will be held on the first and fourth Friday of the month respectively at the Engineer's field office.

- Change orders to Contract ER-AC2 will continue to be prepared and processed. Shop drawings, RFIs, etc. will be submitted and responses provided.

Table 6 – Alley Creek CSO Projects

	Phase I, Stage 1	*Phase I, Stage 2*
Plan Elements:	Alley Creek Drainage Area Improvements	Alley Creek CSO Abatement Facilities
Location:	46th Avenue, 53rd Avenue, 56th Avenue, Bell Boulevard, Luke Place, 214th Street, 215th Street, 216th Street, 217th Street, Springfield Boulevard, Cloverdale Boulevard, Cross Island Parkway, Northern Boulevard and Alley Park in Bayside, Queens	Northern Boulevard and Alley Park in Bayside, Queens
Actions:	Construction of additional water mains, stormwater and combined sewers, catch basins, outfall sewer and outfall structure to effect improved drainage in areas upstream of CSO Outfall TI-008 in Bayside, Queens; construction of 5 MG CSO storage facility for CSO abatement within Alley Creek	Design and construction of modifications to the Old Douglaston Pumping Station including air treatment facilities to treat air exhausted from the CSO storage facility and the pumping station; design and construction of hydraulic control structures and facilities to activate the 5 MG CSO storage facility constructed under Phase I, Stage 1; rehabilitation of the CSO Outfall TI-008 structure; restoration of a 2.5-acres of wetland/upland area surrounding CSO Outfall TI-008. The wetland/upland restoration work has been transferred to Contract ER-AC3
Cost:	$98,850,488	**$34,982,220**
Status:	Construction completed.	**98%** complete with construction activities Notice of Force Majeure submitted November 2007. Modification request submitted on October 2009 **and September 2010**. Reactivation of the Interim Pumping Station (IPS) in July 2010 due to potential flooding issues.

3.2. Outer Harbor CSO

The Outer Harbor CSO Facility Planning area consists of the drainage areas of the Port Richmond, Oakwood Beach, Owls Head and Coney Island (separately sewered area) Wastewater Treatment Plants (WWTPs) and their associated sewers and pumping stations. The receiving waters of the study area include the New York limits of the Raritan Bay, Arthur Kill and Kill Van Kull, Upper New York Bay waters to the boundary of the Inner Harbor CSO Project, the Narrows, Gravesend Bay, Lower New York Bay, Richmond Creek and Lemon Creek. This section reports on the progress for Phase I – Regulator Improvements (Fixed Orifices) and Phase II – Throttling Facility. In addition, the automation of key regulators will be accomplished under the Citywide SCADA Project (Contract REG-026) that addresses the milestones for regulator automation under Outer Harbor, Inner Harbor, and Jamaica Tributaries.

Phase I will provide improvements to 32 regulators in the Outer Harbor study area. Phase II entails the construction of a throttling facility in the Port Richmond east interceptor, which will provide the ability to store up to 5 MG upstream of the Port Richmond WWTP. The Citywide SCADA Project will automate regulators in Outer Harbor.

Work Performed During This Quarter

Construction

- Regulator Automation
  - **SCADA System Historian Workshop occurred on October 20, 2010. SCADA System Training for DEP Collections Operators occurred on December 1 and 2, 2010. A technical meeting occurred on October 20, 2010. Monthly Construction Progress Meetings occurred on October 21 and December 16, 2010.**
  - **Construction activities were completed during this quarter. The Contractor completed site and system-wide acceptance testing of SCADA Panel regulator sites. The Contractor completed DEP Operators training on the SCADA System. The Certification of Construction Completion was submitted to DEC on December 30, 2010.**
- Phase I Regulator Improvements
  - Construction complete. The certification of construction completion was submitted to DEC and a final inspection was completed by DEC. In a letter dated June 30, 2008, DEC certified compliance with the construction completion milestone
- Phase II Throttling Facility
  - DEP certified Construction Completion of the Port Richmond throttling facility on November 20, 2009 in compliance with the modified milestone.

Missed/Modified Milestones

- DEP submitted a Request for Modification and Notice of Force Majeure for the Construction Completion Milestones associated with the Regulator Improvements – Automation to DEC on April 30, 2010. The basis for this request was due to a number of factors, including delays in scheduling work by the telephone company after extreme weather, unanticipated field conditions encountered by the contractor, limited site access to perform work, change in equipment to meet classified conditions, and the change order registration. The new date requested for the Construction Completion milestone was December 31, 2010. DEC acknowledged receipt of the Force Majeure Notice on June 21, 2010 and directed DEP to provide more information. DEP provided additional information on July 12, 2010.

Anticipated Activities for Next Quarter

Construction

- Regulator Automation
  - **Punch list items and project close-out.**
- Phase II Throttling Facility
  - Project close-out.

Table 7 – Outer Harbor CSO Projects

	Phase I	*Phase II*	*Citywide SCADA*
Plan Elements:	Regulator Improvements – Fixed Orifices	Throttling Facility	Regulator Improvements – Automation
Location:	32 regulator sites throughout Brooklyn and Staten Island	Port Richmond WWTP	Regulator sites throughout Brooklyn and Staten Island
Actions:	Conversion to manually operated sluice gates, replacement of stop plank guides, manhole steps, standardization of manhole cover sizes	Installation of throttling facility and sluice gate in Port Richmond east interceptor sewer	Conversion to automated regulators
Construction Cost:	$4,390,100	$ 5,704,481.02	$15,721,000*
Status:	Construction Complete	Construction Complete	**Construction Complete**
Other Issues:	-	DEC granted Modification Request; revised Construction Completion date November 20, 2009 was met.	**Modification Request outstanding; requested Construction Completion date of December 31, 2010 was met.**

*Construction cost represents original contract amount for REG-026

3.3. Inner Harbor CSO

The Inner Harbor CSO Facility Planning area consists of the drainage areas of the North River, Newtown Creek, and Red Hook Wastewater Treatment Plants (WWTPs) and their associated sewers and pumping stations. The receiving waters of the study area include the Lower East River, Hudson River, Upper New York Bay, and Gowanus Canal and Bay. This section reports on the progress of Phase I (Regulator Improvements), Phase II (In-Line Storage), and the automation of key regulators to be accomplished under the Citywide SCADA Project. In addition, the proposed elements of the August 2008 Gowanus Canal Waterbody / Watershed Facility Plan (as amended April 2009) became enforceable under the CSO Consent Order by reference upon approval by DEC, which was granted on July 14, 2009.

Phase I provides improvements to 72 regulators in the Inner Harbor study area. Phase II provides for in-line storage at two inflatable dam locations in the study area. The Citywide SCADA Project will automate regulators in Inner Harbor.

The key components include the rehabilitation of the Gowanus Canal Flushing Tunnel, reconstruction of the Gowanus Pumping Station, floatables controls at major CSOs, and environmental dredging at the head end of Gowanus Canal. Rehabilitating the Flushing Tunnel will eliminate shutdowns during low tide and many maintenance operations with the installation of a new pumping system with redundant, interchangeable pumps. The Gowanus Pumping Station reconstruction includes major improvements to operational reliability and the replacement of the force main to convey pumped flow directly to the Columbia Street Interceptor via a new force main to be constructed within the Flushing Tunnel. CSO screens will be retrofitted to RH-034 at the upstream side of the Gowanus Pumping Station. Environmental dredging in the upper 750 feet of the Gowanus Canal to a final water depth of 3.0 feet below mean lower low water will reduce exposure of CSO sediment mounds, thereby improving aesthetic conditions.

Gowanus Canal was added to the US EPA Superfund National Priorities List (NPL) on March 2, 2010. According to EPA, placing the Gowanus Canal on the list allows the Agency to further investigate contamination at the site and develop an approach to address the contamination.

Work Performed During This Quarter

Design

- In-line Storage
  - DEP submitted a Notice of Force Majeure in December 2007 to DEC due to unanticipated subsurface conditions and discontinuation of equipment by the specified dam manufacturer. DEP has not yet determined the impact of these events on compliance with the construction completion milestone date. An update on this Force Majeure event was submitted in a letter dated August 29, 2008.
  - **Instrument calibration for the inflatable dam system**
  - **Investigation of power supply problems developed from the utility**

- **Made adjustment to the Plan of Operation as a result of instrument calibration**

- Gowanus Canal
  - The Gowanus Canal Waterbody / Watershed Facility Plan and the Gowanus Canal Facilities Upgrade Plans and Specifications were submitted to DEC in August 2008 and approved on July 14, 2009 as amended.
  - An engineer was selected to perform design services for City-wide dredging. Notice-to-Proceed was issued September 20, 2010
  - Commenced work on the Work Plan and HASP for the Gowanus CSO Dredging Permit.

Construction

- Regulator Automation
  - **Certification of Construction Completion for the Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation was submitted 12/30/10. Refer to section 3.2 for details**
- Regulator Improvements
  - Work is complete on the construction of Phase I, which was broken up into two contracts: Brooklyn Regulator Improvements (32 regulators) and Manhattan Regulator Improvements (40 regulators). The certification of construction completion was submitted to DEC on January 24, 2006 and the final inspection was completed by DEC. In a letter dated March 20, 2006, DEC certified compliance with the construction completion milestone.
- In-line Storage
  - **Post-testing and performance of the inflatable dams continues; operation of dams under evaluation.**
  - **Contractor initiated punch list item work.**
- Gowanus Canal – Rehabilitation of Flushing Tunnel and Reconstruction of Gowanus Pump Station
  - A Notice to Proceed to Construction (NTP) was issued to the G contractor for the Gowanus Facilities Upgrades on September 14, 2009. DEP certified compliance with the NTP milestone on October 2, 2009 in a letter to DEC. The milestone date for the NTP in the Order is February 2010.

Missed/Modified Milestones

- Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for missed or modified milestones related to this project.
- **Construction continued during this quarter. The interim oxygen transfer system continued to remain in operation. The flushing tunnel continues to be dewatered.**

Jet grouting for the clean out chamber, exit chamber and dissipation chamber was completed and excavation at all three locations commenced.

- **The G and E contractors installed and tested the interim wasterwater pumps. The G contractor is operating the interim wastewater pump system and has taken over the plant operations from the DEP.**
- **The G contractor started to mobilize his jet grouting operations to the Gowanus Pump Station.**
- **The G contractor has performed his asbestos and PCB abatement work. The G, E, H and P contractors have commenced selective demolition on Gowanus Pump Station site in preparation for the demolition of the Service building and the pump building.**

Anticipated Activities for Next Quarter

Design

- In-Line Storage
  - **Coordinate the monitoring of the dam with the Citywide SCADA project manager.**

Construction

- Regulator Automation
  - **Certification of Construction Completion for the Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation was submitted 12/30/10. Refer to section 3.2 for details**
- In-line Storage
  - Certify construction completion of In-Line Storage in August 2010 in compliance with the CSO Consent Order.
  - **Preparation of As-Built drawings and final record documents.**
  - **Continue Start-up activities.**
  - **Post-test evaluation of inflatable dam systems will be ongoing.**
- Gowanus Canal – Rehabilitation of Flushing Tunnel and Reconstruction of Gowanus Pump Station
  - **Continue with the operation of the Oxygen Transfer System and the Interim Wastewater Pump System.**
  - **Complete the excavation at the clean out, exit and dissipation chambers and start the construction of these chambers. Install the force main piping between the clean out and dissipation chambers.**
  - **Start the demolition of the service building.**

- **Start the force main work in the flushing tunnel by performing demolition of the exiting force main piping.**
- **Start the jet grout operation for the court yard chamber on the pump station site.**

Table 8 – Inner Harbor CSO Projects

	Phase I	*Phase II*	*Citywide SCADA*	***Gowanus Canal Pumping Station and Flushing Tunnel***	***Dredging***
Plan Elements:	Regulator Improvements – Fixed Orifices	In-Line Storage	Regulator Improvements – Automation	Rehabilitation of Pumping Station and Flushing Tunnel	Dredging Gowanus Canal Head End
Location:	72 regulator sites in Manhattan and Brooklyn	Upstream of regulators B-6 and R-20 in Brooklyn	Regulator sites in Manhattan and Brooklyn	Gowanus Pumping Station Property, Brooklyn	Gowanus Canal
Actions:	Conversion to fixed orifices	Installation of two inflatable dams in the combined sewer systems	Conversion to automated regulators	NTP Issued	Prepare and Submit Dredging Permit Application
Construction Cost:	$9,500,000	$15,836,084	Note 1	$136,437,568	TBD
Status:	Construction Complete	100% complete	Note 1	Under construction. **20%** complete	Design Contract procurement in progress initiated 9/20/2010
Other Issues:		Force Majeure submitted to DEC in December 2007	Note 1	Force Majeure submitted to DEC in February 2010 related to site access at Flushing Tunnel intake.	Modification Request anticipated due to Superfund listing

Note 1: Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for an update on the status of this project.

3.4. Paerdegat Basin CSO

The Paerdegat Basin CSO Retention Facility is located in southeastern Brooklyn, at the intersection of Flatlands and Ralph Avenues. The facility will receive combined sewer overflows from outfalls CI –004, CI-005, and CI-006, a drainage area of approximately 6,000 acres in the Coney Island WWTP service area. Once constructed, the facility will consist of a four (4) bay underground storage tank and operations buildings. The stored CSO will be pumped back to the Coney Island WWTP for treatment after each rain event. This section reports on the progress of Phase IA – Influent Channels, Phase II – Foundations and Substructures, and Phase III – Structures and Equipment.

Phase IA includes construction of a major portion of the influent channels and the relief weir. Phase II includes construction of the CSO tank and building foundations and dredging of the basin. Phase III entails construction of the aboveground structures including Pump Back Building, Odor Control Building, Screening Building and Collection Facilities Building; also completion of the influent channels and reconstruction of the outfalls, installation of all mechanical equipment and start-up of the CSO facility.

Work Performed During This Quarter

Planning

- Submitted to DEC and EFC the Paerdegat Basin Drainage Specific LTCP report in November 2005, in compliance with the milestone date in the CSO Consent Order. Transmitted a response to DEC comments and revised LTCP on June 30, 2006.
- DEC approved the Paerdegat Basin LTCP in a letter dated February 1, 2007.
- The Joint Application Permit to allow for dredging of CSO sediments at the head-end of Paerdegat Basin and to improve the navigational channel at the mouth of the basin was submitted in the 4th Quarter of 2008 in accordance with the approved LTCP. DEC Region 2 noticed the completed application in the February 17, 2010 Environmental Notice Bulletin (ENB). The public comment period closed on March 4, 2010, and DEC issued a permit on March 19, 2010. On April 9, 2010, DEC forwarded the dredging permit along with CSO Order milestone dates, and the initiation of final design milestone was incorrectly stated as June 19, 2010. DEC issued a correction letter on June 7, 2010 in which the date provided for this milestone was September 19, 2010. **The U.S. Army Corps of Engineers requested additional information to assist in their review of the Joint Application Permit on October 13, 2010 which was forwarded to the Corps on October 14, 2010. The permit application is still under review by the Corps.** The final design initiation milestone was certified complete September 20, 2010.
- The updated Form 2A SPDES Application and Wet Weather Operating Plan (WWOP) were submitted to DEC on May 21, 2010. **DEC provided comments on the NY-2A and WWOP on August 13, 2010, and the WWOP and NY-2A were resubmitted to DEC October 22, 2010.**

Design

- Design of Phase I A – Influent Channels, Phase II – Foundations and Substructures, and Phase III –Structures and Equipment is 100% complete
- Paerdegat Basin Environmental Dredging
  - **Work has commenced on the Design of Environmental dredging for Paerdegat Basin including data collection and development of the Basis of Design Report.**
  - DEC formally established milestones for Final Design and Construction Completion on April 9, 2010 based on the date of issuance of the DEC permit (March 19, 2010).
  - The USACE permit was not received as of the end of the **fourth quarter of 2010**.
  - An engineer was selected to perform design services for City-wide dredging. The initiation of final design was certified on September 20, 2010.

Construction

- Phase I A – Influent Channels
  - Construction completed in 2002.
- Phase II – Foundations and Substructures
  - Construction work had ceased at approximately 97% complete due to the default of the contractor on December 6, 2007 by the Department pursuant to Articles 48.1.3, 48.1.4, 48.1.9, 48.1.10, 48.1.11 and 48.1.12 of the Contract. Construction of 4B items critical to operation of the Paerdegat Basin CSO Facility was certified as 100% complete on January 5, 2010. DEC performed the post-construction inspection on March 23, 2010.
  - The surety abandoned the project on January 26, 2010, and ceased performing all punch list work. The DEP and surety negotiated a global settlement which was signed in March 2010. The surety completed all remaining punch list work activities on August 15, 2010 while avoiding delays to the CSO-5 contract completion. The surety completing contractors completed all CSO Tank punch list items. **The surety completed installation of NEMA 7 XP box and began closeout documentation.**
- Phase III - Structures and Equipment
  - Construction work has continued and is approximately 88 percent complete. The CSO-5 contractors are proceeding at their own risk on **4 million dollars worth of unregistered change orders, which is not reflected in the percentage of work completed. The prime contractors have begun commissioning of the process buildings in preparation to turn over the facility to the Department for operation.**
  - **The 5G contractor continued construction of the 5-barrel influent channel and outfall structure. Testing was performed on CSO Tank flushing gates, various local control panels, instrumentations and the security system. Installation of the vehicle fueling station and fire suppression system. Contractor continued classroom training of BWT personnel on various systems as well as began hands-on training after the temporary Certificate of Completion was obtained. Inspections were**

requested on various systems in preparation for commissioning and turnover including the fire sprinkler system, fuel oil storage system and the Odor Control Vessels. Contractor also began commissioning of the facility after temporary certificate of completion was obtained.

- **The 5E contractor continued pulling cable and wire to various pieces of equipment in the PBB, Odor Control Building (OCB) and SB, including gas sensors, security systems, and CSO Tank drop down ladders and continued trouble shooting and testing of equipment in preparation for commissioning. Completed installation and troubleshooting of the Emergency Generator and requested inspections by DEP; additional inspections will be required prior to final signoff. Continued installation of duct banks on the west side, along with yard lighting, process wiring, and sensors and samplers at the 5-barrel influent channel and outfall. The contractor also passed three DOB electrical inspections for the process buildings and continued classroom training of BWT personnel on critical systems.**
- **The 5H contractor completed punch list items identified by the DOB and passed the re-inspection of hot water boilers as well as the DOB electrical inspection of the boilers; completed installation of fiberglass ductwork in the CSO Tanks; completed air balancing of ductwork and completed installation of exhaust fans in the SB. Contractor also completed classroom training of BWT personnel and began hands-on training after the temporary Certificate of Completion was obtained.**
- The 5P contractor continued punch list work in the PBB, OCB, and SB, including hydrostatic pressure testing of piping.
- **DEP submitted to DEC a listing of items required for construction completion on November 5, 2010 as requested by DEC.**

Missed/Modified Milestones

- DEP issued a Notice of Force Majeure on February 12, 2010 related to the January 25, 2010 Notice of Claim and Appeal issued by the 4B contract surety and the potential impact of associated delays on the Structures and Equipment contract. DEC responded to DEP's Notice on April 9, 2010 requesting additional information, which DEP provided on April 30, 2010.

Anticipated Activities for Next Quarter

Construction

- Phase II - Foundations and Substructures
  - **The surety will complete project closeout and documentation.**
- Phase III - Superstructures and Equipment
  - Work will continue on the construction in order to meet the modified milestone date for Construction Completion Date of May 2011.

- **The 5G contractor will continue punch list work in the CFS Building, phased construction of the 5-barrel influent channel, and commissioning of the process buildings. The contractor will also begin punch list work in the process buildings and any items identified during inspections from the FDNY, DEP or DOB. Additionally, the 5G contractor will complete training of DEP personnel on various pieces of equipment throughout the CSO Facility.**
- **The 5E contractor will continue punch list work in the CFS and CB buildings, and will continue pulling, testing and terminating cable and wire to local control panels for various pieces of equipment at the 5 Barrel outfall area and site including level sensors, site lighting and security devices. The contractor will complete punch list items identified during inspections by various agencies including DOB, DEP and FDNY. In addition, the 5E contractor will complete troubleshooting and commissioning of equipment in the process buildings and training of DEP personnel on equipment in the Process Buildings.**
- **The 5H contractor will continue troubleshooting and commissioning of equipment in the process buildings. Contractor will also complete hands-on training of DEP personnel on various pieces of equipment and systems.**
- **The 5P contractor will begin training of DEP personnel on various pieces of equipment and systems in addition to continuing with ongoing punch list work, remedial work, and testing.**

- Environmental Dredging
  - **Basis of Design Report for Environmental Dredging is scheduled for submission by the end of January 2011.**

Table 9 – Paerdegat Basin CSO Projects

	Phase IA	*Phase II*	*Phase III*	*Dredging*
Construction Phase	Influent Channels	Foundations and Substructures	Structures and Equipment	Environmental Dredging
Location:	Flatlands and Ralph Avenues, Brooklyn, NY	West Shore of Paerdegat Basin	West Shore of Paerdegat Basin	Head end of Paerdegat Basin
Actions:	Construction of the influent channels to the CSO facility	Underground structural elements	Aboveground buildings and equipment	Dredge bottom sediments to finish depth of 3 ft below MLLW
Cost:	$9,000,000	**$123,905,101**	**$ 203,412,731**	TBD
Status:	Construction completed.	Construction 100% complete.*	NTP issued on 9/26/05. Construction 88% complete.	DEC Permit issued 3/19/10; USACE permit pending
Other Issues:	-	The Contractor was held in default in December 2007. Issues related to the surety and completion of outstanding work added substantial time to all schedules. A sand bar identified as a navigational hazard delayed the dredging work related to the 4B contract. The sand bar was removed in October 2009.	Construction work continued; contractors proceeding at risk on unregistered change orders (not reflected in completion percentage)	DEC established milestone dates based on issuance of DEC permit on 3/19/2010; however, USACE permit not yet issued. **Unfinished USACE review poses a risk that substantial design modification may be necessary.**

*CSO Consent Order elements completed and a Certification of Construction Completion has been submitted

3.5. Flushing Bay CSO

Flushing Bay CSO Retention Facility

The Flushing Bay CSO Retention Facility is an underground storage tank, which has a storage capacity of 43 million gallons, 28 MG in the tank and 15 MG in the upstream sewers. The project was constructed in phases to provide abatement in the Tallman Island WWTP drainage area at CSO Outfall TI-010 which discharges to the head of Flushing Creek. The elements of the facility include:

- Relocation of ball fields in Kissena Corridor
- Rerouting of Park Drive East CSO line inside the construction site and construction of the effluent channel
- Phase 1 construction of the underground structural elements of the tank
- Phase 2 construction of the mechanical and above-ground portion of the facility
- Construction of tide gates on the tank outfall sewer and construction of two (2) soccer fields

A written Notice of a Force Majeure Event was submitted to DEC on September 24, 2004. This event affected compliance with the Construction Completion milestone date of December 2004 for the Flushing Bay CS4-4 (Mechanical Structures) in the Order.

On September 8, 2004, rainfall at LaGuardia Airport was recorded by the National Weather Service at three inches in a three hour time period. This torrential rain event caused flooding in the basement of the Flushing Bay facility due to a breach in a temporary construction bulkhead in the influent sewer line to the facility. Water levels reached seven to eight feet above the basement floor at the CSO facility which caused damage to various mechanical, HVAC and electrical equipment.

DEC requested that DEP provide additional information in a formal report concerning the force majeure event and resultant impact upon the facility and construction status. DEP submitted such report on April 1, 2005.

DEP submitted a Construction Completion certification letter to DEC on May 31, 2007 for the CSO Retention Facility. The DEC issued a Notice of Violation (NOV) on July 15, 2008 for failure to meet the conditions of the Construction Completion Milestone for CS4-4 (V.F.4 of the CSO Consent Order). This NOV was resolved through the 2009 Modification to Order on Consent (DEC Case # CO2-20090318030).

The revised Flushing Bay Waterbody/Watershed Facility Plan Report was submitted to DEC on December 30, 2010.

Tallman Island Wet Weather Maximization

The 2008 Modification to Order on Consent included a date modification for the Flushing Bay CS4-4 milestone, as well as the addition of item V.J. "Tallman Island WWTP and associated sewer system are capable of delivering, accepting and treating influent at or above twice the plant's design flow during any storm event." The project was transferred from the 1999 Omnibus IV Consent Order to the CSO Consent Order and includes a new interceptor to parallel the Main Interceptor; and modifications at Regulators 10, 10A, 10B and 13.

Work Performed During This Quarter

Design

- Flushing Bay CSO Retention Facility
  - ♦ No activities this reporting period.
- Tallman Island Wet Weather Maximization
  - ♦ **Completed design and QA/QC of the 90% design submittal in October 2010.**
  - ♦ **Completed design and QA/QC of the 100% design submittal in December 2010; transmitted final plans, specifications, and CPM analysis to NYSDEC on December 29, 2010.**
  - ♦ Continued coordination with DEP Operating Bureaus regarding design calculations, amendments to the City drainage plan and general water & stormwater relocations required due to proposed construction activities.
  - ♦ Continued utility coordination with Con Edison, Verizon & Time Warner Cable
    - o **Received Section U Packages from Con Edison, Verizon & Time Warner Cable; incorporated into project specifications.**
    - o **Received EP-7 Gas Cost Sharing Package from Con Edison; incorporated into project specifications.**
    - o Continued coordination with TI WWTP personnel regarding potential utility conflicts on WWTP property.
  - ♦ **Received all applicable permits and initiated work on six (6) additional geotechnical borings, one of which also includes a groundwater monitoring well. .**
  - ♦ BEDC and DEP Legal continued coordination with NYCDPR regarding outstanding property encroachments along the proposed route of the new Whitestone Interceptor **A meeting between involved parties was held on November 23, 2010, and the following items were discussed:**
    - o **BWT is initiating a JOC Contract to install a temporary fence along the Powell's Cove property line to discourage any further encroachments. To support installation of this fence, a new Joint Application for Permit package and a new NYCDPR permit package were prepared and are currently under review by BEDC's Permit Resource Division.**

- **The surveyor for the design consultant was instructed to perform additional field work to more accurately define property lines and the nature/area of each encroachment. The additional field work was completed in mid-December 2010 and draft maps for each property encroaching on Parkland were submitted to DEP Legal on December 29, 2010.**

- Work on the following permits was performed:
  - BEPA, BEDC and the design consultant continued work on finalizing the EAS in support of obtaining the Negative Declaration.
  - **BEDC's Permit Resource Division initiated review of the Joint Application for Permit package for construction of the new interceptor.**
  - **BEDC's Permit Resource Division initiated review of the Joint Application for Permit package for the proposed pumping test; and also for the jurisdictional determination request related to discharging dewatered groundwater from the pumping test into Powell's Cove.**
  - **BEDC's Permit Resource Division initiated review of the Joint Application for Permit package and NYCDPR permit package for installation of a temporary chain link along the Powell's Cove Park property line between 7th and 9th Avenues.**
  - BEDC, BCIA, NYCDPR and the design consultant continued work on the presentation to the NYC Design Commission for the wetland restoration/landscaping work proposed under TI-WW1.

Construction

- Flushing Bay CSO Retention Facility
  - DEP submitted revised flow metering methodology on March 5, 2010 in response to comments received from DEC. Included in this submittal was a description of the installation of meters in the effluent channel of the facility and the use of storm events to confirm that the measurement system is accurate. The temporary meters were installed in March, and have collected data for two substantial storm events. A summary report was submitted on May 18, 2010, and DEP and DEC conducted a meeting to discuss the flow metering methodology on May 20, 2010.
  - **Based on discussions during the most recent Quarterly Meeting, DEP and DEC agreed to postpone DEP's submittal of the revised flow metering methodology from December 2010 to the end of January 2011. DEP continued collecting data through the end of December.**
- Tallman Island Wet Weather Maximization
  - Construction has not commenced.

Anticipated Activities for Next Quarter

Design

- Tallman Island Wet Weather Maximization
  - Continue coordination with DEP Operating Bureaus regarding final plan review and amendments to the City drainage plan.
  - Continue addressing legal issues with property encroachment along proposed Whitestone alignment.
  - Continue work on project permitting, most notably:
    - The EAS;
    - The applicable NYCDPR permits;
    - The Joint Application for Permit package for construction of the new interceptor;
    - **The Joint Application for Permit package for the proposed pumping test, and associated Jurisdictional Determination Request related to discharging dewatered groundwater from the pumping test into Powell's Cove;**
    - **The Joint Application for Permit package and NYCDPR permit package for installation of a temporary chain link along the Powell's Cove Park property line between 7th and 9th Avenues.**
    - The NYC Public Design Commission.
  - **Submit contract documents for NYC Law Review and receive approval.**
  - **Make preparations for bid advertisement.**

Construction

- Flushing Bay CSO Retention Facility
  - **Submit flow metering methodology report to DEC by January 31, 2011.**

Table 10 – Flushing Bay CSO Projects

	Flushing Bay CSO Tank	TI Wet Weather Maximization
Plan Elements:	Flushing Bay CSO Retention Facility	Tallman Island WWTP and associated sewer system are capable of delivering, accepting and treating influent at or above twice the plant's design flow during any storm event
Location:	Intersection of College Point Boulevard and Avery Avenue, Queens	New section of the Whitestone Interceptor from the existing Junction Chamber at the intersection of 11th Avenue and 130th Street to the WWTP, College Point, Queens Regulators 10, 10A, 10B and 13
Actions:	Design and construction of a 43 MG storage facility, which includes a 28 MG, underground storage tank and 15 MG in-line storage in upstream sewers. The facility collects flow from the system tributary to the TI-010 outfall.	New section of the Whitestone Interceptor from the existing Junction Chamber at the intersection of 11th Avenue and 130th Street to the WWTP, College Point, Queens **Regulators 10, 10A and 13**
Cost:	$291,000,000	**$34,000,000**
Status:	Construction Completion certified on 5/31/07; DEC issued NOV 7/15/2008; Consent Order Modification 9/3/09 established new Construction Completion date of September 2009. Flow metering methodology currently in validation process.	**Design and construction of a new interceptor and modifications to regulators 10, 10A and 13.**
Other Issues:	2009 Consent Order Modification included required corrective actions at the Flushing Bay CSO Retention Facility	**100% design complete**

3.6. Jamaica Tributaries CSO

The Jamaica Tributaries project area includes the Jamaica WWTP sewer shed area and the tributaries, which receive the wet weather discharges from the drainage area. These tributaries include Bergen, Thurston, Shellbank, and Hawtree Basins, which are located in the northeast portion of Jamaica Bay. There are several recommendations that are being advanced in this facility plan which include:

Meadowmere & Warnerville DWO Abatement – Construction of a new pumping station, force main, and sanitary sewer collection system in southeast Queens, NY, to convey flows from the communities of Meadowmere and Warnerville into the Jamaica drainage area collection system, for treatment at the Jamaica WWTP. This project will eliminate the dry weather discharge that is currently occurring in these two communities, which are not connected to NYC's collection system.

Expansion of Wet Weather Capacity of Jamaica WWTP – An additional 50 MGD of wet weather flow will be treated at the Jamaica WWTP to reduce the CSO discharges to Bergen Basin. Recent analyses indicate that this element has limited water quality benefits. Alternative actions have been analyzed and included in the Waterbody/ Watershed plan that was submitted to DEC in June 2007. The alternate actions are collection system upgrades designed to increase total CSO volume treated without expanding capacity. The upgrades include the installation of bending weirs at three regulators: J3 and J14 in the West Interceptor, and J6 in the East Interceptor, and a new 48-inch parallel sewer to complement the existing double barrel 36-inch Belt Parkway crossing in the West Interceptor.

Destratification Facility – Installation of a permanent diffused-air bubble mixing system at Shellbank Basin. The system is designed to eliminate temperature stratification during the summer season, which leads to poor water quality conditions in the basin, odors and marine life kills. This element currently has an operating pilot facility, which has produced positive water and air quality results for the past 10 summer seasons.

Laurelton and Springfield Blvd. Drainage Plan – A drainage plan for 7,000 acres in southeast Queens is being developed to address flooding and to construct high-level storm sewers in a 1,450 acre CSO drainage area tributary to Thurston Basin. The drainage plan identifies the necessary capital sewer projects to alleviate flooding and convert the aforementioned CSO area to a high-level storm sewer system.

Regulator Automation – Automation of key regulators was recommended in response to the 1988 State Pollution Discharge Elimination System (SPDES) permit requirements that called for telemetry in the regulators to detect dry weather overflows. It was recommended at those regulators contributing the largest flows to the treatment plants, specifically Regulators 2, 3, and 14 in the Jamaica WWTP drainage area. The Citywide Collection Facilities Supervisory Control and Data Acquisition (SCADA) System Project will automate key regulators in the City by installing electro-hydraulic actuators capable of controlling flows to the sewer interceptor.

Work Performed During This Quarter

Design

- Expansion of Wet Weather Capacity of the Jamaica WWTP
  - DEC conditionally approved a Modification Request from DEP on June 28, 2010 that would replace all milestones related to the wet weather expansion with new milestones related to a parallel sewer and bending weirs.
- Destratification Facility
  - **DEP sought approval from DEC to discharge clean, oil-free compressor condensate from two compressors directly to nearby storm sewer to eliminate the need for a sanitary sewer connection to the facility. The first correspondence to DEC regarding this was in August 2010, and DEC indicated in an October 7, 2010 email that a formal approval would be sent to DEP. The approval had not been sent as of the end of the fourth quarter of 2010.**

Construction

- Meadowmere/Warnerville
  - **Continued addressing final DOB permitting issues and outstanding items in order to secure the Certificate of Occupancy. A temporary Certificate of Occupancy was issued by the Buildings Dept. on November 9. Operation of the station was subsequently transferred to BWT.**
  - **No work during this quarter. Construction is substantially complete.**
  - No Monthly Construction I&T meetings were held during this quarter.
- Destratification Facility
  - Notice to Proceed for Contract CSO-JT-DF-G and CSO-JT-DF-E was issued on September 27, 2010. This complies with the consent order requirement for NTP issuance by September 30, 2010.
  - **Department of Building plan approval was issued in November 23, 2010. Permit renewal letter for the DEC tidal wetlands permit including the fee was delivered on November 12, 2010. One year extension was granted on December 15, 2010.**
  - **Preconstruction meeting was held on October 22, 2010. Contractor subsequently submitted HASP for approval, vendor approvals for a majority of the equipment and materials required for the project, and commenced with shop drawing submittal process**.
- Regulator Automation
  - **Certification of Construction Completion for the Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation was submitted 12/30/10. Refer to section 3.2 for details.**

Missed/Modified Milestones

- On June 28, 2010, DEC acknowledged that certain proposed sewer system modifications in the Jamaica WWTP service area are technically acceptable alternatives that can be adopted in lieu of the 50 MGD wet weather expansion of the Jamaica WWTP. DEP submitted a revised Request for Modification of project and milestones associated with the expansion of the wet weather capacity of the Jamaica WWTP to DEC on November 14, 2008. The basis of the original Request for Modification was the identification of an alternative approach that is expected to result in a greater degree of CSO reduction. The June 2007 Jamaica Bay and CSO Tributaries WWFP proposed replacing the expansion with more cost-effective sewer modifications projected to achieve greater CSO capture. Numerous meetings between DEP and DEC technical staff occurred, during which schedule, additional alternatives, and field measurements were discussed. A final proposed modification was included in the May 5, 2010 "omni letter" submitted by DEP that included a specific modification request for the June 30, 2010 milestone for submittal of the form 2A SPDES Application and a request to replace the remaining milestones related to the wet weather expansion with new milestones related to a parallel sewer and bending weirs. DEC conditionally approved this request June 28, 2010.

Anticipated Activities for Next Quarter

Design

- Destratification Facility
  - **DSDC activities will continue.**

Construction

- Meadowmere/Warnerville
  - **Resolve remaining issue with DEP site connection work approval in order to acquire the final Certificate of Occupancy.**
- Destratification Facility
  - **Shop drawing submission and the preparation of demolition work and timber pile installation work at site**.
- Regulator Automation
  - **Certification of Construction Completion for the Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation was submitted 12/30/10. Refer to section 3.2 for details**

Table 11 – Jamaica Tributaries CSO Projects

Plan Elements:	Meadowmere & Warnerville DWO Abatement	Expansion of Wet Weather Capacity of Jamaica WWTP	Destratification	Laurelton and Springfield Blvd. Drainage Plan	Regulator Automation
Location:	Meadowmere and Warnerville – Queens, New York	Bergen Basin	Shellbank Basin	Jamaica WWTP Drainage Area	Regulators 2,3 and 14
Actions:	Construction of a Pumping Station, Sewer Collection System, and Dual Force Main	Provide an additional 50 mgd of wet weather capacity at the Jamaica WWTP.	Conduct Demonstration Construct Permanent Facility	Develop drainage plan for storm sewer build out	Provide automated regulators
Construction Cost:	$37,637,569	$120 million	$2,621,918	To be determined	Note 1
Status:	Construction 100% complete. Construction Completion Milestone met.	Project to be replaced with a parallel sewer and bending weirs, pending August 2010 Consent Order negotiations per DEC 6/28/2010 correspondence	**DOB plan approval issued/** **Contractor submitting shop drawings and vendor approvals and preparing for work on site.**	Drainage planning complete.	Note 1

Note 1: Outer Harbor, Inner Harbor, and Jamaica Tributaries milestones for Regulator Improvements – Automation are being satisfied under a single construction contract (REG-026). Refer to Section 3.2 for an update on the status of this project.

3.7. Coney Island Creek CSO

The recommended plan for the Coney Island Creek CSO Facility Planning Project is to increase the wet weather pumping capacity of the Avenue V Pumping Station. The Avenue V Pumping Station tributary area encompasses 2,900 acres, of which 2,056 acres are separately sewered and 844 acres have combined sewers. The Avenue V Pumping Station capacity will be increased to capture 85 percent, by volume, of the current CSO discharge from outfall OH-021 to Coney Island Creek. The capacity of the pumping station will be increased from approximately 30 MGD to 80 MGD in two construction contracts, a pumping station upgrade phase and a force main construction phase.

Work Performed During This Quarter

Design

- Avenue V Pumping Station Upgrade
  - **DSDC activities continued, including:**
    - **Shop drawing review**
    - **Coordination drawing review**
    - **Change Order preparation**
    - **Architectural Terra Cotta inspection.**
- New Force Mains
  - **DSDC activities continued, including:**
    - **Shop drawing review**
    - **Change Order preparation**
    - **Construction Assistance**

Construction

- Avenue V Pumping Station Upgrade
  - **The construction/installation of the following items was completed: wet well roof; Main Building roof, existing electrical wing floor demolition Generator Building roof, electrical conduits, and painting of the main building roof and trusses.**
  - **The construction/installation of the following items was initiated: Installation of the cover over the 48" sewer beneath the Network Protection Structure.**
- Avenue V Force Mains
  - **Final Leakage Tests are 76.8% complete. To date, 21,548 linear feet (l.f.) of the total 28,061 l.f. of force main has successfully passed the final leakage test. The Bay 40th Street force main has failed the leakage test and work is ongoing to locate the leak.**

- **Other construction activities included the continued construction of the 48-inch Discharge Chamber at Bay 16th Street and Bath Avenue; cleaning of SE-133 from MH 18 to MH 6; investigation of a leak in the 42-inch Hobas pipe at Bay 40th Street.**
- **SE 133 has been undergoing a cleaning operation and televised inspection. This cleaning and inspection work is approximately 50% completed.**

Missed/Modified Milestones

- There are no missed milestones.

Anticipated Activities for Next Quarter

Design

- **DSDC Activities**

Construction

- Avenue V Pumping Station Upgrade
  - **O&M of temporary pumping system. Dewatering systems will be slowed as the work rises out of the ground. Continued construction of the new Main Building structure, mechanical equipment and electrical work.**
  - **The installation of the remaining Network Protection Building mini-piles will commence.**
- New Force Mains
  - **Continued open cut force main installation on the Stillwell Avenue to Avenue V connection and the Stillwell Avenue to Cropsey Avenue intersections, leakage tests for installed pipe and repairs as needed.**

Table 12 – Coney Island Creek CSO Projects

	Contracts *PS-79G, H, P, E*	*Contract* *PS-79F*
Plan Elements:	Upgrade Avenue V Pumping Station	New Force Mains
Location:	Avenue V PS (Avenue V and West 11th Street)	42-inch to SE-133 (Shore Pkwy. Vic. Verrazano Bridge); 48-inch to vic. Reg. 9A
Actions:	Comprehensive upgrade to automate and increase station capacity to 80 mgd; Lower Wet Well operating level to reduce sewer surcharges; Network Protector Structure to reliably transform utility power; Generator system to improve station reliability; Architectural restoration of Main Building to 1915 appearance	New force mains to convey DWF and WWF
Cost:	**$72,499,815**	**$113,920,076**
Status:	Notice to Proceed issued on 12/16/05. **Construction is 60% complete.**	Notice to Proceed issued on 7/23/07. **Construction is 97% complete.**

3.8. Newtown Creek CSO

The Newtown Creek CSO Facility Planning area consists of the areas in Brooklyn and Queens from which wet weather runoff drains to the Newtown Creek waterbody and its branches: English Kills, Dutch Kills, Whale Creek, Maspeth Creek and the East Branch. For this CSO planning area, the Waterbody/Watershed Facility Plan, still under review by the DEC, proposes some modifications to the consent order milestones that will ultimately achieve better CSO capture and result in improved water quality, as permitted in the Order in Section III, Paragraph A, Section 3.

This section reports on the progress of facility planning and design of the existing CSO plan, subject to modifications by the Waterbody/Watershed Facility Plan, and includes 1) maximizing flow through the Morgan Avenue Interceptor, 2) the construction of in-stream aeration facilities (Zone I & II) and 3) the construction of an off-line storage tank.

Maximizing flow through the Morgan Avenue Interceptor will include raising the overflow weir in Regulator B1; increasing the sluice gate openings to the interceptor; providing a relief sewer from the St. Nicholas weir to Regulator B1; and providing a throttling gate on the Kent Avenue Interceptor. The Aeration Facilities (Zone I) includes construction of a landside compressor station and installation of an air header in the creek bottom of the Upper English Kills. Based upon the performance evaluation of the Zone I aeration testing, Zone II aeration may be implemented to expand in-stream aeration to include the Lower English Kills, the East Branch and Dutch Kills. The off-line storage facility will control CSO discharge to the English Kills and will include a 9 million gallon tank, a pumping station, and a new gravity drain to drain the tank for treatment at the Newtown Creek WWTP.

Subsequent to the Newtown Creek WB/WS Facility Plan submittal of June 2007, the DEP analyzed additional alternatives to reduce CSOs to Newtown Creek and the East River, including control measures beyond those listed in the 2007 Plan. Based on these analyses and on ongoing discussions between DEP and DEC, DEP proposed to modify the mandated elements currently in the CSO Consent Order constructing a much larger relief sewer in the Newtown Creek drainage area, bending weirs at targeted regulators, and additional floatables controls at targeted regulators and outfalls. In addition, the goals of the Zone II Aeration project have been realigned towards higher dissolved oxygen levels. The projects included in the Modification Request are expected to contribute to improved water quality in a cost-effective manner.

The Modification Request was submitted by DEP to DEC in April 30, 2009. DEC granted a 60-day milestone extension to August 31, 2009 for items VIII.E.2 and VIII.F.3 on June 24, 2009, and further extended the milestone dates to October 31, 2009 on August 27, 2009. DEP responded to these, and on October 30, 2009 requested an additional extension of time for items VIII.E.2 and VIII.F.3 to February 1, 2010, at which time DEP committed to submitting reports related to the Zone I Aeration data collection and analysis. DEP resubmitted the Modification Request on March 31, 2010. The biological and water quality data reports related to Aeration Zone I were provided to DEC on February 1, 2010.

Work Performed During This Quarter

Planning

- Off-line Storage Tank
  - No actions to report this quarter.

Design

- Maximize Flow to Morgan Ave. Interceptor
  - Kent Avenue Throttling Facility design has been completed.
- Phase 1 Aeration Facility
  - Design completion was certified December 2008 and accepted February 2009. Start-up of the facility first occurred on June 25, 2009. Sampling for the First Year Post-Operational Habitat Monitoring was performed.
- Phase 2 Aeration Facilities
  - **The 90% design completion Contract Drawings and Specifications for the addition of a third blower to the Phase I Aeration Facilities and associated aeration system for the lower English Kills was completed.**
  - **A meeting was held with the NYC Economic Development Corporation (EDC) on the use of EDC property to locate an aeration facility that would serve the East Branch and portions of Newtown Creek.**

Construction

- Phase 1 Aeration Facilities
  - Construction of the Phase 1 Aeration Facilities was complete as of December 2008.
- Kent Avenue Throttling Facility
  - DEP certified that the Notice to Proceed to Construction for the Kent Avenue Throttling Facility had occurred prior to the June 2009 milestone in a letter dated September 29, 2009. The construction is occurring under Newtown Creek WWTP contract NC-36.
  - **The remaining work has not been scheduled yet but is expected to be completed before milestone date. The work is 90% complete.**

Missed/Modified Milestones

- DEP submitted a Modification Request on April 30, 2009 to eliminate certain elements and replace with more cost-effective elements that achieve similar or greater water quality benefits. A revised Modification Request was submitted on March 31, 2010. Biological and water quality data reports related to Aeration Zone I were provided to DEC on February 1, 2010 in support of this request.

Anticipated Activities for Next Quarter

Design

- Maximize Flow to Morgan Ave. Interceptor
  - Continue design of the Regulator B-1 Modifications.
  - Continue design of St. Nicholas Avenue Weir to Regulator B-1 Relief Sewer.
- Phase 1 Aeration Facility
  - **Prepare for commencement of seasonal operation.**
- Phase 2 Aeration Facilities
  - **Complete final design of third blower installation in the Phase I Aeration Facility building for the Lower English Kills.**
  - **Advertise Contract CSO-NC-2 for the installation of the third blower in the existing English Kills blower building, which would serve the Lower English Kills.**
  - **Survey and perform environmental audits on the EDC property proposed for the aeration facility that would serve the East Branch and portions of Newtown Creek.**

Construction

- Phase 1 Aeration Facility
  - Bureau of Water Treatment takeover.
- Kent Avenue Throttling Facility
  - The remaining electrical work has not been scheduled yet but is expected to be completed before milestone date.

Table 13 – Newtown Creek CSO Projects

	Maximize flow through Morgan Ave. Interceptor	*Throttling Facility*	*Phase 1 - Aeration Facilities*	*Phase 2 - Aeration Facilities*	*Off-line Storage Tank*
Location:	Regulator B1 and WWTP throttling chamber	Kent Avenue Interceptor upstream from Morgan Avenue Interceptor	Head end of English Kills, south of Grand Street	Lower English Kills, Dutch Kills, East Branch and Newtown Creek	Sewers tributary to CSO outfall discharging to English Kills
Actions:	Raise overflow weir in R-B1; increase sluice gate openings to interceptor; provide relief sewer from St. Nicholas weir to R-B1	Continued Construction	Provide aeration to raise DO to a goal of 3.0 mg/l; includes landside compressor station, air header, and diffuser assembly.	Provide aeration to raise DO to a goal of 3.0 mg/l; includes landside compressor station, air header, and diffuser assembly.	Design facility, including tank, pumping station, and gravity drain for treatment at the Newtown Creek WWTP.
Cost:	$10,000,000	$1,000,000	$7,503,000	$26,000,000	TBD
Status:	Throttling gate at the WWTP is 100% complete; B-1 overflow weir and relief sewer are proposed to be replaced by new elements in 3/31/2010 Modification Request	Throttling gate at Kent Avenue 90% Complete	Construction 100% complete: DEP certified 12/31/08; DEC approved 2/25/09. Operated during 2009 summer season.	Continue design and site selection of the Aeration Systems for the Lower English Kills, Dutch Kills, East Branch and Newtown Creek under Contract NC-EK-IV.	On hold pending submission and approval of Newtown Creek Modification Request
Other Issues:	Requires coordination with WWTP planning and design requirements As allowed by the Order, currently subject to modification by the WWFP		Water quality and habitat monitoring data reports submitted to DEC		Site approval (ULURP) and acquisition of property required. As allowed by the Order, currently subject to modification by the WWFP

3.9. Westchester Creek CSO

The Westchester Creek CSO Facilities Planning area consists of the drainage area of CSO Outfall HP-014, which discharges at the head end of the Creek. Westchester Creek receives discharges from five CSO outfalls; however, discharges from CSO Outfall HP-014 were determined to be the primary cause of water quality degradation in the Creek. CSO Outfall HP-014 serves a drainage area of approximately 2,321 acres within the Hunts Point WWTP service area in the Borough of the Bronx. For this CSO planning area, the June 2007 Waterbody / Watershed Facility Plan DEC reviewed and provided comment in January 2010 analyzes cost effective CSO control measures for this waterbody and proposes modifications to the scope of the existing CSO facilities plan, as permitted in the Order in Section III, Paragraph A, Section 3.

The current Westchester Creek CSO Abatement Facilities Plan, subject to modifications by the Waterbody/Watershed Facility Plan recommendations, will be constructed in two phases with Phase I consisting of the facilities to divert the combined sewage to the CSO storage tank, as well as rehabilitation of an existing tide gate chamber, and Phase II consisting of the CSO storage tank. This section reports on the progress of Phases I and II of the Westchester Creek CSO Abatement Facilities Plan.

Phase I includes construction of the diversion chamber in Eastchester Road, construction of the 2 MG CSO supply/storage conduit along Waters Place between the diversion chamber and the 10 MG CSO storage tank, and rehabilitation of the existing tide gate chamber located at CSO Outfall HP-014. Phase II includes construction of the 10 MG CSO storage tank in the southwest section of the BPC Campus, including an operations building to house operational units, and installation of the required fencing at the site.

Work Performed During This Quarter

Design

- Phase I – Influent Sewers
  - The DEP submitted the revised Westchester Creek Waterbody/Watershed Facility Plan Report in November 2010 that recommended replacing this element in Appendix A of the Order.
- Phase II – CSO Storage Facility
  - The DEP submitted the revised Westchester Creek Waterbody/Watershed Facility Plan Report in November 2010 that recommended replacing this element in Appendix A of the Order.

Construction

- Construction has not yet been initiated.

Missed/Modified Milestones

- The May 5, 2010 modification request submitted by DEP included a specific request to defer the June 30, 2010 milestone for completion of design for the Westchester Creek

Phase I Influent Sewers to September 2010. The June 2007 Westchester Creek WWFP proposed replacing the facility with weir modifications at the head end of Westchester Creek and floatables control at Pugsley Creek. DEC provided comments on this WWFP on January 20, 2010, raising an issue regarding the additional CSO flow that would be discharged to the tidal mud flats at Pugsley Creek. Discussions between DEP and DEC technical staff during the first and second quarters of 2010 indicated that a new parallel sewer from regulator structure CSO-24 to a downstream location in the existing collection system could relocate CSO away from the head end of Pugsley Creek, and DEP requested that the milestone be modified to September 2010 to allow time to complete analyses associated with this sewer concept. DEP also committed to submitting a subsequent modification request along with a detailed justification 60 days prior (i.e., July 31, 2010). DEC Responded to this request on June 28, 2010, stating that it would exercise enforcement discretion. On August 25, 2010 DEC determined that the proposed cost-effective sewer improvements were technically acceptable alternatives to the 12 MG CSO storage facility in the CSO Consent Order.

Anticipated Activities for Next Quarter

- Phase I – Influent Sewers
  - DEP submitted a Modification Request for completion of final design of the Phase I Influent Sewers on July 30, 2010.

Table 14 – Westchester Creek CSO Project

Plan Elements:	Westchester Creek CSO Supply/Storage Conduit, CSO Storage Tank and Little League Amenities
Location:	Bronx Psychiatric Center Campus, and along Eastchester Road and Waters Place in the Bronx
Actions:	Design and construction of an underground CSO storage tank with a capacity of 12 MG (including the storage capacity within the supply/storage conduit) to provide abatement at CSO Outfall HP-014 on Westchester Creek; design and construction of an operations building;
Cost:	Under Revision
Status:	**On August 25, 2010 DEC determined that certain cost-effective sewer improvements proposed by DEP were technically acceptable alternatives to the 12 MG CSO storage facility.**
Other Issues:	

3.10. Bronx River CSO

The modified CSO facilities plan for the Bronx River recommends that floatables control facilities be provided at CSO Outfalls HP-004, HP-007 and HP-009, within the Hunts Point WWTP drainage area, to minimize the discharge of unsightly floatable material. This modified plan eliminated the previously proposed 4 MG CSO storage facility due to limited benefits in the improvement of water quality in the Bronx River.

For CSO Outfall HP-004, which is located on the west bank of the Bronx River just north of the Cross Bronx Expressway and serves a drainage area of approximately 582 acres, the recommended floatables control facility consists of providing in-line netting within a new conduit located upstream of the outfall along West Farms Road. For CSO Outfall HP-007, which is located on the east bank of the Bronx River just north of the Sheridan Expressway and serves a drainage area of approximately 1,693 acres, the recommended floatables control facility consists of providing mechanical screens within Regulators 27 and 27A located upstream of the outfall. For CSO Outfall HP-009, which is located on the east bank of the Bronx River near the confluence with the East River and serves a drainage area of approximately 436 acres, the recommended floatables control facility consists of providing in-line netting within Regulator 13, located within Soundview Park upstream of the outfall.

Work Performed During This Quarter

Design

- Design completion was certified in May 2009.

Construction

- Construction commenced on January 15, 2010.
- **At the Bronx Zoo (CSO-27/HP-007) site completed installation of steel sheeting and the excavation to a depth of -32 feet. Formed and placed slab and walls for new Regulator expansion. Cut and removed existing sewer roof, walls and weir wall. Formed and placed new weir wall. Completed construction of regulator access chamber as well as formed and placed new columns for roof support.**
- **At the West Farms Road site (CSO-28/HP-004), formed and placed Chamber No. 4's slab and walls. Completed installation of 29 units of precast concrete pipe (culvert units), and completed the installation of precast Chamber No. 3.**
- **At the Bronx Zoo site (CSO-27), the expansion of the regulator has been completed, the new weir wall has been constructed and the mechanical bar screens which are to be installed have been fabricated**.
- **At the Soundview Park site (CSO-13/HP-009), construction activities have started and to date 82 piles have been installed. Dewatering equipment has been installed.**
- **At the West Farms Road site (CSO-28/HP-004), the pre-cast sewer sections and chambers located on the NYS DOT property have been installed. Work has started**

on the chamber located beneath the sidewalk off of West Farms Road. Dewatering continues.

- **At the Bronx Park Avenue site (CSO-27A), Con Ed has completed the relocation of the gas lines and has started the electric utility relocation.**

Missed/Modified Milestones

- There are no missed milestones.

Anticipated Activities for Next Quarter

- *Planning*
  - No activities to report.
- *Construction*
  - **At the Bronx Zoo site (CSO-27), the new regulator roof will be installed. The mechanical bar screen will be installed and tested.**
  - **At the Soundview Park site (CSO-13/HP-009), pile installation will be completed and work on the regulator expansion will begin.**
  - **At the West Farms Road site (CSO-28/HP-004), the precast sewer will be installed beneath the sidewalk of off West Farms Road, the pre-cast concrete netting chamber will be installed and the netting system installed.**
  - **At the Bronx Park Avenue site (CSO-27A), Con Ed will complete the utility relocations, the detour around the section of Bronx Park Ave where construction will take place will be set and excavation will start on the regulator.**

Table 15 – Bronx River CSO Project

Plan Elements:	Floatables Control Facilities at CSO Outfalls HP-004, HP-007 and HP-009
Location:	New conduit (West Farms Road) upstream of CSO Outfall HP-004, Regulator 27 (Bronx Park Avenue) and Regulator 27A (Bronx Zoo) upstream of CSO Outfall HP-007, and Regulator 13 (Soundview Park) upstream of CSO Outfall HP-009
Actions:	Design and construction of floatables control facilities for CSO Outfalls HP-004, HP-007 and HP-009
Cost:	Current Cost **$26,757,522**
Status:	Construction is **28% complete.**
Other Issues:	

3.11. Hutchinson River CSO

The Hutchinson River CSO Facilities Planning area consists of the drainage areas of CSO Outfalls HP-023 and HP-024 in the Hunts Point WWTP drainage area. The Hutchinson River receives discharges from five CSO outfalls; however, discharges from CSO Outfalls HP-023 and HP-024 were determined to be the primary cause of water quality degradation in the River. CSO Outfall HP-023, which is located on the west bank of the Hutchinson River near the southern end of Conner Street, serves a drainage area of approximately 300 acres. CSO Outfall HP-024, which is located on the west bank of the Hutchinson River near the intersection of Boston Road and 233rd Street, serves a drainage area of approximately 1,100 acres. For this CSO planning area, the Waterbody/Watershed Facility Plan, currently under review by the DEC, analyzes cost effective CSO control measures for this waterbody and proposes modifications to the scope of the existing CSO facilities plan, as permitted in the Order in Section III, Paragraph A, Section 3.

The current Hutchinson River CSO Abatement Facilities Plan, subject to modifications by the Waterbody/Watershed Facility Plan, will be constructed in two phases with Phase I consisting of a 4 MG CSO storage tank to provide abatement at CSO Outfall HP-023 and Phase II a 3 MG CSO storage tank to provide abatement at CSO Outfall HP-024. This section reports on the progress of Phases I and II of the Hutchinson River CSO Abatement Facilities Plan.

Phase I includes construction of a southern 4 MG CSO storage tank to be located adjacent to the Hutchinson River wholly within the boundary limits of Public Place Site, which is land near the southern end of Conner Street currently controlled by the DPR. Phase II includes construction of a northern 3 MG CSO storage tank to be located adjacent to the Hutchinson River along Hutchinson Avenue on land currently owned by Pascap Export, Inc.

DEC issued a letter to DEP date May 22, 2009 that prompted a series of discussions on the proposed Hutchinson River Waterbody/Watershed Facility Plan, and on July 31, 2009, DEP submitted a proposed sampling plan for the Hutchinson River that DEC approved. Sampling occurred during August and October 2009, and was presented to DEC on October 1 and December 10, 2009.

Based on conversations with DEC, the DEP retracted the existing WWFP to better identify causes of impairment based on a more robust sampling program and to further evaluate cost effective alternatives consistent with the EPA CSO Policy. DEC provided comments to the June 2007 WWFP on May 22, 2009, in response to which DEP agreed to conduct water quality sampling. On January 4, 2010 DEC directed DEP to submit a letter outlining its strategy and timeline for submitting an approvable WWFP subsequent to that sampling effort. A conference call was convened by DEP and DEC on January 29, 2010, and on February 1, 2010 DEP responded. On February 19, 2010, DEC acknowledged the February 1 DEP letter and reaffirmed its direction for DEP to submit a water quality sampling plan and scoping document. DEP submitted the water quality sampling plan to DEC on May 24, 2010 that was rejected by DEC on July 2, 2010.

Work Performed During This Quarter

Design

- Phase I – 4 MG CSO Storage Tank
  - DEP received comments from the DEC on the June 2007 Hutchinson River Waterbody/Watershed Facility Plan which includes modifications to the elements included in Appendix A of the Order on May 22, 2009. Alternative CSO abatement technologies are under consideration.
- Phase II – 3 MG CSO Storage Tank
  - DEP received comments from the DEC on the June 2007 Hutchinson River Waterbody/Watershed Facility Plan which includes modifications to the elements included in Appendix A of the Order on May 22, 2009. Alternative CSO abatement technologies are under consideration.

Construction

- Construction has not yet been initiated.

Missed/Modified Milestones

- On May 5, 2010 DEP requested a modification of the June 30, 2010 milestone for completion of final design for a CSO storage facility for the Hutchinson River, as well as all other outstanding Hutchinson River CSO milestones (XI.A.2 through XI.E). The influence of Westchester County water quality has been the subject of discussions between DEC and DEP technical staff, and DEP requested that a waste load allocation analysis be performed that can be used as a basis to finalize the LTCP for the Hutchinson River. In addition, DEP proposed eliminating the requirement to submit a WWFP and proceed directly to the development of an LTCP as suggested by DEC. DEC Responded to these requests on June 28, 2010, stating that it would exercise enforcement discretion.
- **DEP submitted a revised sampling plan on October 15, 2010, as well as an updated modification request on the same date. DEC commented on the revised sampling plan on November 19, 2010, and DEP responded to these comments on December 20, 2010.**

Anticipated Activities for Next Quarter

- Respond to any DEC comments on the proposed water quality sampling plan
- Based on a teleconference between DEP and DEC on July 29, 2010, the water quality sampling plan will commence Spring 2011.

Table 16 – Hutchinson River CSO Project

Plan Elements:	Hutchinson River CSO Storage Facilities
Location:	City-owned property at southern end of Conner Street adjacent to Hutchinson River; privately-owned property along Hutchinson Avenue adjacent to Hutchinson River
Actions:	Design and construction of a 4 MG CSO storage tank and a 3 MG CSO storage tank to provide abatement at CSO Outfalls HP-023 and HP-024, respectively; rehabilitation of existing CSO Outfalls HP-023 and HP-024
Cost:	Under Revision
Status:	Alternatives under consideration
Other Issues:	Water quality sampling plan under negotiation, and will require coordination with Westchester County.

3.12. Jamaica Bay CSO

The Jamaica Bay CSO Abatement Facility Plan addresses CSOs in the 26th Ward WWTP drainage area, specifically the CSO discharges to Fresh Creek, Hendrix St. Canal and Spring Creek, as well as other tributary waters with CSO discharges to Jamaica Bay. The phased plan for the 26th Ward tributaries includes: Phase I includes cleaning of sewers in the 26th Ward drainage area and interim dredging of the head-end of Hendrix St Canal. Subsequent phases include development of waterbody/watershed plans for the 26th Ward tributaries under the Citywide Long Term Control Plan for CSO and expansion of the wet weather capacity of the 26th Ward WWTP by 50 MGD.

In addition to the facility plan recommendations, the existing Spring Creek Auxiliary WWTP has been upgraded. The project was developed under another program, but was subsequently listed as a recommended project in the Jamaica Bay CSO Abatement Facility Plan. The Spring Creek AWPCP is a CSO facility that receives flow from the Autumn Avenue Regulator in Brooklyn and the 157th Avenue Regulator in Queens. The flow is conveyed to the plant through six barrels and is distributed to six basins. If stored flow reaches an elevation of 1.0, the 24 effluent sluice gates at the effluent end of each of the basins open, allowing flow to be discharged to Spring Creek.

The key components of the Spring Creek AWPCP upgrade include lowering the roof and providing enhanced HVAC and odor control systems, improved chemical systems, and new basin wash down systems.

In order to resolve remaining outstanding requirements of the omnibus Order on Consent dated June 18, 1999 (#R2-0045-93-05, the "Omni IV Order"), DEP and DEC agreed to include the Rockaway Omni IV Order in the 2008 modification to the 2005 CSO Consent. This requires the design of flow upgrades and construction of all necessary facilities to ensure that the Rockaway WWTP and associated sewer system is capable of delivering accepting, and treating influent at or above twice the plant's design flow during any storm event.

Work Performed During This Quarter

Design

- Expansion of 26th Ward WWTP Capacity
  - DEP has requested modification of the milestone for final design completion to December 2010 to allow more time to develop alternative wet weather and sewer optimization strategies.
  - DEP made a presentation related to this modification during the September 2010 CSO Technical Meeting.
  - **On October 1, 2010 DEC issued a Notice of Violation on the milestone for the 26th Ward Wet Weather Expansion, Final Design, Submit Form 2A SPDES Application. DEP responded to the NOV on October 8, 2010.**

- **On December 30, 2010 DEP submitted a feasibility plan for the wet weather expansion in accordance with the commitment made in the May 5, 2010 "omni" modification request letter. DEP proposed replacing the wet weather expansion with a combination of high level sewer separation and green infrastructure. A technical memo was provided evaluating these alternatives.**

Construction

- Spring Creek AWPCP Upgrade
  - The certification of construction completion was sent to DEC in April 2007 in satisfaction with the milestone.
- 26th Ward Drainage Area Sewer Cleaning and Evaluation
  - DEP Certified Construction Completion of the 26th Ward Drainage Area Sewer Cleaning on May 17, 2010. A Final Inspection meeting was held with DEC personnel on June 28, 2010. **A follow-up inspection occurred on October 5, 2010, and DEC accepted the Certificate of Construction Completion on December 13, 2010.**
- Hendrix Street Canal Dredging
  - Shop drawing submittals, including the Environmental Health and Safety Plan were reviewed.
  - A silt curtain was installed downstream of the project area and the dewatering barge was fabricated, transported and moored at the DEP pier. Supply and return piping was installed and the hydraulic dredge was mobilized to the project site.
  - Production dredging was initiated at the head end of the Hendrix Street Canal.
  - A barge mounted mechanical excavator was mobilized to the project site and began removal of CSO sediment along the eastern bank of the Hendrix Street Canal.
  - **The Department approved modifications to the dredging plan, to include the installation of a booster pump and bypass scow, to allow for increased production dredging.**

Missed/Modified Milestones

- Dredging
  - The Notice to Proceed to Construction milestone was modified to February 2010 and the Construction Completion milestone to February 2012 for the Hendrix Street Canal Interim Dredging Project.
- Expansion of 26th Ward WWTP Capacity
  - On May 5, 2010 DEP request a modification of the Wet Weather Expansion (XII.F) and associated milestones, deferring the next milestone (final design completion, June 30, 2010) until December 2010. Regulatory, constructability, and cost issues may render the expansion infeasible. DEP requested the deferral to provide more time to develop

alternative wet weather and sewer optimization strategies and to complete designs associated with portions of the wet weather expansion that have other operational benefits. DEP also committed to submitting an updated modification request along with a detailed justification 60 days prior to the requested milestone extension date – October 31, 2010. **DEP submitted a feasibility plan for the wet weather expansion in accordance with this commitment on December 30, 2010.**

Anticipated Activities for Next Quarter

- Dredging
  - Continue removal of CSO sediments via hydraulic dredging and placement of clean sand cap in first acceptance area.
- Expansion of 26th Ward WWTP Capacity
  - ♦ Continue to develop an alternate, cost-effective strategy for increasing wet weather capture at 26th Ward.

Table 17 – Jamaica Bay CSO Projects

Plan Elements:	Dredging	26th Ward Drainage Area Sewer Cleaning and Evaluation	Expansion of 26th Ward WWTP Capacity	Spring Creek Upgrade	Rockaway WWTP Conveyance Improvements
Location:	Phase I- Interim Dredging of Hendrix Street Canal	Phase I-Portions of sewers in Williams, Hegeman and Flatlands Avenues	Phase IV- 26th Ward WWTP, Brooklyn	Spring Creek, Brooklyn	Rockaway WWTP, Brooklyn
Actions:	Removal of CSO sediment mounds from the head end of the Hendrix Street Canal	Contractor initiated work August 2008	Increase wet weather capacity by 50 mgd	Upgrade of existing CSO facility	Improve collection system and WWTP capacity to achieve 2DDWF
Project Cost:	$13.2 million	$3.88 million		$87 million	TBD
Status:	**Construction 9% complete**	100% Complete	Alternative approaches under evaluation	100% complete	Construction Completion in December 2017
Other Issues:	Notice to Proceed to Construction and Construction Complete Milestones dates have been modified by the DEC to Feb 2010 and Feb 2012, respectively.	-	**Feasibility Plan submitted to DEP 12/30/10**	-	Construction Completion in December 2017

3.13. Citywide Comprehensive Floatables Plan

Work Performed During This Quarter

- The floatables monitoring program completed its transition from a pilot phase to a full scale program as of February 2008. **In the fourth quarter of 2010, floatables-monitoring activities have continued as part of the following ongoing programs:**
    - Harbor Water Quality Survey: **DEP continued floatables monitoring incorporated into existing cruise schedules at roughly 50 sites.**
    - Public Participation: The Public Participation component is conducted by the New York City Beach Floatables Survey Program (Survey Program), a volunteer group that has been performing counts of beach floatables for several years. **Data collected during the warm-weather season monitoring at roughly 50 sites was compiled for analysis.**
    - Long Term Control Plan post construction compliance monitoring (PCM): Floatables monitoring is conducted as part of the PCM for the LTCP facilities that are on line (i.e., Flushing Bay and Spring Creek CSO retention facilities). **DEP summarizes collected-floatables information for these facilities in monthly reports that are provided to the State.**
    - Environmental Benefit Shoreline Cleanup Program –This program 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 (the Nitrogen Consent Judgment). During the summer of 2010, there were 103 cleanup events where a crew of 50 manually cleaned visible debris from City beaches. A total of 10 beach locations were each cleaned once every one to two weeks on average. **This warm weather program was not continued in the fourth quarter.**
- **Analysis of floatables monitoring data collected during 2010 is ongoing. Results of these investigations will be presented in an Annual Report on April 1, 2011**.

Missed/Modified Milestones

- There are no missed milestones.

Anticipated Activities for Next Quarter

- **Continued analysis of data collected through the floatables-monitoring program activities, and preparation of an annual report.**

3.14. Environmental Benefits Projects

These projects were 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. The 2008 Modification to the CSO Consent Order requires not less than four million dollars ($4,000,000) worth of DEP-funded Environmental Benefit Projects (EBPs) designed to abate CSOs and/or address wet weather water quality impacts of CSOs and to benefit the waters in and around New York City. The 2008 Order further stipulates that the Quarterly Reports required by Section IV of the 2005 CSO Order shall include a report on the status of these EBPs and funds expended on the EBPs during the prior quarter, including 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.

DEP submitted an approvable CSO EBP Plan to DEC in March 2008 that included the implementation of a suite of stormwater management techniques for the Bronx, Flushing, and Gowanus watersheds. The status of these programs is summarized below. The March 2008 EBP Plan was approved April 28, 2008.

Work Performed During This Quarter

Bronx River

- **Drexel University and EDesign Dynamics have completed their review of the proposed contract submitted by DEP,and have accepted and incorporated specific contract language to be more consistent with the objectives of the EBP. EDesign is currently modifying several of the design elements to better reflect the allocated budget and monitoring requirements of the EBP. DEP Legal has also completed their review and accepted recommendations by Drexel University and EDesign to the contract language. At this point, contract is anticipated to be signed in the first quarter of 2011.**
- **The stormwater BMP contractor used under the Nitrogen Consent Order stormwater BMP installation has been selected for this work. He has prepared cost estimates for the various green infrastructure technologies that will be used for this project. The construction costs are consistent with other bidders and has a proven track record in the installation and design of similar stormwater BMPs.**

Flushing Creek

- **With the exception of one grantee, DEP Legal has completed their review of the proposed contracts. A subcontractor on the Regional Plan Association's team has raised issues with specific contract language that DEP Legal and Corp Counsel are actively addressing and we anticipate a resolution shortly. Other grantees, including Manhattan College, Columbia University and Unisphere are currently modifying several of their design elements to better reflect the allocated budget and monitoring requirements of the EBP. These contracts are anticipated to be signed in the first quarter of 2011.**

Gowanus Canal

- **DEP Legal has completed their review of the proposed contract from the Gowanus Canal Conservancy. They are currently modifying several of their design elements to better reflect the allocated budget and monitoring requirements of the EBP. This contract is anticipated to be signed in the first quarter of 2011.**

DEC US Forestry Service Grant

- **Gaia and YMPJ visited project site to discuss schedule and plans for construction for the Bronx tree pits.**
- **Riverkeeper and Parks working together to find a suitable project location.**

Anticipated Activities for Next Quarter

Bronx River

- **After signing contract with EDesign and processing their start-up invoice funding, we expect to begin work on plans and specifications of the proposed work.**

Flushing Creek

- **After signing contracts with Columbia University, Manhattan College, Unisphere, Regional Plan Association and processing their start-up invoice funding, we expect to begin work on plans and specifications of the proposed work.**

Gowanus Canal

- **After signing contract with Gowanus Canal Conservancy and processing their start-up invoice funding, we expect to begin work on plans and specifications of the proposed work.**

DEC US Forestry Service Grant

- **Riverkeeper will select a final location for the Newtown Creek project. Project coordination and design work will begin once location is selected. Project design work must be completed by March 31, 2011.**
- **Gaia will finalize design modifications and make all necessary steps to begin construction of the tree pits in the spring.**
- **Drexel work is completed.**

Table 18 – 2008 Modified CSO Consent Order Environmental Benefits Projects

Plan Elements:	***Bronx River***	***Flushing Bay and Creek***	***Gowanus Canal***	***DEC US Forestry Service Grant***
Location:	HP-009 service area	**Multiple areas**	**6th St / 2nd Ave, Brooklyn**	Bronx River and Newtown Creek CSO-Sheds
Description:	Stormwater BMP evaluations	Manhattan College New York Hospital Green roof ($660,440); Columbia University Rego Park Green Streets ($389,187); RPA bioretention basins under the LIE ($600,000); Unisphere treatment wetlands and rain gardens for Meadow Lake ($386,551)	Gowanus Canal Conservancy 6th Street Green Corridor Project	Evaluation of three tree pit types in the HP-009 area in the Bronx; Green infrastructure installation in Newtown Creek CSO shed; Open source access for Drexel University's LIDRA model; Education and stewardship activities in the HP-009 area.
Cost:	Budget: $850,000 Cost to date: $0 This Qtr: $0 Next Qtr: **$75,000**	Budget: $2,036,178 Cost to date: $0 This Qtr: $0 Next Qtr: **$300,000**	Budget: $583,470 Cost to date: $0 This Qtr: $0 Next Qtr: **$75,000**	Budget: $250,000 Cost to date: $161,751 This Qtr: $3,258 Next Qtr: $45,000
Status:	**Grantees incorporated language consistent with EBP objectives into contract. Grantee modifying design to address EBP budget and monitoring requirements. Contract anticipated to be signed in the first quarter of 2011**.	**DEP Legal contract review completed. Grantees modifying designs to address EBP budget and monitoring requirements. Contracts anticipated to be signed in the first quarter of 2011.**	**DEP Legal contract review completed. Grantee modifying design to address EBP budget and monitoring requirements. Contracts anticipated to be signed in the first quarter of 2011.**	LIDRA model completed; Tree pit design complete; Newtown Creek CSO-Shed GI site selection ongoing.
Other Issues:		**Regional Plan Association subcontractor raised issues with specific contract language. DEP Legal and Corp Counsel are addressing and resolution is anticipated.**		All letter agreements are in place with Gaia, Riverkeeper, Drexel and YMPJ.

4.0 Compliance Status

4.1. Unresolved Delays

See **Section 7.0**, Other Issues.

4.2. Compliance Charts

The following table summarizes the milestone dates developed in the draft Consent Order and updates available through **September 2010**:

Table 19 – Consent Order Milestone Dates

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
I. Alley Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Approvable Additional Modified Facility Plan Report	-	Feb 2004	100
3. Submit Form 2A SPDES Application	-	Jun 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Alley Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
2. Submit Approvable East River Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Outfall and Sewer System Improvements			
1. Initiate Final Design	May 1996	-	100
2. Final Design Completion Including CPM Analysis	-	Mar 2002	100
3. Notice to Proceed to Construction	Dec 2002	-	100
4. Construction Completion	-	Dec 2006	100
D. CSO Retention Facility			
1. Initiate Final Design	May 1996	-	100
2. Final Design Completion Including CPM Analysis	-	Dec 2005	100
3. Notice to Proceed to Construction	Dec 2006	-	100
4. Construction Completion	-	Dec 2009[(1)]	**98**
E. Drainage Basin Specific LTCPs			
1. Submit Approvable Drainage Basin Specific LTCP for	-	Apr 29 2010	50

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
Alley Creek			
2. Submit Approvable Drainage Basin Specific LTCP for East River	-	6 mos. after approval of II.B.1.	50
II. Outer Harbor CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Open Waters Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Regulator Improvements - Fixed Orifices			
1. Initiate Final Design	Jan 2004	-	100
2. Final Design Completion Including CPM Analysis	-	Apr 2005	100
3. Notice to Proceed to Construction	Feb 2006	-	100
4. Construction Completion	-	Jul 2008	100
D. Regulator Improvements – Automation			
1. Initiate Final Design	Feb 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 2006	100
3. Notice to Proceed to Construction	Nov 2007	-	100
4. Construction Completion	-	Jun 2010	**100**
E. Port Richmond Throttling Facility			
1. Initiate Final Design	Jun 2004	-	100
2. Final Design Completion Including CPM Analysis	-	Aug 2005	100
3. Notice to Proceed to Construction	Jun 2006	-	100
4. Construction Completion	-	Nov 2009	100
F. Submit Approvable Drainage Basin Specific LTCP for Open Waters	-	6 mos. after approval of II.B.1.	50
III. Inner Harbor CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100

ITEM DESCRIPTION		START DATE	DUE DATE	% COMPLETE
	2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
B. Comprehensive Watershed Planning				
	1. Submit Approvable Gowanus Canal Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Regulator Improvements - Fixed Orifices				
	1. Initiate Final Design	Mar 2000	-	100
	2. Final Design Completion Including CPM Analysis	-	Sep 2002	100
	3. Notice to Proceed to Construction	Feb 2003	-	100
	4. Construction Completion	-	Apr 2006	100
D. Regulator Improvements – Automation				
	1. Initiate Final Design	Feb 2005	-	100
	2. Final Design Completion Including CPM Analysis	-	Nov 2006	100
	3. Notice to Proceed to Construction	Nov 2007	-	100
	4. Construction Completion	-	Jun 2010	**100**
E. In-Line Storage				
	1. Initiate Final Design	Jul 2005	-	100
	2. Final Design Completion Including CPM Analysis	-	Nov 2006	100
	3. Notice to Proceed to Construction	Aug 2007	-	100
	4. Construction Completion	-	Aug 2010	100
F.	Submit Approvable Drainage Basin Specific LTCP for Gowanus Canal	-	Jan 2011	50
G.	Flushing Tunnel Modernization			
	1. Notice to Proceed to Construction	Feb 2010	-	100
	2. Construction Completion	-	Sep 2014	**20**
H.	Gowanus Pump Station Reconstruction			
	1. Notice to Proceed to Construction	Feb 2010	-	100
	2. Construction Completion	-	Sep 2014	**20**
I.	Dredging of Gowanus Canal			
	1. Submittal of All Dredging Permit Applications	Dec 2010		-
	2. Notice to Proceed with Dredging		TBD[(2)]	-

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
3. Complete Dredging		TBD[2]	-
IV. Paerdegat Basin CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
3. Submit Form 2A SPDES Application	-	Jul 2002	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Paerdegat Basin Waterbody / Watershed Facility Plan Report	-	Mar 2003	100
C. Influent Channel			
1. Initiate Final Design	Oct 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Mar 1997	100
3. Notice to Proceed to Construction	Feb 1999	-	100
4. Construction Completion	-	Feb 2002	100
D. Foundations and Substructures			
1. Initiate Final Design	Oct 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Aug 2001	100
3. Notice to Proceed to Construction	Jun 2002	-	100
4. Construction Completion	-	Dec 2009	100[3]
E. Structures and Equipment			
1. Initiate Final Design	Oct 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 2004	100
3. Notice to Proceed to Construction	Sep 2005	-	100
4. Construction Completion	-	May 2011	88
F. Submit Approvable Drainage Basin Specific LTCP for Paerdegat Basin	-	Nov 2005	100
Dredging of Paerdegat Basin			
Submit Joint Application Permit to USACE and DEC to associated with dredging at the head-end and mouth of Paerdegat Basin	-	Dec 2008	100
1. Initiate Final Design	Sep 19, 2010	-	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Complete Final Design	-	Sep 19, 2011	-
3. Notice to Proceed with Dredging	Mar **19, 2013**	-	-
4. Complete Dredging	-	Mar 19, 2015	-
V. Flushing Bay CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
3. Submit Form 2A SPDES Application	-	Jun 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Flushing Bay Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
2. Submit Approvable Flushing Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. CS4-1 Reroute and Construct Effluent Channel			
1. Initiate Final Design	Oct 1992	-	100
2. Final Design Completion Including CPM Analysis	-	Sep 1994	100
3. Notice to Proceed to Construction	Jun 1995	-	100
4. Construction Completion	-	Jun 1996	100
D. CS4-2 Relocate Ballfields			
1. Initiate Final Design	Oct 1992	-	100
2. Final Design Completion Including CPM Analysis	-	Sep 1994	100
3. Notice to Proceed to Construction	Apr 1995	-	100
4. Construction Completion	-	Aug 1995	100
E. CS4-3 Storage Tank			
1. Initiate Final Design	Dec 1993	-	100
2. Final Design Completion Including CPM Analysis	-	Sep 1996	100
3. Notice to Proceed to Construction	Jul 1997	-	100
4. Construction Completion	-	Aug 2001	100
F. CS4-4 Mechanical Structures - Initiate Final Design			
1. Initiate Final Design	Dec 1993	-	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Final Design Completion Including CPM Analysis	-	Feb 2000	100
3. Notice to Proceed to Construction	Mar 2002	-	100
4. Construction Completion	-	Sep 2009	100
G. CS4-5 Tide Gates			
1. Initiate Final Design	Aug 1998	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 1999	100
3. Notice to Proceed to Construction	Dec 2000	-	100
4. Construction Completion	-	Apr 2002	100
H. CD-8 Manual Sluice Gates			
1. Final Design Completion Including CPM Analysis	-	May 2003	100
2. Notice to Proceed to Construction	Feb 2004	-	100
3. Construction Completion	-	Jun 2005	100
I. Drainage Basin Specific LTCPs			
1. Submit Approvable Drainage Basin Specific LTCP for Flushing Bay	-	6 mos. after apprvl. of V.B.1.	50
2. Submit Approvable Drainage Basin Specific LTCP for Flushing Creek	-	6 mos. after apprvl. of V.B.2.	50
J. Tallman Island WWTP and associated sewer system are capable of delivering, accepting and treating influent at or above twice the plant's design flow during any storm event			
1. Initiate Final Design	Dec 2007	-	100
2. Final Design Completion including CPM Analysis	-	Dec 2010	100
3. Notice to Proceed to Construction	Dec 2011	-	-
4. Construction Completion	-	Jul 2015	-
B1. Flow Meters (2009 Modification, Appendix B)			
a) Submit flow metering protocols	-	Jul 2009	100
b) Include effluent overflow volumes in monthly reports	-	Within 60 days of DEC approval of 1(a)	-
B2. Odor Control System (2009 Modification, Appendix B)			
a) Apply to register CBS & for inspection variance	-	Sep 2009	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
b) Certify completion of start-up and testing	-	Jun 2009	100
c) Demonstrate system to DEC using water	-	Sep 2009	100
d) Certify construction completion	-	Sep 2009	100
B3. Bar Screens (2009 Modification, Appendix B)			
a) Report on repairs and modifications	-	Jun 2009	100
b) Demonstrate full operation to DEC	-	Sep 2009	100
B4. Tallman Island Regulator 9 (2009 Modification, Appendix B)			
a) Submit report describing telemetry/SCADA systems	-	May 2009	100
VI. Jamaica Tributaries CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr 2003	100
2. Submit Additional Modified Facility Plan Report	-	Feb 2004	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Bergen Basin Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
2. Submit Approvable Thurston Basin Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Meadowmere & Warnerville DWO Abatement			
1. Initiate Final Design	Jan 2004	-	100
2. Final Design Completion Including CPM Analysis	-	May 2005	100
3. Notice to Proceed to Construction	Jun 2006	-	100
4. Construction Completion	-	Jul 2009	100
D. Expansion of Wet Weather Capacity of Jamaica WWTP			
1. Initiate final Design	Jun 2009	-	-
2. Submit Form 2A SPDES Application	-	Jun 2010	-
3. Final Design Completion Including CPM Analysis	-	Jun 2011	-
4. Notice to Proceed to Construction	Jun 2012	-	-
5. Construction Completion	-	Jun 2015	-
E. Destratification Facility			
1. Initiate Final Design	Jan 2006	-	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Final Design Completion Including CPM Analysis	-	Dec 2007	100
3. Notice to Proceed to Construction	Sep 2010	-	-
4. Construction Completion	-	Mar 2012	-
F. Laurelton and Springfield Blvd.			
1. Submit Drainage Plan for Storm Sewer Build-out (extension granted by DEC letter, 2/29/08)	-	May 2008	100
G. Regulator Automation			
1. Initiate Final Design	Feb 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Nov 2006	100
3. Notice to Proceed to Construction	Nov 2007	-	100
4. Construction Completion	-	Jun 2010	**100**
H. Drainage Basin Specific LTCPs			
1. Submit Approvable Drainage Basin Specific LTCP for Bergen Basin	-	Aug 2012	50
2. Submit Approvable Drainage Basin Specific LTCP for Thurston Basin	-	Aug 2012	50
VII. Coney Island Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Coney Island Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Avenue V Pumping Station Upgrade			
1. Initiate Final Design	Apr 1998	-	100
2. Final Design Completion including CPM Analysis	-	Jan 2005	100
3. Notice to Proceed to Construction	Nov 2005	-	100
4. Construction Completion	-	Apr 2011	**60**
D. Avenue V Force Main			
1. Initiate Final Design	Apr 1998	-	100
2. Final Design Completion Including CPM Analysis	-	Sep 2006	100
3. Notice to Proceed to Construction	Jul 2007	-	100
4. Construction Completion	-	Jun 2012	**97**

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
E. Submit Approvable Drainage Basin Specific LTCP for Coney Island Creek	-	Jan 2011	50
VIII. Newtown Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Oct 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Newtown Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Aeration Zone I			
1. Initiate Final Design	Mar 2001	-	100
2. Final Design Completion Including CPM Analysis	-	Dec 2004	100
3. Notice to Proceed to Construction	Dec 2005	-	100
4. Construction Completion	-	Dec 2008	100
D. Aeration Zone II			
1. Initiate Final Design	Jun 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010	20
3. Notice to Proceed to Construction	Jun 2011	-	-
4. Construction Completion	-	Jun 2014	-
E. Relief Sewer / Regulator Modification			
1. Initiate Final Design	Jun 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2009	10
3. Notice to Proceed to Construction	Jun 2010		-
4. Construction Completion	-	Jun 2014	-
F. Throttling Facility			
1. Initiate Final Design	Dec 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2008	100
3. Notice to Proceed to Construction	Jun 2009	-	100
4. Construction Completion	-	Dec 2012	90
G. CSO Storage Facility			
1. Initiate Final Design	Nov 2010	-	-

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Submit Form 2A SPDES Application	-	Nov 2013	-
3. Final Design Completion Including CPM Analysis	-	Nov 2014	-
4. Notice to Proceed to Construction	Dec 2015	-	-
5. Construction Completion	-	Dec 2022	-
H. Submit Approvable Drainage Basin Specific LTCP for Newtown Creek	-	Feb 2016	50
IX. Westchester Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr 2003	100
2. Submit Form 2A SPDES Application	-	Submit with final design plans & specs[4]	-
B. Comprehensive Watershed Planning			
1. Submit Approvable Westchester Creek Waterbody / Watershed Facility Plan Report	Jul 2004	Jun 2007	100
C. Phase I (Influent Sewers)			
1. Initiate Final Design	Jan 2004	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010	20
3. Notice to Proceed to Construction	Jun 2011	-	-
4. Construction Completion	-	Jun 2015	-
D. CSO Storage Facility			
1. Notice to Proceed to Construction	Dec 2015	-	-
2. Construction Completion	-	Dec 2022	-
E. Submit Approvable Drainage Basin Specific LTCP for Westchester Creek	-	Feb 2016	50
X. Bronx River CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Sep 2003	100
2. Submit Additional Modified Facility Plan Report	-	Mar 2004	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Bronx River Waterbody / Watershed Facility Plan Report	-	Jun 2007	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
C. Floatables Control			
1. Initiate Final Design	Jan 2006	-	100
2. Final Design Completion Including CPM Analysis	-	Jul 2008	100
3. Notice to Proceed to Construction	Jun 2009	-	100
4. Construction Completion	-	Jun 2012	**28**
D. Submit Approvable Drainage Basin Specific LTCP for Bronx River	-	**Jun 2014**[(5)]	50
XI. Hutchinson River CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Jul 2003	100
2. Submit Form 2A SPDES Application	-	Submit with final design plans & specs[(4)]	-
B. Comprehensive Watershed Planning			
1. Submit Approvable Hutchinson River Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Phase I of the Storage Facility			
1. Initiate Final Design	Apr 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010	10
3. Notice to Proceed to Construction	Jun 2011	-	-
4. Construction Completion	-	Jun 2015	-
D. Future Phases			
1. Notice to Proceed to Construction	Dec 2016	-	-
2. Construction Completion	-	Dec 2023	-
E. Submit Approvable Drainage Basin Specific LTCP for Hutchinson River	-	Feb 2017	50
XII. Jamaica Bay CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Dec 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Jamaica Bay Waterbody / Watershed Facility Plan Report	-	Jun 2007	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Submit Approvable Spring Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
3. Submit Approvable Fresh Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
4. Submit Approvable Hendrix Creek Waterbody / Watershed Facility Plan Report	-	Jun 2007	100
C. Spring Creek AWPCP Upgrade			
1. Initiate Final Design	Apr 1998	-	100
2. Final Design Completion Including CPM Analysis	-	Feb 2002	100
3. Submit Form 2A SPDES Application	-	Jun 2003	100
4. Notice to Proceed to Construction	Mar 2003	-	100
5. Construction Completion	-	Apr 2007	100
D. 26th Ward Drainage Area Sewer Cleaning and Evaluation			
1. Initiate Final Design	Jan 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2007	100
3. Notice to Proceed to Construction	-	Jun 2008	100
4. Construction Completion	-	Jun 2010	100
E. Hendrix Creek Dredging			
1. Initiate Final Design	Jan 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2007	100
3. Notice to Proceed to Construction	Feb 2010	-	100
4. Construction Completion	-	Feb 2012	**9**
F. 26th Ward Wet Weather Expansion			
1. Initiate Final Design	Jun 2006	-	100
2. Final Design Completion Including CPM Analysis	-	Jun 2010	15
3. Submit Form 2A SPDES Application	-	Submit with final design plans & specs[(4)]	-
4. Notice to Proceed to Construction	Jun 2011	-	-
5. Construction Completion	-	Dec 2015	-
G. Drainage Basin Specific Long Term Control Plans			

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
1. Submit Approvable Drainage Basin Specific LTCP for Jamaica Bay	-	Aug 2012	50
2. Submit Approvable Drainage Basin Specific LTCP for Spring Creek	-	Aug 2012	50
3. Submit Approvable Drainage Basin Specific LTCP for Fresh Creek	-	Aug 2012	50
4. Submit Approvable Drainage Basin Specific LTCP for Hendrix Creek	-	Aug 2012	50
H. Rockaway WWTP Conveyance Improvements		Dec 2017	-
XIII. Citywide Comprehensive Floatables Plan			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Dec 2004	100
XIV. Submit Approvable City-Wide LTCP			
	-	Dec 2017	-

Notes: (1) A modification to the completion date from 12/31/2009 to 11/10/2010 was submitted to DEC on 10/30/ 2009. (2) Dredging NTP 3 years from effective date of permit; completion within 5 years of EDP. (3) CSO Consent Order elements completed and a Certification of Construction Completion has been submitted. (4) A modification request to the submittal date of Form 2A was submitted to DEC on 6/29/2010. **(5) A modification was requested to extend the completion date from 11/31/11 to 6/30/14 on 11/29/10.**

5.0 Community Relations

No public meetings were held during the Fourth Quarter of 2010.

6.0 Key Personnel Changes

No key personnel changes occurred during the Fourth Quarter of 2010.

7.0 Other Issues

The following action items were identified during the **December 2, 2010** CSO Quarterly Meeting:

	Action Item	Response	Target Date	Status
1	**Alley Creek – DEC to provide response to proposed scope of work required for construction completion**	***DEP submitted proposed scope 7/1/2010***	**No Target Date Established**	**Under Development**
2	**Inner Harbor – DEP, DEC Legal to provide notification when In-Line Storage project is ready for final inspection.**	***DEP is resolving some internal issues***	**No Target Date Established**	**Ongoing coordination**
3	**Inner Harbor – DEP/DEC Legal to respond to modification request for extension for submittal date for Gowanus Canal dredging permit application**	***DEC approved the request on 12/15/2010***	**No Target Date Established**	**Complete**
4	**Paerdegat Basin – DEC to provide response to proposed scope of work required for construction completion**	***DEP submitted proposed scope 11/5/2010***	**No Target Date Established**	**Under Development**
5	**Paerdegat Basin – DEP to submit application for variance**	***DEP submitted on 12/30/2010***	**No Target Date Established**	**Complete**
6	**Flushing Bay and Creek – DEP to provide V-E report for Tallman Island sewer system improvements**	***DEP submitted on 12/29/2010***	**12/31/10**	**Complete**
7	**Flushing Bay and Creek – DEP to send email requesting extension until 1/31/11 for submittal of technical report on Flushing CSO Tank flow measuring / monitoring**	***DEC approved DEP's email request***	**No Target Date Established**	**Complete**
8	**Flushing Bay and Creek – DEP to recommend alternatives for public participation for approval of Flushing Creek WWFP**	***Ongoing coordination***	**12/31/2010**	**Ongoing coordination**
10	**Jamaica Tribs – DEC Region 2 to provide approval letter for connection of clean condensate to onsite stormwater collection box for Destratification Facility**	***DEC emailed on 10/7/2010 that formal approval would be sent to DEP.***	**No Target Date Established**	**Under Development**
11	**Coney Island Creek – DEP to submit modification request to align completion milestones for Ave V PS and FM**	***DEP will prepare and submit 60 days before milestone***	**2/28/2011**	**Under Development**
12	**Jamaica Bay – DEP to submit feasibility study of alternatives for 26th Ward Wet Weather Expansion**	***DEP submitted on 12/30/2010***	**12/31/10**	**Complete**

	Action Item	Response	Target Date	Status
13	**Jamaica Bay – DEP/DEC to conduct telecom to discuss feasibility study of alternatives for 26th Ward WWE**	***To be discussed at the next technical meeting***	**No Target Date Established**	**Ongoing coordination**
14	**Jamaica Bay – DEC to submit approval of certification of construction completion for 26th Ward sewer cleaning**	***DEC approved the certification on 12/13/2010***	**12/13/10**	**Complete**
15	**EBPs – DEC/DEP Legal to confirm grantee for NHT funds – conduct telecom**	***Teleconference held***	**12/3/10**	**Complete**
16	**LTCP – DEP to submit draft goal statement and outline for developing new baselines for LTCPs or request meeting to interpret MOU if needed**	***DEP submitted to DEC by email***	**12/13/10**	**Complete**
17	**Consent Order General – DEP to confirm date for next meeting on CSO CO discussions**	***Teleconference on Consent Order held 12/15/10***	**12/20/10**	**Complete**

8.0 Status of LTCP Development

According to the Order, the reporting on the progress of the Drainage Basin Specific LTCP and Waterbody/Watershed Plan development shall be included in the first and third quarterly reports of each calendar year beginning in the year 2005 and continuing until all Appendix A requirements have been completed and approved.

APPENDIX A

CONSENT ORDER CERTIFICATION LETTERS

NYC Environmental Protection

Caswell F. Holloway
Commissioner

Vincent Sapienza, P.E.
Deputy Commissioner
Bureau of Wastewater Treatment
vsapienza@dep.nyc.gov

96-05 Horace Harding Expressway
Corona, NY 11368
Tel. (718) 595-4906
Fax (718) 595-6950

December 30, 2010

Mr. Joseph DiMura, P.E.
Director
Bureau of Water Compliance
New York State Department of Environmental Conservation
625 Broadway, 4th Floor
Albany, NY12233-3506

Re: Order on Consent (CSO Order)
DEC Case #CO2-20000107-8
Appendix A,

II. Outer Harbor CSO, D. Regulator Improvements – Automation, 4. Construction Complete;

III. Inner Harbor CSO, D. Regulator Improvements – Automation, 4. Construction Complete; and

VI. Jamaica Tributaries CSO, G. Regulator Automation, 4. Construction Complete

Certification of Construction Completion

Dear Mr. DiMura:

In accordance with paragraph III.F of the above referenced Order on Consent (the "Order"), this letter certifies compliance by the New York City Department of Environmental Protection ("DEP") with the milestones proposed in DEP's April 30, 2010 modification request. The Order milestone date associated with completion of each of the three projects named above is June 30, 2010 and the modified milestone date requested is December 31, 2010.

The SCADA System has been constructed and installed in accordance with the approved plans and specifications with one minor modification. At 16 of the 38 locations a wireless GPRS communication system had to be substituted for a regular phone line as a back up to the wireless primary CDMA communication system due to the configuration of the 16 regulators. Based on discussions with DEC at the monthly progress meeting held August 19, 2010 and during subsequent meetings where DEC was updated in the progress of this work, it was DEP's understanding that this modification was acceptable to DEC. The SCADA System has been placed into operation as December 29, 2010 to meet applicable Consent Order and SPDES permit requirements. The completion of remaining punch list work will not affect operation of the system. Please contact me at (718)-595-4906 if you have any questions regarding this certification.

Sincerely,

Vincent Sapienza P.E.
Deputy Commissioner
DEP Bureau of Wastewater Treatment

Copy to:

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DEP BWT:	V. Sapienza, J. Mueller, A. Maracic, R. LaGrotta, S. Rozelman, K. Mahoney, F. Kulcsar, L. Lee, S. Sewgobind, File
DEP BEDC:	K. Mallon; K. Donnelly
DEP Legal:	M. Eckels
H&S:	P. Young, T. Groninger, File

MEMORANDUM

TO: Vincent Sapienza, P.E.
Deputy Commissioner
Bureau of Wastewater Treatment

FROM: Stella Rozelman, P.E.
Division Chief – Collection Facilities Planning, Analysis and Engineering.
Project Director - REG-026: Installation of SCADA System of 38 Regulators CCFISS, Citywide Facility Collection.

DATE: December 29, 2010

SUBJECT: Certification of Construction Complete - DEC Case#CO2-20000107-8
Appendix A, II. Outer Harbor CSO, D. Regulator Improvements – Automation, 4. Construction Complete
Appendix A, III. Inner Harbor CSO, D. Regulator Improvements – Automation, 4. Construction Complete
Appendix A, VI. Jamaica Tributaries CSO, G. Regulator Automation, 4. Construction Complete

This memorandum provides certification that "REG-026 - Installation of SCADA System of 38 Regulators CCFISS, Citywide Facility Collection" equipment has been constructed in accordance with the approved plans and specifications. The SCADA System has been placed into operation as of December 29, 2010 to meet applicable DEC Consent Order requirements. The completion of all remaining punch list work will not affect the system operation.

This work has been constructed and made operational in accordance with Milestones II.D.4, III.D.4 and VI.G.4 in Appendix A of the above referenced Order.

(Seal)

(Sign) Project Director

Stella Rozelman

(Print)

12/29/2010

(Date)

MWH
MONTGOMERY WATSON HARZA

In Association With ARCADIS

Transmitted Via First Class Mail

December 29, 2010

Mr. Anthony Abbene
Project Manager
T. Moriarty & Son, Inc.
63 Creamer Street
Brooklyn, NY 11231

Re: Contract REG-026
Substantial Completion

Dear Mr. Abbene,

In accordance with Article 14 of the Standard Construction Contract, based upon final inspection of the work completed for the installation of this SCADA system including provisions for instrumentation and control upgrades at the 38 regulator locations, it has been determined that Contract REG-026 (Construction For Consent Order Regulator SCADA – City Wide Collection Facilities Integrated SCADA System (CCFISS)) is hereby Substantially Complete. Please see the attached punch-list.

All work performed shall be guaranteed for one (1) year from December 29, 2010 to December 29, 2011 in accordance with Article 24 of the Standard Construction Contract. It is expected that all punch list items will be completed prior to the Final Acceptance date of February 28, 2011.

If you have any questions regarding this matter, please do not hesitate to call me at 646-957-5499.

Yours truly,

Steven Bendoraitis, P.E.
Construction Manager

cc: Stella Rozelman, P.E. – NYCDEP
Frank Kulcsar – NYCDEP
Shri Sewgobind, P.E. – NYCDEP
Brian Lauro – VIP
Joe Frissora, P.E. – MWH
Rakesh Ghai - MWH
Vatche Minassian – ARCADIS
Vahid Kacila – ARCADIS

REG-026 - CCFISS Punch List - Updated 12/28/10
Contractor (TMS)

Site	Description	Contractor	Status
NCB-04	Repair Gate position indication - 4-20mA output does not correspond to gate position - Transdyn to provide OCC position signal configuration parameters	OCC/DEP Maintenance	Open
NCB-09	Instrumentation - Repair/replace Tide Gate chamber level sensor and/or transmitter - reading when new sensor connected to existing transmitter is inaccurate - **HAWK to be contacted by maintainance contractor**	OCC/DEP Maintenance	Open
NCM-16	Gate - Repair Gate position indication - 4-20mA output does not correspond to gate position - Transdyn to provide OCC position signal configuration parameters	OCC/DEP Maintenance	Open
OH-01	Gate - Repair Gate position indication - 4-20mA output does not correspond to gate position - Transdyn to provide OCC position signal configuration parameters	OCC/DEP Maintenance	Open
RH-20	Gate - Repair Gate position indication - 4-20mA output does not correspond to gate position - Transdyn to provide OCC position signal configuration parameters	OCC/DEP Maintenance	Open
RH-21	Instrumentation - Repair/replace Tide Gate chamber level sensor and/or transmitter - reading when new sensor connected to existing transmitter is inaccurate - **HAWK to be contacted by maintainance contractor**	OCC/DEP Maintenance	Open
SCADA	SCADA - ~~configure Win911~~ - complete configuration of email - coordination with DEP required	OCC	Open
SCADA	TMS/OCC to provide 3 Hawk Level Transmitters that were supplied by DEP Maintence Contractor	OCC/TMS	Open
SCADA	TMS/OCC to provide 1 Foxboro Condutivity Sensor and probe supplied by DEP Maintence Contractor	OCC/TMS	Open
Shop Dwg	SD138R3 - OCC O&M - ASCN and needs to be resubmitted to verify all comments are incorporated	OCC/TMS	Open
Shop Dwg	SD128R1 - Fiber Test Results - ASCN and needs to be resubmitted to verify all comments are incorporated	OCC/TMS	Open
Shop Dwg	SD171R2 - Training - ASCN and needs to be resubmitted to verify all comments are incorporated	OCC/TMS	Open

NYC Environmental Protection

Caswell F. Holloway
Commissioner

Vincent Sapienza, P.E.
Deputy Commissioner
Bureau of
Wastewater Treatment
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December 29, 2010

Mr. Joseph DiMura, P.E.
Director, Bureau of Compliance
New York State Department of
Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, NY 12233-3500

Re: **Order on Consent (CSO Order)**
DEC Case #CO2-20000107-8
Appendix A, V. Flushing Bay CSO
Certification of Final Design Completion of Tallman Island Wet Weather Maximization

Dear Mr. DiMura:

In accordance with Section III F of the above referenced Consent Order for Combined Sewer Overflow (Order), this letter is to certify completion of a final design milestone contained in Appendix A (Milestone V.J.2) for the Tallman Island Wet Weather Maximization project, by the New York City Department of Environmental Protection (DEP).

In accordance with the definition of design completion set forth in Section III, paragraph H (1) of the Order, approvable plans and specifications are enclosed for your review. Approvable plans and specifications are also being provided to Cheryle Webber of the NYS Environmental Facilities Corporation and DEC's Region 2 office. However, before DEC commences the review of DEP's design submittal DEP requests that DEC consider the information presented below and attached to this letter.

Recently, DEP has taken advantage of the opportunity to analyze data newly collected under the CSO BMP order in regards to soundings and inspections on the existing Flushing and Whitestone interceptors. This data has shown that there are key bottlenecks on the Whitestone and Flushing interceptors with significant amounts of sedimentation while areas downstream of the junction chamber are shown to be fairly clean (see attachments 1 and 2).

Based upon the collected data, DEP has revisited the hydraulics of the system (see attachments 3 and 4) and believes that instead of the parallel interceptor project, it may be more prudent to clean the sewers, confirm additional flow capacity to the plant, and develop a cost effective control strategy for the plant to optimize flow from this drainage area. To that end, BWT has developed a specification for sewer cleaning in the critical areas and will utilize an existing sewer cleaning contract to initiate work. It is anticipated that this cleaning will take 3-4 months. The impact of the sewer cleaning will be evaluated under a similar program as that performed under the 26th Ward sewer cleaning project with all analytical work projected to be

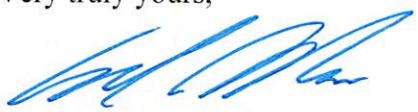
completed by August 2011. Concurrently, a cost effective control strategy will be investigated with an optimized implementation schedule. Preliminary analyses indicate that performing sewer cleaning in combination with modifications to regulators 10 and 13 and an effective control strategy at the treatment plant could yield equivalent benefits as a parallel interceptor.

The City recognizes that the timing of this proposed alternative is not optimum yet believes it is prudent to react to data that has recently become available and consider potential alternatives as opposed to going forward with a project that may not be cost-effective particularly in the current economic climate. As discussed on a phone call with DEC on December 20, 2010, it is the City's intent to perform the sewer cleaning and associated flow evaluation work as quickly as possible to determine the appropriate path forward. In the meantime, please note that, in the event further analysis indicates that the approach outlined above would yield benefits equivalent to a parallel interceptor, DEP may seek to modify the plans and specs to incorporate this new design, and may seek to delay the milestone for NTP if necessary to accommodate this work. It may be worthwhile for us to meet to review the hydraulics in more detail and discuss the alternatives being considered.

Please contact me at (718) 595-5045 to follow up with any questions. In the meantime, I will coordinate with your office to schedule a meeting with technical staff from DEC and DEP to review the alternatives described above.

Thanks in advance for your consideration.

Very truly yours,



Anthony Maracic, P.E.
Director
Capital Planning and Asset Management

Enc.

cc: w/attachments (CD + Hard Copy)
Cheryle Webber, P.E.
New York State Environmental
Facilities Corporation
625 Broadway, 7th Floor
Albany, New York 12207

Robert Elburn, P.E.
Regional Water Engineer
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H&S: P. Young, File

APPENDIX B
NYSDEC COMMENTS ON PREVIOUS QUARTERLY REPORT

NYS DEC Comments
Quarterly Report
3rd Quarter 2010

Report:

- Page 3-14, Table 5: Include dates for the dredging: NTP = 3/19/2013, Dredging Completion = 3/19/2015.

- Page 3-11, last bullet under Planning: The DEC sent comments on 8/13/2010 on the NY-2A and WWOP and DEP submitted revisions on 10/22/2010.

- Page 3-17: Include under Anticipated Activities for Next Quarter, Planning, an activity to submit the revised Flushing Bay WWFP.

- Page 3-17, Flow Metering bullet: Provide details on what is being done each quarter. Confirm when the data collection for this evaluation will be completed.

- Page 3-28: Include under Anticipated Activities for Next Quarter, Planning, an activity to submit the revised Newtown Creek WWFP and an activity Initiate Final Design for CSO Storage Facility.

- Page 3-31: Include under Anticipated Activities for Next Quarter, Planning, an activity to submit the revised Westchester WWFP.

- Page 3-33: Add that the Bronx River WWFP was approved by DEC on 7/27/2010.

- Page 3-39: Provide the aggregate quantity of sediments dredged for each quarter.

- Page 3-40: The final inspection activity scheduled for 10/5/2010 should be listed under 26th Ward Drainage Area Sewer Cleaning and Evaluation.

- Page 3-41: DEP should submit the 2010 invoice for shoreline cleanup to DEC for processing ASAP.

- Page 3-42: Add text regarding the $1.5 M EBP from the 2005 Order that resides with NHT.

- Page 4-4, IV.E.4: Reconcile the percent complete for construction reported in Table 5 and Table 19.

- Page 4-5, Dredging Paerdegat Basin: #3 NTP date is 3/19/2013.

- Page 4-11: Bronx LTCP due date is 1/27/2011.

Action Item List:

Item #6: There is no update provided in the report.

Items #10 and 11: These items are the same thing. Remove Gowanus Canal EBP from #10.