

# **Combined Sewer Overflow Order on Consent**

# **Quarterly Progress Report – Second Quarter 2009**



**July 2009** 



DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Bureau of Engineering Design & Construction JUL 29 2009

Mr. Joseph DiMura, P.E. Director Bureau of Water Compliance New York State Department of Environmental Conservation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3506

Re: Order on Consent (CSO Order)

DEC Case # CO2-20000107-8

Citywide CSO Program - Quarterly Report and Quarterly

**Meeting Minutes** 

Dear Mr. DiMura:

In accordance with Section IV, Paragraphs A-C of the above referenced Consent Order, the New York City Department of Environmental Protection hereby submits the Citywide CSO Quarterly Report for the period of April 1 through June 30, 2009.

Should you require further information, please contact me at (718) 595-6208.

Very truly yours,

Roy Tysvaer, P.E.

Director

Wastewater Treatment and Water Quality

RT/ka

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

CSO Order on Consent
DEC Case # CO2-20000107-8

QUARTERLY PROGRESS REPORT SECOND QUARTER 2009 (April 1 – June 30)

July 30, 2009

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# 1.0. Executive Summary

The Combined Sewer Overflow "CSO" Order on Consent, DEC Case # CO2-20000107-8 (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. 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 April 1, 2009 to June 30, 2009.

## **Critical Events This Quarter:**

The following critical events occurred this quarter:

- 1) The Gowanus Facilities Upgrades contracts have not been awarded due to USEPA's consideration of including Gowanus Canal on the National Priorities List for Superfund. The Notice to Proceed for the start of construction was scheduled to be issued by February 2010.
- 2) The NYCDEP issued the Notice to Proceed to Construction for the Bronx River Floatables Control Facilities project on June 18, 2009. Clarifications to the Plans and Specifications had been submitted to DEC May 22, 2009. The Certification of Notice to Proceed to Construction was sent to DEC on June 25, 2009. The Pre-Construction meeting was held on June 29, 2009.
- 3) DEP advertised the Hendrix Creek Dredging project for bids on May 20, 2009. The revised Post Dredge Monitoring Plan was submitted to, and approved by, the NYSDEC.
- 4) DEP requested a Modification to the Hendrix Creek Dredging milestones on June 15, 2009. The basis for the request is that DEP's previous request had been granted based on the date of issuance of DEP's Tidal Wetland Permit rather than from the effective date of approval of the Joint Application, which is the *de facto* limiting date for commencing dredging. The modification was granted June 30, 2009 and moved the Notice-to-Proceed Milestone from August 2009 to February 2010.
- 5) DEC provided written approval of DEP's April 7, 2009 Design Modification Request for the Inner Harbor Regulator Improvements Automation on April 15, 2009.
- 6) DEP issued a Notice of Force Majeure regarding changes to navigational conditions in Paerdegat Basin on June 10, 2009. A sand bar was identified near the mouth of Paerdegat Basin that could not be cleared with conventional construction and dredging barges. The removal of this obstruction requires modification to the existing dredging permits associated with Paerdegat Contract 4B.
- 7) On April 15, 2009 DEC approved the Modification Request that DEP submitted associated with the Meadowmere & Warnerville DWO Abatement Construction

Completion Milestone. Stipulations in that approval prompted DEP to submit a clarification of Construction Completion requirements on June 2, 2009. The modified construction completion milestone is July 31, 2009.

- 8) In a letter dated April 27, 2009, DEC approved a Modification Request made by DEP on June 9, 2008, related to the Notice to Proceed to Construction and Construction Completion Milestones for the Destratification Facility in Shellbank Basin. Pursuant to the Modification the new dates of the aforementioned Milestones are September 30, 2010 and March 30, 2012 respectively.
- 9) DEP issued Modification Requests for the submittal of NY2A SPDES applications associated with Westchester Creek and the Hutchinson River on April 29, 2009. Each request to change the date from June 2009 to one year prior to construction completion for the first facility proposed was denied by DEC in June 2009. The denial included DEC's expectation that the application would be submitted with the final design plans and specifications for the first facility designed under the WB/WS Facility Plan.
- 10) DEP issued Modification Requests for the submittal of NY2A SPDES applications associated with the 26<sup>th</sup> Ward WPCP upgrades on April 29, 2009. The request to change the date from June 2009 to one year prior to construction completion was denied by DEC in June 2009. The denial included DEC's expectation that the application would be submitted with the final design plans and specifications for the facility that are due on June 30, 2010.

# **Major Actions This Quarter:**

Table 1 presents the milestones that were met by DEP this quarter and Table 2 shows milestones that were postponed. For each milestone listed in Table 1 below, either met or postponed, written notification was submitted by DEP to DEC.

As stipulated by the Order, DEP and DEC held a Quarterly Progress Meeting on **June 5, 2009**. The meeting was held via teleconference to discuss issues related to the Order and review milestones met during the last quarter.

DEP continued to make progress in the planning, design and construction of its CSO facilities during this quarter, as documented in this report.

#### **Major Actions Next Quarter:**

The following major actions are expected to occur between July 2009 and September 2009:

- **♦** Schedule and hold the next Quarterly Progress Meeting between DEC and DEP.
- ♦ Solicitation of Bids and bid opening associated with Contract CSO-HC; Hendrix Street Canal Interim Dredging.

**Table 1 – Milestones This Quarter (Apr 2009 – Jun 2009)** 

Table 1 – Winestones This Quarter (Apr 2007 – 3un 2007)					
LOCATION/ PROJECT AREA	ITEM DESCRIPTION	ACTION REQUIRED	MILESTONE DATE	STATUS	
Jamaica Tributaries	Expansion of Wet Weather Capacity of Jamaica WPCP	Initiate Final Design	Jun 2009	Modification Request submitted Jun 2008; updated in Nov 2008	
Jamaica Tributaries	Destratification Facility	Notice to Proceed to Construction	Apr 2009	Milestone Modified to Sep 2010	
Newtown Creek	Relief Sewer / Regulator Modification	Final Design Completion Including CPM Analysis	Jun 2009	Modification Request submitted Apr 2009	
Newtown Creek	Throttling Facility	Notice to Proceed to Construction	Jun 2009	Modification Request submitted Apr 2009	
Westchester Creek	Facility Plan Development	Submit Form 2A SPDES Application	Jun 2009	Modification Request submitted Apr 2009; conditionally denied Jun 2009	
Bronx River	Floatables Control	Notice to Proceed to Construction	Jun 2009	NTP Issued Jun 2009	
Hutchinson River	Facility Plan Development	Submit Form 2A SPDES Application	Jun 2009	Modification Request submitted Apr 2009; conditionally denied Jun 2009	
Jamaica Bay	26th Ward Wet Weather Expansion	Submit Form 2A SPDES Application	Jun 2009	Modification Request submitted Apr 2009; conditionally denied Jun 2009	

**Table 2 – Milestones to be Considered for Potential Modification** 

LOCATION / PROJECT AREA	ITEM DESCRIPTION	ACTION REQUIRED	REASON FOR MODIFICATION
Newtown Creek	Aeration Zone II	Design and Construction	Alternative approach identified
Newtown Creek	Relief Sewer / Regulator Modification	Design and Construction	Alternative approach identified
Newtown Creek	Throttling Facility	Design and Construction	Alternative approach identified
Newtown Creek	CSO Storage Facility	Design and Construction	Alternative approach identified
Bronx River	Submit Approvable LTCP	Submittal	Modification Request submitted Jun 2009 to change Aug 2009 to "6 months after approval of WB/WS Facility Plan"
Jamaica Tributaries	Destratification Facility	Construction Completion	Date basis of prior modification is on DEC permit rather than Joint Permit and additional procurement issues.

Table 3 – Milestones to be Met Next Quarter (Jul 2009 - Sep 2009)

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	ACTION REQUIRED	MILESTONE DATE	STATUS
Bronx River	Submit Approvable Drainage Basin Specific LTCP for Bronx River	Submit Plan	Aug 2009 Modified to 6 months after approval of WBWS plan	Modification Request submitted and approved Jun 2009
Jamaica Tributaries	Meadowmere &Warnerville DWO Abatement	Construction Completion	Jul 2009	On Schedule
Jamaica Bay	Hendrix Creek Dredging	Notice to Proceed to Construction	Aug 2009 as modified; Modified to Feb 2010	Modification Request submitted Apr 2009; approved Jun 2009

Table 4 – Milestones with Force Majeures and Modification Requests

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	ACTION(S)	REASON FOR ACTION(S)	MILESTONE DATE	STATUS
Alley Creek	CSO Retention Facility	Force Majeure	Deteriorated Sewer	Construction Completion Dec 2009	FM Update Feb 3, 2009
Outer Harbor	Port Richmond Throttling Facility	Force Majeure and Mod Request	Excessive Groundwater	Construction Completion Nov 20, 2009	Approved by DEC Jan 15, 2009
Inner Harbor	In-Line Storage	Force Majeure	Unmapped Utilities; Discontinued Equipment Manufacturer	Construction Completion Aug 2010	Construction in progress
Paerdegat Basin	Foundations and Substructures	Mod Request; Force Majeure	Contractor Default <b>Sand Shoal</b>	Construction Completion Feb 2009	NOV issued; Recovery in process
Jamaica Tributaries	Meadowmere & Warnerville DWO Abatement	Force Majeure and Mod Request	Unanticipated Subsurface Conditions	Construction Completion Mar 2009	Mod Request approved Jun 2009; Revised date Jul 2009
Jamaica Tributaries	Expansion of Wet Weather Capacity of Jamaica WPCP	Mod Request	Cost-Effective Alternative	Initiate Final Design Jun 2009	Under negotiation between DEC and DEP
Jamaica Tributaries	Destratification Facility	Force Majeure, Mod Request	Property Acquisition Issues, Additional Sampling required	Construction NTP Sep 2010 and Completion Mar 2012	Mod Request Approved Apr 2009; Continued DCAS negotiation with property owner
Newtown Creek	Aeration Zone II Sewer Modifications Throttling Facility Storage Facility	Proposed Mod Request & Waterbody/Wa tershed Plan	Cost-Effective Alternative	Jun 2010* Jun 2009* Dec 2009* Dec 2009*	Under negotiation between DEC and DEP
Jamaica Bay	Hendrix Creek Dredging	Force Majeure and Mod Request	Permitting Stipulations	NTP for Construction 2008 Modified to Feb 2010	Mod Request submitted 6/2009; DEC approved

<sup>\*</sup>Next upcoming Milestone date for each item, i.e.: Final Design Completion for Aeration Zone II and Sewer Modifications; Notice to Proceed to Construction for the Throttling Facility; 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

Table 5 – Construction Contracts and their Status					
WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED*
Alley Creek	Outfall and Sewer System Improvements	Dec 2002	Dec 2006	100%	100%
	CSO Retention Facility	Dec 2006	Dec 2009	86%	51%
	Regulator Improvements - Fixed Orifices	Feb 2006	Jul 2008	100%	100%
Outer Harbor	Regulator Improvements - Automation	Nov 2007	Jun 2010	61%	45%
	Port Richmond Throttling Facility	Jun 2006	Nov 2009 as modified	88%	80%
	Regulator Improvements - Fixed Orifices	Feb 2003	Apr 2006	100%	100%
Inner Harbor	Regulator Improvements - Automation	Nov 2007	Jun 2010	61%	45%
	In-Line Storage	Aug 2007	Aug 2010	61%	70%
	Influent Channel	Feb 1999	Feb 2002	100%	100%
Paerdegat Basin	Foundations and Substructures	Jun 2002	Feb 2009	100%	97%
	Structures and Equipment	Sep 2005	May 2011	66%	87%
	Reroute and Construct Effluent Channel	Jun 1995	Jun 1996	100%	100%
	Relocate Ball fields	Apr 1995	Aug 1995	100%	100%
	Storage Tank	Jul 1997	Aug 2001	100%	100%
Flushing Bay	Mechanical Structures	Mar 2002	May 2007 <sup>(1)</sup>	100%	100%
l rushing Duy	Tide Gates	Dec 2000	Apr 2002	100%	100%
	Manual Sluice Gates	Feb 2004	Jun 2005	100%	100%
	Tallman Island WPCP Conveyance Improvements	Dec 2011	Jul 2015	-	-
Jamaica Tributaries	Meadowmere & Warnerville DWO Abatement	Jun 2006	Jul 2009 as modified	97%	90%

WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED*
	Expansion of Wet Weather Capacity of Jamaica WPCP	Jun 2012	Jun 2015	-	-
	Destratification Facility	Apr 2009	Nov 2010	11%	-
	Regulator Automation	Nov 2007	Jun 2010	61%	45%
Coney Island	Avenue V Pumping Station Upgrade	Nov 2005	Apr 2011	66%	44%
Creek	Avenue V Force Main	Jul 2007	Jun 2012	39%	64%
	Aeration Zone I	Dec 2005	Dec 2008	100%	100% <sup>(2)</sup>
	Aeration Zone II	Jun 2011	Jun 2014	-	-
Newtown Creek	Relief Sewer / Regulator Modification	Jun 2010	Jun 2014	-	-
	Throttling Facility	Jun 2009	Dec 2012	-	-
	CSO Storage Facility	Dec 2015	Dec 2022	-	-
Westchester	Phase I (Influent Sewers)	Jun 2011	Jun 2015	-	-
Creek	CSO Storage Facility	Dec 2015	Dec 2022	-	-
Bronx River	Floatables Control	Jun 2009	Jun 2012	-	-
Hutchinson	Phase I of the Storage Facility	Jun 2011	Jun 2015	-	-
River	Future Phases	Dec 2016	Dec 2023	-	-
	Spring Creek AWPCP Upgrade	Mar 2003	Apr 2007	100%	100%
	26th Ward Drainage Area Sewer Cleaning and Evaluation	Jun 2008	Jun 2010	50%	70%
Jamaica Bay	Hendrix Creek Dredging	Aug 2009	Aug 2011	1	-
	26th Ward Wet Weather Expansion	Jun 2011	Dec 2015		
	Rockaway WPCP Conveyance Improvements	-	Dec 2017	-	-

\*Note: Percentage Construction Completion is generally tracked based on cost incurred
(1) NOV issued Jul 2008 (2) Facilities necessary to operate Zone 1 Aeration are completed. Certification of
Construction Completion submitted to DEC in December 2008

# 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 Water Pollution Control Plant (WPCP) 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 WPCP 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**

- Alley Creek Drainage Area Improvements Phase I, Stage 1, Contract ER-AC1
  - ◆ Construction phase activities continued for Contract ER-AC1. Construction of Contract ER-AC1 is currently 100 percent complete of all Consent Order related work. The remaining work has been administrative closeout items.
  - ◆ Implementation of the post-construction erosion monitoring plan entitled "Erosion Monitoring Plan, Alley Creek CSO Facility," dated May 24, 2002 for the CSO storage

facility and new outfall continued. The erosion monitoring phase has been completed and a final report was submitted to the NYSDEC on June 23, 2009.

- ♦ Construction progress meetings were held on April 3, 2009, May 1, 2009 and June 5, 2009 at the Engineer's field office.
- ♦ Issues and Tasks meetings were held on April 24, 2009, May 29, 2009 and June 26, 2009 at the Engineer's field office.
- Alley Creek CSO Abatement Facilities Phase I, Stage 2, Contract ER-AC2
  - ◆ Activities continued for Contract ER-AC2. The principal work included submittal of shop drawings by the Contractor and review of the drawings by the Engineer, obtaining permits and approvals from regulatory/approval agencies, negotiation of change orders and general coordination of construction activities. Construction of Contract ER-AC2 is currently about 51 percent complete.
  - ◆ The DEP and CM have been coordinating with the contractor to develop alternatives to help recover time and update the CPM accordingly. Some of the recovery measures that have been considered include premium time, possible use of an interim pumping station, re-sequencing work, and substituting some of the means and methods specified in the contract. However, the contractor does not feel that the premium time will offer any time savings and has not been willing to negotiate a premium time change order with DEP. The DEP is looking into modifying the means and methods specified in the contract but will not make any modifications that may compromise project quality. **The DEP continues to work with the contractor on recovering time.**
  - ♦ The Contractor activated the Interim Pumping Station (IPS) on May 26, 2009 and shut down the Old Douglaston Pumping Station (ODPS). The ODPS is being renovated.
  - ♦ Construction progress meetings were held on April 3, 2009, May 1, 2009 and June 5, 2009 at the Engineer's field office for Contract ER-AC2.
  - ♦ Issues and Tasks meetings were held on April 24, 2009, May 29, 2009 and June 26, 2009 at the Engineer's Field Office for Contract ER-AC2.

#### **Missed Milestones**

♦ There are no missed milestones.

# **Anticipated Activities for Next Quarter**

- Alley Creek Drainage Area Improvements Phase I, Stage 1, Contract ER-AC1
  - ♦ Construction closeout activities will continue including finalization of as-built documents and plans.
- Alley Creek CSO Abatement Facilities Phase I, Stage 2, Contract ER-AC2

- ◆ Construction under Contract ER-AC2 will continue. The principal work will include construction of Meter Chamber No. 2 and the Grinder Room of ODPS, reconstruction of Outfall TI-008, installation of the 36" pipe between the Junction Chamber and Meter Chamber No. 2, obtaining permits and approvals from regulatory/approval agencies, and submittal and review of shop drawings.
- ♦ Monthly construction progress and issues and tasks meetings will be held 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.
- ◆ DEP will continue to work with the contractor to improve the schedule to mitigate delays of the Force Majeure event. An updated schedule will be provided when viable recovery alternatives are established.

Table 6 – Alley Creek CSO Project

	Phase I, Stage I	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:	\$98,850,487.61	\$32,473,379
		51% complete with construction activities
Status:	Construction completed. Final close-out period.	Notice of Force Majeure submitted to DEC in November 2007.An updated letter was issued on 2/3/09
		DEP is currently identifying appropriate recovery options.

#### 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) Water Pollution Control Plants (WPCPs) 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.

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 WPCP. The Citywide SCADA Project will automate regulators in Outer Harbor.

# **Work Performed During This Quarter**

- Regulator Automation
  - Construction activities were continued during this quarter. The Contractor is conducting contract work at regulator sites, performing site inspections, obtaining necessary permits and performing change/modification work.
  - ◆ Negotiations meetings for Change Order No. 3 occurred on April 17, 2009, Change Order Nos. 4, 6 and 8 occurred on May 14, 2009 and Change Order No. 9 occurred on June 1, 2009. All negotiations meetings involved the Construction Manager, Design Engineer, Contractor and DEP.
  - ♦ Weekly construction meetings occurred on April 2, April 9, April 23, April 30, May 7, May 14, May 29, June 4, and June 11, 2009. Monthly Progress Meetings occurred on April 16 and June 18, 2009. No Monthly Progress Meeting occurred in the month of May 2009.
  - ♦ CPM Schedule update 10 submitted by the Contractor in May 2009 is showing a construction completion date beyond the Consent Order date of June 15, 2009.
  - ♦ DEP requested the submittal of a recovery plan from the Contractor and agreed to a Change Order request to accelerate the schedule at a cost of \$1.8M that will bring the completion of the contract back to April 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 date June 30, 2008, DEC certified compliance with the construction completion milestone.

- Phase II Throttling Facility
  - ♦ DSDC activities continued, including shop drawing reviews and RFI responses.
  - **♦** The new structural design for the stainless steel gate guide support system was fabricated and installed.
  - **♦** The Contractor completed the cutting and removal of the steel and concrete sections of the interceptor pipe.
  - ♦ The Contractor completed all formwork and rebar activities and poured all concrete walls and floors including the roof slab.
  - ♦ The dewatering activities were completed and the system was shut off on May 12.
  - **♦** The Contractor completed cutting of all steel sheeting 4' below Richmond Terrace and initiated backfilling up to street level.
  - ♦ The throttling gate and hydraulic actuator cylinder were installed.
  - **♦** Demand electric started installation of panels, conduit and electrical connections for the actuator and sluice gate.
  - ♦ Regular monthly construction progress meetings were held on April 8, May 5, and June 2, 2009.

#### **Missed Milestones**

◆ DEP submitted a Request for Modification of Milestone associated with the Port Richmond Throttling Facility to DEC on October 31, 2008. The basis for this request was unanticipated subsurface conditions encountered by the contractor, a Force Majeure event. DEP submitted a Notice of Force Majeure in November 2007 to DEC related to the subsurface conditions, and updates on this Force Majeure event were submitted in November 2007 and February 2008. DEC granted a modification of the Construction Completion Milestone on January 15, 2009. The Milestone was revised from December 31, 2008 to November 20, 2009.

# **Anticipated Activities for Next Quarter**

- Regulator Automation
  - **♦** Construction activities at multiple sites; obtaining and maintaining necessary permits.
- Phase II Throttling Facility
  - ♦ Continue to address Design Services During Construction activities for the ongoing construction.

- ♦ The contractor will continue main pit construction activities including the installation of all instrumentation, control and electrical components.
- ♦ The contractor will begin training, field testing and startup activities.
- ♦ The contractor will begin site and street restoration activities.

**Table 7 – Outer Harbor CSO Project** 

	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 WPCP	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	\$4,203,000	\$2,842,000
Status:	Construction Complete	Construction 95% complete.	Construction 45% Complete
Other Issues:	-	Delays to project due to unanticipated field conditions (dewatering).  DEC granted  Modification Request;  revised Construction  Completion date is  November 2009.	-

#### 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 Water Pollution Control Plants (WPCPs) 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) and Phase II (In-Line Storage). In addition, the automation of key regulators will be accomplished under the Citywide SCADA Project.

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.

#### **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.
  - **♦** Review of shop drawings, responses to RFIs and meetings continued this quarter.

- Regulator Automation
  - ♦ Construction activities were continued during this quarter. The Contractor (TMS) is conducting contract work at regulator sites, performing site inspections, obtaining necessary permits and performing change/modification work.
  - ♦ Negotiations meetings for Change Order No. 3 occurred on April 17, 2009, Change Order Nos. 4, 6 and 8 occurred on May 14, 2009 and Change Order No. 9 occurred on June 1, 2009. All negotiations meetings involved the Construction Manager, Design Engineer, Contractor and DEP.
  - ♦ Weekly construction meetings occurred on April 2, April 9, April 23, April 30, May 7, May 14, May 29, June 4, and June 11, 2009. Monthly Progress Meetings occurred on April 16 and June 18, 2009. No Monthly Progress Meeting occurred in the month of May 2009.
  - ♦ CPM Schedule update 10 submitted by the Contractor in May 2009 is showing a construction completion date beyond the Consent Order date of June 15, 2009.

- ♦ DEP requested the submittal of a recovery plan from the Contractor and agreed to a Change Order request to accelerate the schedule at a cost of \$1.8M that will bring the completion of the contract back to April 2010.
- 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
  - ♦ At the B-6 site, the contractor has finished major construction of all chamber and dam components. The dam was installed inside the chamber.
  - ♦ At the R-20 site, the contractor finished the installation of the mechanical equipment and piping inside the control vault.
  - **♦** The contractor started the change order related work to continue construction of the chamber.

#### **Missed Milestones**

♦ There are no missed milestones.

#### **Anticipated Activities for Next Quarter**

Design

- In-line Storage
  - ♦ Review shop drawings, respond to RFIs and attend monthly construction I&T meetings.

- Regulator Automation
  - ♦ Construction activities will continue. The contractor will conduct contract work, performing site visits at multiple sites; obtaining and maintaining necessary permits.
- In-line Storage
  - ◆ At the B-6 site the contractor will begin site restoration and test the dam.
  - **♦** Contractor will prepare the excavation to start chemical grouting and continue with the construction of the chamber.

Table 8 – Inner Harbor CSO Project

Table 6 – Inner Harbor CSO Froject					
	Phase I	Phase II	Citywide SCADA		
Plan Elements:	Regulator Improvements – Fixed Orifices	In-Line Storage	Regulator Improvements – Automation		
Location:	72 regulator sites in Manhattan and Brooklyn	Upstream of regulators B-6 and R-20 in Brooklyn	Regulator sites in Manhattan and Brooklyn		
Actions:	Conversion to fixed orifices	Installation of two inflatable dams in the combined sewer systems	Conversion to automated regulators		
Construction Cost:	\$9,500,000	\$11,200,000	\$13,737,000		
Status:	Construction Complete	Under construction, 70% complete	Construction 45% Complete		
Other Issues:		Force Majeure submitted to DEC in December 2007			

## 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 WPCP 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 WPCP 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 4<sup>th</sup> Quarter of 2008 in accordance with the approved LTCP.

#### Design

- Phase I A Influent Channels
  - ♦ 100% complete
- Phase II Foundations and Substructures
  - ◆ Underground CSO Tank design 100% complete.
- Phase III Superstructures and Equipment
  - ♦ Construction of the facility buildings (Pump Back, Odor Control, Screenings Building and Collection Facilities South headquarters) design 100% complete.

- 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.
- ♦ The Surety's completing contractors loaded the instrumented tiedowns in the CSO Tanks; began installation of conduit and wire for the instrumented tiedowns; continued placing fill concrete in the CSO Tanks and completed placing concrete for flushing pipe encasement. Contractor also began removal of temporary north access road and testing of the soil piles on Parks and Recreation property.
- ♦ DEP issued a Notice of Force Majeure regarding changes to navigational conditions in Paerdegat Basin on June 10, 2009. A sand bar was identified near the mouth of Paerdegat Basin that could not be cleared with conventional construction and dredging barges. The removal of this obstruction requires modification to the existing dredging permits associated with Paerdegat Contract 4B.
- Phase III Superstructures and Equipment
  - Construction work has continued and is approximately 87% complete.
  - ♦ The 5G Contractor continued installation of the flushing gates and the hydraulic operators in the CSO Tanks; continued installation of the CSO Pump Back Pumps in the Pump Back Building (PBB); completed installation of the CSO Tank vertical drop down ladders and stainless steel access platform ladders and continued installation of ornamental fencing and gates on the perimeter of the property. Contractor also continued phased demolition of the existing 5-Barrel Effluent channel and completed connection of channels 1 and 2. Contractor also continued installation of panels and local control panels for various pieces of mechanical equipment; began installation of concrete topping on the ground floors of the SB and OCB; continued installation of piping for the 42-inch force main and 12-inch grit lines as well as the CSO Pump Back Pumps and Grit Pumps.
  - ♦ The 5E Contractor continued pulling cable and wire to various pieces of equipment in the PBB, OCB and SB; continued terminating conductors for, telephone, paging and fire alarm in the PBB, OCB and SB. Contractor also continued installation of duct banks on the west side of the PBB, OCB and SB and emergency generator in the PBB Contractor also began installation of light poles on the CSO Tanks and pulling wire to sensors on the CSO Tanks.
  - ♦ The 5H Contractor continued installation and insulation of stainless steel ductwork and plenums; continued installation and insulation of HWS & HWR piping and refrigeration piping in the PBB, OCB and SB; continued pulling and terminating control wiring in the PBB, OCB and SB; continued installation of three (3) hot water boilers with associated instruments and controls. Contractor also completed major installation of ductwork on the north side of the CSO Tanks.
  - ◆ The 5P Contractor continued performing remedial work in the CFS Building and installation of pipe penetrations through the roof of the PBB, OCB and SB.

#### **Missed Milestones**

- ◆ DEP submitted a Request for Modification of a Minor Milestone associated with the Paerdegat Basin Foundations and Substructures Construction Completion to DEC on December 29, 2008. The basis for this request stems from delays associated with the default of the Foundations and Substructures contractor on December 6, 2007.
- ◆ DEC denied DEP's Request for Modification of a Minor Milestone and issued a Notice of Violation dated March 27, 2009 and received by DEP on April 2, 2009.

# **Anticipated Activities for Next Quarter**

- Phase II Foundations and Substructures
  - ♦ The completing contractor will complete installation of fill concrete in the CSO Tanks; complete installation of instrumented tiedowns and caps in the CSO Tanks; continue installation of sluice gates in the CSO Tank corridor; continue removal of the temporary north access road; continue removing derelict equipment and machinery from the site; continue removal of soil from Parks and Recreation Property.
  - ♦ The completing contractor will also begin dredging of Paerdegat Basin as necessary to complete Contract 4B work and pending receipt of the necessary permits from DEC, USACE, and NMFS. A variance from the NMFS restriction of dredging to limited seasonal time windows is necessary.
- 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. Contractor will also complete installation of flushing gates and associated hydraulic piping and panels in the CSO Tanks; complete installation of the CSO Pump Back Pumps, Grit Pumps and Sump Pumps in the PBB, complete installation of the stainless steel access platform ladders and vertical drop down ladders in the CSO Tanks and continue installation of odor control system including exhaust fans, valves, dampers, stacks and silencers in the OCB. Contractor will also complete installation of service air piping system in the PBB, OCB and SB; complete installation of 42-inch CSO force main, 12-inch grit piping and associated valves in the PBB; complete installation of the 10 foot ornamental picket fence around the project site; begin installation of ornamental fence gates with associated security system and begin installation of Bergen avenue roadway and sidewalk. Contractor will also complete installation of concrete topping on the ground floors of the PBB, OCB and SB; complete landscaping of the area west and east of the PBB, OCB and SB and begin field testing and commissioning of various pieces of equipment and systems.

Contractor will also continue phased demolition of the existing 5-barrel effluent channel and begin diversionary connection to the new five barrel influent channel while maintaining operation of the existing facility. Contractor will also begin installation of new equipment in the Existing Pump Station while maintaining operation of the existing facility.

- ◆ The 5E Contractor will complete punch list work in the CFS Building and begin training of DEP personnel on equipment in the CFS Building. Contractor will also complete installation of the emergency generator and request inspection of the same. Contractor will also continue installation of RGS conduit and conduit racks for lighting, fire alarms, telephones and paging in the PBB, OCB and SB; continue installation of RGS conduit and conduit racks for the CSO Pump Back Pumps, Grit Pumps and Sump Pumps in the PBB; continue testing and terminating cable and wire for site lighting on the north of the CSO Tanks and west of the process buildings; continue installing ductbanks for site lighting and security on the west side of the process buildings; continue ductbank installation for control wire on the west side of the process building; continue pulling, testing and terminating cable and wire to local control panels for various pieces of equipment in the PBB, OCB and SB; continue installation of security system components throughout the property. Contractor will also begin requesting inspections by the FDNY and NYCDOB Bureau of Electrical Controls.
- ♦ The 5H Contractor will complete punchlist work in the CFS Building. Contractor will also complete installation of stainless steel ductwork in the PBB, OCB, SB and CSO tanks; begin field testing of the permanent hot water boilers. Contractor will also complete installation of seismic restraints and insulation for various types of piping and ductwork in the PBB, OCB and SB; complete testing of refrigerant piping in the PBB and OCB and begin installation of exhaust fans EF-7304 and EF-7305 in the SB. Contractor will also begin training DEP personnel on various pieces of equipment and systems.
- ♦ The 5P Contractor will complete remediation work in the CFS Building; complete installation of vent piping in the PBB, OCB and SB; begin training DEP personnel on various pieces of equipment.

Table 9 – Paerdegat Basin CSO Project

	Phase IA	able 9 – Paerdegat Basin CSO Pro Phase II	Phase III
Construction Phase:	Influent Channels	Foundations and Substructures	Structures and Equipment
Location:	Flatlands and Ralph Avenues, Brooklyn, NY	West Shore of Paerdegat Basin	West Shore of Paerdegat Basin
Actions:	Construction of the influent channels to the CSO facility	Underground structural elements	Aboveground buildings and equipment
Cost:	\$9,000,000	\$ 123,291,328.29	\$ 188,599,510
Status:	Construction completed.	NTP issued on 6/24/02. Construction 97% complete.	NTP issued on 9/26/05. Construction <b>87%</b> complete.
Other Issues:	-	The Contractor was held in default in December 2007. The Surety has since submitted three completion contractors for different work. All completing contractors have begun working and one, has completed their work.  DEC denied DEP's Request for Modification of a Minor Milestone and provided Notice of Violation on March 27, 2009.  The Surety has informed the DEP of a sand bar which is a navigational hazard that could delay dredging and contract completion	After activation of the first two channels of the 5-Barrel a tidal event occurred flooding the system. DEC was notified. Bulkheads were reinstalled and a new plan of operation is being devised.

# 3.5. Flushing Bay CSO

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 WPCP 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 is currently being resolved through negotiations.

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 WPCP 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; a new Throttling Facility at the Tallman Island WPCP; Regulator improvements at 10, 10A, 10B and 13; and re-support of the Flushing Interceptor in Ulmer Street.

# **Work Performed During This Quarter**

#### Design

- Tallman Island Wet Weather Maximization
  - ♦ Obtained applicable permits and initiated geotechnical and environmental drilling program along proposed route of the new Whitestone Interceptor.
  - ♦ Completed first draft of the Environmental Assessment Statement (EAS) for internal review by BEPA.
  - ◆ Continued preparation of 30% design documents for the new Whitestone Interceptor, from 11<sup>th</sup> Avenue and 131<sup>st</sup> Street, north through Powell's Cove Park to the Tallman Island WPCP
  - ♦ Continued hydraulic analyses associated with throttling influent flow
  - ◆ Continued preparation of 30% design documents for modifications to Regulators 10, 10A, 10B and 13.
  - ♦ Planned and executed coordinated survey & sewer inspection of the Flushing Interceptor from Ulmer Street and 25th Avenue to Ulmer Street and 15<sup>th</sup> Avenue.
  - ♦ Continued coordination with NYCDPR regarding property encroachments along the proposed route of the new Whitestone Interceptor.

#### Construction

- Flushing Bay CSO Retention Facility
  - ◆ 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 is currently being resolved through negotiations.

#### **Anticipated Activities for Next Quarter**

#### Design

- Tallman Island Wet Weather Maximization
  - ♦ Continue addressing legal with property encroachment issues along proposed Whitestone alignment. Upon issuance of required permits, schedule geotechnical investigative work along the proposed alignment.
  - ♦ Continue with geotechnical and environmental drilling program associated with the proposed alignment of the new Whitestone Interceptor.
  - ♦ Initiate geotechnical and environmental drilling program associated with the modifications to Regulators 10, 10A, 10B & 13.

♦ Continue hydraulic analyses, preliminary design development, and evaluations associated with design

- Flushing Bay CSO Retention Facility
  - **♦** Contractor to continue punchlist activities.

**Table 10 – Flushing Bay CSO Project** 

Plan Elements:	Flushing Bay CSO Retention Facility	Tallman Island WPCP 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 11 <sup>th</sup> Avenue and 130 <sup>th</sup> Street to the WPCP; Throttling Facility at WPCP headworks, College Point, Queens Regulators 10, 10A, 10B and 13 Flushing Interceptor in Ulmer Street	
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.	Design and construction of a new interceptor; a new throttling facility at the Tallman Island WPCP; improvements to regulators 10, 10A, 10B, and 13; the re-support of the Flushing Interceptor in Ulmer Street	
Cost:	\$291,000,000	\$67,252,171	
Status:	Construction Completion was certified on 5/31/07	Design 12% complete	
Other Issues:	NOV dated July 15, 2008 is currently the subject of negotiations.		

#### 3.6. Jamaica Tributaries CSO

The Jamaica Tributaries project area includes the Jamaica WPCP 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 WPCP. 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 WPCP An additional 50 mgd of wet weather flow will be treated at the Jamaica WPCP 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.
- ♦ 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 8 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 WPCP 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**

#### **Planning**

- Drainage Plan
  - ♦ BWSO submitted the Laurelton and Springfield Blvd. drainage plan for storm sewer buildout on May 31, 2008 in accordance with the modified date granted by DEC in February 2008. **DEC accepted the submittal in July 2008**.

#### Design

- Destratification Facility
  - ♦ Submitted legal review set of the contract documents on April 21, 2009.
  - **◆** DEC approved the tidal wetlands permit for construction of facility on April 2, 2009.
- Expansion of Wet Weather Capacity of the Jamaica WPCP
  - ◆ DEP submitted a revised Request for Modification of project and milestones associated with the expansion of the wet weather capacity of the Jamaica WPCP to DEC on November 14, 2008. The basis of this request is the identification of an alternative approach that is expected to result in a greater degree of CSO reduction. However, DEC has asked that the modification request be revised so as to achieve construction completion in a similar time frame as current mandated projects and include a period to conduct field flow measurements. To date, no written response to the modification request has been received.

- Destratification Facility
  - ♦ NYC DCAS continued negotiation with property owner of proposed site
  - ♦ By letter dated June 9, 2008, DEP notified DEC of a Force Majeure and requested modification to the April 30, 2009 and November 30, 2010 milestones (respectively, Notice to Proceed to Construction and Construction Completion). DEC approved the Modification Request on June 30, 2009, moving these milestone dates to September 2010 and March 2012, respectively.
- Regulator Automation
  - Construction activities were continued during this quarter. The Contractor is conducting contract work at regulator sites, performing site inspections, obtaining necessary permits and performing change/modification work.
  - ♦ Negotiations meetings for Change Order No. 3 occurred on April 17, 2009, Change Order Nos. 4, 6 and 8 occurred on May 14, 2009 and Change Order No. 9 occurred on June 1, 2009. All negotiations meetings involved the Construction Manager, Design Engineer, Contractor and DEP.

- Weekly construction meetings occurred on April 2, April 9, April 23, April 30, May 7, May 14, May 29, June 4, and June 11, 2009. Monthly Progress Meetings occurred on April 16 and June 18, 2009. No Monthly Progress Meeting occurred in the month of May 2009.
- ♦ On June 2009, a letter was sent to the DEC stating that the current CPM Schedule submitted by the Contractor is showing a construction completion date beyond the Consent Order date of June 15, 2009. At this time DEP in negotiation with the contractor agreed to a recovery plan with a cost of \$1.7M that will accelerate the completion schedule to April 2010.
- Meadowmere/Warnerville
  - ♦ Continued DSDC activities for the Meadowmere & Warnerville project. Construction is 90% complete.
  - ♦ The Contractor is continuing construction on the pumping station, electrical control building, site work, plantings, street paving and sidewalk restoration, field testing of instrumentation and installed equipment and startup tasks.
  - ♦ Monthly Construction I&T meetings were held on April 8, May 13, and June 10, 2009.
  - ♦ A meeting was held with DEP BWT and Operations staff on April 27, 2009 at the DEP Lefrak Building. In attendance were also representatives from the CM (LiRo), Hazen and Sawyer, and BEDC.
  - ♦ The 48-hour systems test and the Operational Availability Demonstration (OAD) / Commissioning tests were completed with an IEM in attendance. Test results and data are under review by the design engineer.
  - **♦** The CM and design engineer staff continued final permitting activities regarding DOB TR-1 signoffs, controlled inspections, and the Certificate of Occupancy.

#### **Anticipated Activities for Next Quarter**

#### Design

- Destratification Facility
  - **♦** Continue construction procurement activities.

- Regulator Automation
  - **♦** Construction activities at multiple sites; obtaining and maintaining necessary permits.
- Meadowmere/Warnerville
  - ♦ Substantially complete construction on all aspects of the project. Continue with EH&S and change order work, training, and O&M activities.

- **♦** Issue letter of substantial completion or beneficial use to certify that pump station is ready to accept flow.
- ♦ Continue permitting activities and filing with DOB on various requirements.
- ♦ Begin training tasks for DEP operations personnel.

**Table 11 – Jamaica Tributaries CSO Project** 

	140	ic 11 – Jamaica 11	istituires es e i rej		
Plan Elements:	Meadowmere & Warnerville DWO Abatement	Expansion of Wet Weather Capacity of Jamaica WPCP	Destratification	Laurelton and Springfield Blvd. Drainage Plan	Regulator Automation
Location:	Meadowmere and Warnerville – Queens, New York	Bergen Basin	Shellbank Basin	Jamaica WPCP 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 WPCP.	Conduct Demonstration Construct Permanent Facility	Develop drainage plan for storm sewer build out	Provide automated regulators
Construction Cost:	\$30,648,888	\$120 million	\$3,800,000	To be determined	\$1,421,000
Status:	Construction 90% complete. DSDC activities continued.	Recent analyses indicate that this element has limited water quality benefits. A Modification Request was submitted to allow for sewer system modifications as well as post construction flow monitoring to quantify maximum flows to the treatment facility	Permit under review by USACE and DEC. Site acquisition in progress.  Force Majeure/Request for Modification Request granted	Drainage planning complete.	Construction 45% Complete.

# 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:
    - o Shop Drawing Review
    - o Coordination Drawing Review
    - o Change Order Preparation
    - o Main Building Roof Structural Inspection.
    - Influent Flow Study.
    - o Existing 24" FM Study.
- New Force Mains
  - ♦ DSDC activities continued, including:
    - o SPDES Preparation
    - o LI Well Permit Preparation
    - Shop Drawing Review
    - o Change Order Preparation

- Avenue V Pumping Station Upgrade
  - ♦ Work during the quarter included:
    - o Operating and maintaining the Temporary Pumping System.
    - o Contractor take-over of the existing PS.
    - o Demolition and removal of existing equipment.
    - o Temporary PS instrumentation calibration and installation.

- o General Site Maintenance.
- New Force Mains
  - **♦** Construction activities during this quarter included:
    - Open Cut Pipe installation (Approximately 75% complete)
      - 42" Verrazano Bridge to Bay 8<sup>th</sup> St. Bay 8<sup>th</sup> St. to Bay Parkway (WIP); Bay Parkway to 25<sup>th</sup> Ave.
        - Total: 11,191 LF
      - 48" Bay 16<sup>th</sup> St. to Bay Parkway; Bay Parkway to 25<sup>th</sup> Ave.
        - Total: 4,970 LF
      - Majority of open cut work pending is to be completed in the street portion. 95% of the force main is completed along the Belt Parkway.
    - Jacked casing pipe installation (Approximately 45% Complete)
      - 66" casing pipe for 42" carrier pipe Total: 615 LF with carrier pipe.
      - 66" casing for 48" carrier pipe Total: 160 LF installed with carrier pipe.
      - Jacking operation at Verrazano Bridge exit 3 ramp complete.
      - Installation of dewatering systems for final jacking operations.
    - Microtunneling pipe installation (Approximately 25% Complete)
      - 60" casing pipe installed for 48" carrier pipe. Total: 1946 LF (64% of 48").
      - 60" casing pipe installed for 42" carrier pipe. Total: 615 LF (36% of 48").
      - Completion of final jacking pits along Cropsey Ave.
    - o Construct 42" discharge chamber manhole at existing manhole # 18.
    - o Change Order Work: Installation of access manholes for air valves.
    - o Sheeting installation and removal as necessary.
    - Leakage tests (42"/48") completed from Bay Parkway to 25<sup>th</sup> Ave.
    - o Backfill, compaction and soil removal.
    - o Start landscape restoration. Bay 17<sup>th</sup> St. to 20<sup>th</sup> Ave.

### **Missed Milestones**

♦ There are no missed milestones.

## **Anticipated Activities for Next Quarter**

### Design

### DSDC Activities

#### Construction

- Avenue V Pumping Station Upgrade
  - **♦** Temporary PS Operation.
  - ♦ Hazardous material remediation.
  - ♦ Existing PS equipment removal and relocation.
  - **♦** Existing PS equipment demolition.
  - **♦** Existing PS roof demolition and reconstruction.
  - ♦ Existing PS wet well cleaning and demolition.
  - ♦ Complete wall and roof of BPMH's.
  - **♦** Architectural glazed tile removal.
  - **♦** Mini-pile installation.
- New Force Mains
  - ♦ Open cut single pipe installation (42" pipe) in the vicinity of Bay 8<sup>th</sup> St, 20<sup>th</sup> & 25<sup>th</sup> Ave. outfalls.
  - ♦ Subcontractor Northeast Remsco to start microtunneling 60" casing pipe below Cropsey Ave. from Jacking Pit O to Receiving Pit N (Bay 40<sup>th</sup> St.) and P (27<sup>th</sup> Ave.)
  - **♦** Jacking operations at Bay Parkway.
  - **♦** Installation and maintenance of wells for dewatering as per NYSDEC permits.
  - **♦** Tree remediation activities.
  - ♦ Prepare for future landscape restoration. (Verrazano Bridge to Bay Parkway)
  - ♦ Continue installation and removal of steel sheeting as necessary.
  - **♦** Leakage tests for installed pipe.
  - ♦ Clean and inspect SE-133.
  - ♦ Structural work at discharge chambers (CO # 2).
    - o Complete 42" discharge chamber at existing manhole # 18 (SE-133).
    - o Start 48" discharge chamber at Bay 16<sup>th</sup> St. & Bath Ave.
  - ♦ Continue installation of air valves and access manholes (CO # 1).

- ♦ Start open cut work in the streets. (Cropsey Ave. to Ave. V P.S.)
- ♦ Water main and sewer relocations on 27<sup>th</sup> Ave.

Table 12 – Coney Island Creek CSO Project

	Contracts	Contract
	PS-79G, H, P, E	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:	\$68,307,000	\$97,756,000
Status:	Notice to Proceed issued on 12/16/05.  Construction is 44% complete.	Notice to Proceed to Construction is <b>64% complete</b> .
Other Issues:	None	None

#### 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 WPCP.

## **Work Performed During This Quarter**

## **Planning**

- Off-line Storage Tank
  - ◆ The Bureau of Environmental Planning and Assessment (BEPA) continued their review of the Remedial Action Plan (RAP) and Health and Safety Plan (HASP) for the remedial work related to the CSO Storage Facility. BEPA completed their review of the revised CSO Storage Facility Environmental Assessment Statement (EAS) and the Air Modeling Report and has requested additional work, including a traffic waterbody/watershed analysis. However, since the WB/WS Plan for Newtown Creek was submitted in June 2007, the DEP directed the Engineer to postpone this analysis until the WB/WS Plan for Newtown Creek is reviewed and approved.

### Design

- Maximize Flow to Morgan Ave. Interceptor
  - ◆ The Department awarded and registered a contract with URS Corporation for Engineering Services for St. Nicholas Avenue Weir to Regulator B-1 Relief Sewer.

## Phase 1 Aeration Facility

- ◆ The DEC Joint Application Permit had expired and a new permit application was submitted to the DEC. The DEC reviewed and has determined that the apparent bulkhead is actually a relieving platform and therefore the land beneath the platform is considered wetlands. As a result, the DEC replied to the DEP with a Notice of Incomplete Application (NOIA). A response to the NOIA was prepared and submitted to the DEC on July 18, 2006. The DEC then issued a second NOIA and a response was prepared by the DEP and submitted to the DEC on August 25, 2006, with a revised response submitted to the DEC on September 7, 2006. The DEP BEPA issued a modified Negative Declaration on October 4, 2006 and the DEC issued a Notice of Complete Application (NOCA) to the DEP on October 18, 2006 for advertisement including a public comment period ending November 10, 2006. The DEC then issued a Notice of Permit Issuance (NOPI) on November 22, 2006 with the effective dates of November 24, 2006 through December 31, 2009. The DEC Joint Application Permit was modified by the DEC on September 11, 2007 to incorporate changes to the construction contract.
- ♦ The NOPI contains Special Conditions, including submission of a Habitat Monitoring Plan and a Wetlands Restoration Plan within 30 days and 60 days of the permit's issuance, respectively.
- ◆ The special condition for the Wetlands Restoration Plan has been approved by the DEC on April 24, 2007.
- ♦ A Habitat Monitoring Plan was submitted to the DEC in January 2007 for their review. The DEC reviewed and submitted comments to the Plan on March 20, 2007. The DEC's comments included requests for much more extensive sampling. A meeting with the DEC, DEP, and the Engineer was held on April 13, 2007 to discuss the DEC comments. The Habitat Monitoring Plan was revised based upon discussions at this meeting and forwarded to the DEC on June 27, 2007. DEC comments to the Habitat Monitoring Plan were received on December 14, 2007. A DEP response was prepared and submitted to the DEC on May 15, 2008. DEC subsequently granted approval of the Plan. DEP prepared and submitted an application for a License to Collect or Possess, which was also approved by the DEC.

Pre-operational sampling for the Habitat Monitoring Plan commenced on August 25, 2008 and was completed the week of September 1, 2008. A draft report summarizing the results of the pre-operational sampling was submitted to the DEP on November 28, 2008 for review. The DEP's comments were incorporated and a revised report was submitted on December 10, 2008.

A separate Performance Sampling Plan for the Phase I Aeration Facility was reviewed by the DEP and their comments incorporated into a revised Plan. The report was approved by DEC on December 31, 2008.

◆ DEP submitted a Certification of Construction Completion letter to DEC for the Zone 1 Aeration work on December 31, 2008, in compliance with the Consent Order milestone. The facilities necessary to operate the Zone 1 Aeration are complete. The DEC granted a

Certification of Construction Completion on February 25, 2009. Remaining work not related to the operational intent is on-going.

- ♦ Reconnaissance sampling for May 28, June 3 and June 19, 2009 to assist in evaluation of current conditions to determine the projected start-up date for the 2009 operating season. Conference calls with BEDC, NYSDEC and the consultants were held on June 1, June 16 and June 22, 2009 to review the data. Based on the data collected, start-up of the Aeration Facility was scheduled for June 25, 2009 and pre-operational sampling was performed on June 23 and 24, 2009. Start-up of the Facility on June 25<sup>th</sup> was successful, and post-operational sampling began on June 26, 2009. However, due to hydrogen sulfide odors, the Facility was shut down on the afternoon of June 26<sup>th</sup> until the conditions could be assessed and addressed. The HASP was revised to incorporate monitoring and testing of hydrogen sulfide and VOCs. A conference call with BEDC, BEPA, EH&S and the consultants to discuss the revised HASP and operational procedures moving forward was held on June 29, 2009. The facility was re-started on July 7, 2009.
- Phase 2 Aeration Facilities
  - ◆ Preliminary design continues on adding a third blower to Phase I Aeration Facilities that will be used to supply air to the Lower English Kills.
  - ♦ Site investigations continue to locate suitable locations for a possible aeration facility for the Newtown Creek.
  - ♦ Aeration technologies to be used as an alternative to the positive displacement blower, air header and diffuser system that is being installed in Phase I are being investigated.
  - Reports were prepared and reviewed recommending properties to locate Aeration Facilities along the East Branch and Dutch Kills waterbodies.
  - ♦ Preliminary design on Aeration Facilities for the East Branch and Dutch Kills waterbodies has begun and is evaluating the viability of targeting a dissolved oxygen concentration of 3 mg/L, as specified in the WWFP.
  - ♦ The 30% design completion contract drawings for the addition of a third blower to the Phase I Aeration Facilities and associated aeration system for the lower English Kills was completed on January 30, 2009.
  - Site selection reports for the aeration facility locations for Dutch Kills and the East Branch were completed on March 12, 2009.
  - ♦ A preliminary design report for the aeration facilities for Dutch Kills and the East Branch was completed on March 12, 2009.

## Construction

- Phase 1 Aeration Facilities
  - ◆ The overall construction of the Phase I Aeration Facilities is **100** percent complete. During the quarter, the NC-EK11G, NC-EK11E and NC-EK11H Contractors performed the following work:

#### o NC-EK11G

- Completed installation of Porous Paver System
- Completed installation of Retaining Wall
- Completed installation of Roofing Snow Guards

#### o NC-EK11E

- Completed installation of Lightning Protection System
- Completed wiring to Various Equipment

#### o NC-EK11H

- Completed installation of HVAC Equipment
- Completed Testing and Balancing of HVAC Equipment
- Maximize Flow to Morgan Ave. Interceptor
  - ♦ Kent Avenue Throttling Facility design has been completed. Construction of this facility is included in the Newtown Creek WPCP Upgrade-Contract NC-36.

#### **Missed Milestones**

♦ There are no missed milestones but the DEP will be looking to modify the existing consent order to eliminate certain elements and replace with more cost effective elements that achieve similar or greater water quality benefits such as targeting a DO of 3 mg/l for both Zone 1 and Zone 2 as opposed to the 1 mg/L currently required in the Consent Order.

### **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
  - Coordinate with DEP for approval of revised Field Sampling and Analysis Plan HASP.
  - Commence 2009 season start-up, performance sampling in accordance with the FSAP and first year post-operational habitat monitoring.
- Phase 2 Aeration Facilities
  - Investigate properties that may be used for the East Branch and the northern portion of Newtown Creek and Dutch Kills and the lower southern portion of Newtown Creek; this will decrease the amount of property that be required.
  - Continue evaluation of alternative properties identified for require blower buildings.

- Continue working on obtaining properties along the East Branch and Dutch Kills for the construction of Aeration Systems for the corresponding waterbodies.
- Continue design of Aeration Systems for the East Branch and Dutch Kills waterbodies.
- Continue design on third blower installation in the Phase I Aeration Facility building for the Lower English Kills.
- Evaluate aeration technologies to be used as an alternative to the positive displacement blower, air header and diffuser system that is being installed in Phase I.
- Begin preparation of Damage and Acquisition Maps for proposed aeration facility locations along the Dutch Kills and East Branch.
- Finish the 60% design completion of the third blower installation in the Phase I Aeration Facility building for the Lower English Kills.

#### Construction

- Phase 1 Aeration Facility
  - The NC-EK11G, NC-EK11H and NC-EK11E Contractors are scheduled to perform the following work for the next quarter:
    - o NC-EK11G
      - Complete the site work
      - Tie in roof drains into site stormwater sewer system
      - Install identifying devices on all rooms, piping and equipment
      - Train DEP personnel on equipment operation for Facility
    - o NC-EK11E
      - Train DEP personnel on electrical equipment operation for Facility
    - o NC-EK11H
      - Train DEP personnel on HVAC equipment operation for Facility

Table 13 – Newtown Creek CSO Project

Plan Elements:	Maximize flow through Morgan Ave. Interceptor	Phase 1&2 - Aeration Facilities	Off-line Storage Tank
Location:	Regulator B1 and WPCP throttling chamber	Head end of English Kills, south of Grand Street	Sewers tributary to CSO outfall discharging to English Kills
Actions:	Raise overflow weir in Regulator B1; increase sluice gate openings to interceptor; provide relief sewer from St. Nicholas weir to Regulator B1; provide throttling gate on Kent Avenue Interceptor.	Provide aeration of English Kills to raise DO concentrations to a goal of 3.0 mg/l. The facility includes a landside compressor station and an air header and diffuser assembly on the Creek bottom.	Design of an off-line storage facility to control CSO discharge into English Kills.  The facility would include the tank, a pumping station, and a new gravity drain to drain the tank for treatment at the Newtown Creek WPCP.
Cost:	\$10,000,000	\$65,000,000 (total for Zones I and II)	TBD
Status:	Facility plan elements for modifications to regulator and routing of the relief sewer have been completed. A Revised Final Facility Plan Report was submitted to the DEC. Regulator B1 Modifications are being performed under a Task Order Contract.	Construction of the facilities necessary to operate the Zone 1 Aeration is 100% complete.  The Habitat Monitoring Plan was approved and pre-operational sampling continued.  Continue design of the Aeration Systems for Dutch Kills and East Branch under Contract NC-EK-IV.	A Draft ULURP application submitted to DEP. The RAP and HASP are under review by BEPA. BEPA submitted comments to the EAS and the Air Modeling Report. The Department directed the Engineer to await the submission of the Newtown Creek LTCP prior to performing the additional work requested by BEPA.
Other Issues:	Requires coordination with WPCP planning and design requirements		Site approval (ULURP) and acquisition of property required. As allowed by the Order, the current plan is subject to modifications proposed in the Waterbody / Watershed Facility Plan.

#### 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 WPCP service area in the Borough of the Bronx. 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 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. In addition to the facilities required for abatement at CSO Outfall HP-014, the DEP has agreed to provide, as part of the project, amenities for use by the Bronxchester and Van Nest Little Leagues that utilize the baseball fields adjacent to the site of the proposed CSO storage tank on the Bronx Psychiatric Center (BPC) Campus. These amenities consist of restroom facilities, a clubhouse facility, a parking lot to be located on top of the CSO storage tank, and fencing to separate the Little League facilities from the BPC Campus facilities and the DEP facilities. This section reports on the progress of the Little League restroom facilities, and Phases I and II of the Westchester Creek CSO Abatement Facilities Plan.

The Little League restroom facilities will be constructed under a separate contract referred to as the Site Preparation Contract in advance of the Phase I contract. 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, construction of the Little League clubhouse facility and parking lot, and installation of the required fencing at the site.

### **Work Performed During This Quarter**

**Planning** 

- Site Acquisition at BPC Campus
  - Negotiations continued between New York City Department of City-Wide Administrative Services (DCAS) and the Dormitory Authority of the State of New York (DASNY) regarding acquisition of the site at the BPC Campus by the DEP for the CSO storage tank, and Little League restroom facilities and clubhouse facility.
  - ♦ A Job Hazard Analysis Form to perform the required surveying to prepare a metes and bounds description of a permanent easement along the access road into the BPC Campus

from Waters Place remained under review by the DEP. This easement, which will be from DASNY to the DEP, is needed to serve as an emergency access route onto the northeast section of the project site, and will be included as a stipulation in the Contract of Sale for the site.

## Design

- Site Preparation
  - Work to prepare the Site Preparation Contract for re-bidding remained on hold until the site at the BPC Campus is acquired by the DEP.
- Phase I Influent Sewers
  - ♦ The DEP is awaiting review comments from the DEC for the Westchester Creek Waterbody/Watershed Facility Plan submitted in June 2007 which includes modifications to the elements included in Appendix A of the Order.
- Phase II CSO Storage Facility
  - ♦ The DEP is awaiting review comments from the DEC for the Westchester Creek Waterbody/Watershed Facility Plan submitted in June 2007 which includes modifications to the elements included in Appendix A of the Order.

#### Construction

♦ Construction has not yet been initiated.

#### **Missed Milestones**

♦ There are no missed milestones.

## **Anticipated Activities for Next Quarter**

- Site Acquisition at BPC Campus
  - ♦ Site acquisition negotiations between DCAS and DASNY will continue.

**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 capaci of 12 MG (including the storage capacity within the supply/storage condui to provide abatement at CSO Outfall HP-014 on Westchester Creek; desig and construction of an operations building; design and construction of amenities for the Bronxchester and Van Nest Little Leagues	
Cost:	Under Revision	
Status:	Negative Declaration issued for project; ULURP Application approved; design underway for CSO supply/storage conduit, CSO storage tank and clubhouse facility for Little Leagues; design complete for restroom facilities for Little Leagues	
Other Issues:	Site needs to be acquired by DEP from the State of New York; licensing agreement between DEP and the Little Leagues needs to be finalized; NYC Building Permit Application, as well as other permit applications, needs to be processed for restroom facilities for Little Leagues. As allowed by the Order, the current plan is subject to modifications by the Waterbody/Watershed Facility Plan	

#### 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 WPCP 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**

### **Planning**

- ◆ The Negative Declaration for the Bronx River Land Exchange Project EAS is still under review by the NYCDPR.
- ♦ The coordination effort between NYCDEP, NYCDPR and NYSDOT is ongoing for the environmental soil boring investigation for the Bronx River Floatables Control Facility.

#### Design

- ♦ All outstanding constructability issues for the Bronx River Floatables Control Project were resolved in late April 2009.
- ♦ Responses to the NYSDEC review comments for the Notice of Incomplete Application for the Joint Wetlands Permit for the Bronx River Floatables Control Facilities Project were finalized by the NYCDEP on June 11, 2009 for resubmission to the NYSDEC.
- ♦ The traffic impact study report for Regulator 27 (Outfall HP-007), entitled "Bronx Floatables Expansion of Regulator CSO 27, Traffic Impact Study of Local Detour Route," was finalized, and the DOT was contacted regarding the recommended traffic control plan included in the report. On August 21, 2008, a meeting was held at the project site with DEP and the NYCDOT to discuss and review the MPT plan for Bronx

- Park Avenue. A follow-up meeting with the local community board was held to review the impacts of construction from the proposed MPT plan.
- ♦ The Geotechnical Investigation Report for the floatables control facilities, based on the geotechnical borings drilled at the project sites has been completed.
- ♦ A utility coordination meeting was held on April 28, 2009 between the DEP and Con Edison for the utility relocation work required on Bronx Park Avenue for the underground expansion of Regulator CSO 27A work for the Bronx River Floatables Control Facilities Project.
- ♦ The NYCDOT has issued traffic stipulations for the traffic control plan for Regulators CSO 27 and CSO 27A for the floatables control facilities.

#### Construction

- ◆ Construction Contract ER-BR1, Bronx River Floatables Control Facilities, was let out on December 16, 2008, and bids were received for on February 3, 2009, with Northeast Remsco being the Low Bidder with a bid of \$26,473,401.
- ♦ The Bronx River Floatables Control Project, (Contract ER-BR1), was registered by the Comptroller on June 12, 2009.
- ♦ Construction Contract ER-BR1, Bronx River Floatables Control Facilities, was given a Notice to Proceed date of June 22, 2009.
- ♦ The Pre-Construction conference for Contract ER-BR1 was held on June 29, 2009.

#### **Missed Milestones**

♦ There are no missed milestones.

## **Anticipated Activities for Next Quarter**

- Planning
  - The environmental borings will be taken at the sites of the floatables control facilities.
- Design
  - ◆ DOT approval of the recommended traffic control plan for Regulator 27 for the floatables control facilities to be obtained.
- Construction
  - **♦** The construction of the Bronx River Floatables Project will begin.

# **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:	\$26,473,401
Status:	Bronx River Floatables Control Construction Project has been awarded to Northeast Remsco Construction, Inc Construction of the Bronx River Floatables Control Facilities Project to begin.
Other Issues:	NYCDOT – OCMC to provide approval for MPT plan; completion of environmental borings required

#### 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 WPCP 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 233<sup>rd</sup> 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.

## **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 Milestones**

♦ There are no missed milestones.

# **Anticipated Activities for Next Quarter**

♦ None

**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:	Alternate CSO abatement technologies under consideration
Other Issues:	DEC comments on WB/WS Facility Plan received May 22, 2009

## 3.12. Jamaica Bay CSO

The Jamaica Bay CSO Abatement Facility Plan addresses CSOs in the 26<sup>th</sup> Ward WPCP 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 26<sup>th</sup> 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 26<sup>th</sup> Ward WPCP by 50 mgd.

In addition to the facility plan recommendations, the existing Spring Creek Auxiliary WPCP is undergoing an upgrade. 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 four 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 Auxiliary WPCP upgrade include lowering the roof and providing enhanced HVAC and odor control systems, improved chemical systems, and new basin wash down systems.

## **Work Performed During This Quarter**

Design

- Hendrix Street Canal Interim Dredging
  - ♦ The Department advertised the project for bids on May 20, 2009, held a pre-bid conference with interested bidders, responded to bidder questions and issued Addendum Nos.2 and 3 to the Contract Documents for Contract CSO-HC; Hendrix Street Canal Interim Dredging.
  - **♦** The revised Post Dredge Monitoring Plan was submitted to and approved by the NYSDEC.
  - ♦ The 60% design documents for Contract 26W-20 (Preliminary Treatment & Solids Handling Facilities) were submitted by the designer for review in August 2008. **Design under this contract included continued scope refinement and design development.**
  - ♦ Contracts 26W-22 and 22F involve the construction of a new main sewage pumping station capable of accommodating the expanded 50 MGD wet weather capacity proposed for the 26th Ward WPCP and designs are underway.
  - ♦ Contract 26W-23 involves the potential construction of a new Chlorine Contact Tank to treat the additional 50 MGD but this tank may not be required to treat the additional 50 MGD as these wet weather overflows occur relatively infrequently and

there appears to be no water quality benefits associated with chlorinating this wet weather flow.

#### Construction

- Spring Creek Auxiliary WPCP Upgrade
  - ♦ Construction activities are nearing completion with change order work remaining to be completed at the Spring Creek Auxiliary WPCP upgrade. The odor control system, generator, boilers, and disinfection system have all been started up and the certification of construction completion was sent to the DEC meeting the April 30<sup>th</sup> milestone. Sluice gate issues are being addressed by the Contractor for Contract SC-1G. The Contractor for Contract SC-1H is addressing punch list issues as is the Contractor for Contractor SC-1E. All basins are operational.
- 26<sup>th</sup> Ward Drainage Area Sewer Cleaning and Evaluation
  - ♦ Work was completed on removal of debris from the Hegeman Avenue and Flatlands Avenue sewers. Work was also completed on debris removal from the three (3) barrel sewer on Williams Avenue. Work continues on debris removal from the four (4) barrel sewer in Williams Avenue.

### **Modified Milestones**

- Dredging
  - ♦ The DEC agreed to modify the Notice to Proceed to Construction milestone for the Hendrix Street Canal Interim Dredging Project to February 2010.

### **Anticipated Activities for Next Quarter**

- Dredging
  - **♦** Bid opening, review of bids and recommendation of award for the Hendrix Street Canal Interim Dredging Project.
- Cleaning of Certain Combined Sewers
  - **♦** Continuation of sewer cleaning activities by the contractor and construction management of contractor sewer cleaning activities by DEP personnel.
- Expansion of 26<sup>th</sup> Ward WPCP Capacity
  - ♦ The 90% design documents for Contract 26W-20 (Preliminary Treatment & Solids Handling Facilities) will be under preparation by the designer. Cost estimates for Contract 26W-20 will be updated to reflect changing market conditions.

Table 17 – Jamaica Bay CSO Project

	Table 17 – Jamaica Bay CSO Project					
Plan Elements:	Dredging	26 <sup>th</sup> Ward Drainage Area Sewer Cleaning and Evaluation	Expansion of 26 <sup>th</sup> Ward WPCP Capacity	Spring Creek Upgrade	Rockaway WPCP Conveyance Improvements	
Location:	Phase I- Interim Dredging of Hendrix Street Canal	Phase I-Portions of sewers in Williams, Hegeman and Flatlands Avenues	Phase IV- 26 <sup>th</sup> Ward WPCP, Brooklyn	Spring Creek, Brooklyn	Rockaway WPCP, 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 WPCP capacity to achieve 2DDWF	
Project Cost:	\$15 million	\$4.3 million	Estimate Construction Costs:  • 26W-20: \$344 million <sup>1</sup> • 26W-22: \$424 million <sup>1</sup> • 26W-23: \$58 million <sup>1</sup> <sup>1</sup> Conceptual estimate	\$87 million	TBD	
Status:	Project advertised for bids.	70% Complete	Final Design Initiated; 26W-20 Design 60% Complete	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 February 2010 and February 2012, respectively.	-	-	-	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. Over the course of 2008, floatables monitoring activities were incorporated into existing programs (listed below) and resulted in roughly 3,700 ratings conducted on 173 separate days at 99 sites. These programs have continued in the first and second quarters of 2009.
  - 1) Long Term Control Plan post construction compliance monitoring (PCM) Floatables monitoring was conducted as part of the PCM for the LTCP facilities that have come on line (i.e., Flushing and Spring Creek CSO retention facilities).
  - 2) Harbor Water Quality Survey Floatables monitoring was incorporated into existing cruise schedules to cover active sites.
  - 3) 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.

    During the second quarter of 2009, planning/scheduling has continued and training of volunteers has commenced with the intent of building on the success of 2008 by introducing new sites and providing as many observations as possible at all sites. Beach surveys are underway.
  - 4) Environmental Benefit Shoreline Cleanup Program —This project was undertaken in connection with the settlement of an enforcement action taken by New York State and DEC for violations of New York State law and DEC regulations (the Nitrogen Consent Judgment). During the second quarter of 2009, planning for the continuation of this program in the summer of 2009 was completed, and the program was started. During the month of June, DEP conducted 12 beach cleanups.
- ♦ During previous reporting periods, CSO LTCP Waterbody/Watershed reports incorporated general language describing the floatables monitoring program and the inclusion of floatables monitoring as part of the post construction monitoring program for relevant LTCP waterbodies.
- ♦ The CY2008 Floatables Monitoring Program Progress Report was completed during the first quarter of 2009 and submitted to the NYSDEC on April 1, 2009 in conjunction with the CY2008 CSO BMP Annual Report.

#### **Missed Milestones**

♦ There are no missed milestones.

## **Anticipated Activities for Next Quarter**

- ♦ Continue floatables monitoring program activities, including monitoring at all active Harbor Water Quality Survey sites.
- ◆ Continued compilation of **Q1 2009** monitoring data from the Harbor Water Quality Survey, the PCM program, and the Environmental Benefit Fund Shoreline Cleanup Program
- ♦ Continued public participation in floatables monitoring for the 2009 bathing season.
- ♦ Planning for site-specific investigations at sites having persistently poor floatables monitoring ratings per the CY2008 Floatables Monitoring Program Progress Report.

#### 3.14. Gowanus Canal CSO

This section of the Quarterly Progress Report was added at the request of DEC and covers projects that were not enumerated in Appendix A of the CSO Consent Order. The Order stipulates that projects and associated schedules proposed in a mandated Waterbody / Watershed Facility Plan become automatically enforceable under the Order upon approval by DEC. As of the end of the Fourth Quarter of 2008, the Gowanus Canal Waterbody / Watershed Facility Plan submitted August 2008 was not approved by DEC, and the projects presented here are therefore not enforceable under the CSO Consent Order.

The Gowanus Canal Waterbody / Watershed Facility Plan addresses CSOs in the Red Hook and Owls Head drainage areas, specifically the CSO discharges to Gowanus Canal in the Borough of Brooklyn. 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 the inside of the Flushing Tunnel. CSO screens will be retrofitted to RH-034 at the upstream side of the Gowanus Pumping Station, while a programmatic cleaning and inspection of the floatables/solids trap at OH-007 should maintain the functionality of the trap, which will provide control of floatables and solids discharges in that location. 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.

### **Work Performed During This Quarter**

- ◆ The Gowanus Canal Waterbody / Watershed Facility Plan was submitted to NYSDEC in August 2008.
- Design completion and bid documents were prepared. The bid walkthrough occurred
- ♦ Construction Contracts CSO-GC-G, H, P, and E for the Gowanus Facilities Upgrades were let out for bid on December 16, 2008. Bids were opened on February 18, 2009 with Northeast Remsco being the Low Bidder for the G Contract with a bid of \$116,948,969. The total of all four contract low bids (G, H, P, and E) is \$136,431,568.

#### **Missed Milestones**

# **Anticipated Activities for Next Quarter**

♦ The Construction Contracts for the Gowanus Facilities Upgrades will be awarded to the winning bidders and a Notice to Proceed for the start of construction will be issued pending the determination by USEPA of whether Gowanus Canal will be added to the National Priorities List to become eligible for Superfund or some type of assurance is given to move forward.

Table 18 – Gowanus Canal CSO Project

Plan Elements:	Rehabilitation of the Gowanus Canal Flushing Tunnel	Reconstruction of the Gowanus Pump Station	Floatables Controls at Major CSOs	Dredging	
Location:	Gowanus Pumping Station Property, Brooklyn	Gowanus Pumping Station Brooklyn	Brooklyn	Head end of Gowanus Canal	
Actions:					
Project Cost:	\$TBD	\$TBD	\$TBD	\$TBD	
Status:	Final Design Completed	Final Design Completed	Final Design Completed		
Other Issues:	out and the first of the first				

## 3.15. Environmental Benefits Projects

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. DEP has not submitted any alternative EBPs subsequent to the March 2008 submittal.

## **Work Performed During This Quarter**

- ♦ Met with New York City Parks and Mayor's Office of Long Term Planning and Sustainability to coordinate monitoring efforts of EBP stormwater projects of both Nitrogen and CSO EBP proposals and New York City Parks Greenstreet stormwater projects.
- ♦ Met with DEP Legal to finalize Request For Grant Proposals and comparisons with other appropriate grant funding programs.

### Bronx River

- ♦ Coordination and scheduling with the companion project being led by Dr. Franco Montalto continued.
- **♦** As companion project being led by Dr. Montalto progresses, continued refinement and schematic design development of BMP technologies listed in original CSO EBP proposal to reflect site conditions and modeling data.
- ♦ Review of existing property data and watershed field work to identify appropriateness and substantial technical issues of individual parcels has been completed. Final field surveys were completed as of April 17th.

## Flushing Creek

♦ Developing narrative summary of desktop analysis and extensive field work evaluations for both Gowanus and Flushing watersheds.

## Gowanus Canal

**♦** Begin outline development of narrative summary of desktop analysis and field work evaluations for both Gowanus and Flushing watersheds.

## DEC US Forestry Service Grant

- Continued to assist YMPJ in developing a contract and plans and specs for tree pit installations in HP-009 CSO-Shed.
- Drexel continued to refine the LIDRA model.
- Met with all grant partners to discuss and refine scopes of work, budgets and schedules for all elements of the grant project.

## **Anticipated Activities for Next Quarter**

DEC US Forestry Service Grant

- A DEC Letter Agreement will be developed and executed with Riverkeeper for their oversight of the work in the Newtown Creek CSO-Sheds.
- Locations for GI will be selected for the Newtown Creek portion of the project.
- Contracts and plans and specs will be finalized for the tree pits in the HP-009 CSO-Shed in the Bronx.

Table 19 – 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	Exact locations TBD	Exact locations TBD	Bronx River and Newtown Creek CSO- Sheds
Actions:	Continued coordination and scheduling with companion project. Refinement of BMP technologies.	Review of existing data and field work for site selection;  Development of public information materials to alert community of BMP Grant program.  Documenting desktop analysis and field	Development of public information materials to alert community of BMP Grant program.  Documenting desktop analysis and field work.	A meeting was held July 2 <sup>nd</sup> to further develop scopes of work, budgets and schedules for the GI installations in both the Bronx and Newtown CSO-Sheds.
Cost:	Budget: \$850,000 Cost to date: \$0 This Qtr: \$0 Next Qtr: \$0	work.  Budget: \$1,450,000  Cost to date: \$0  This Qtr: \$0  Next Qtr: \$0	Budget: \$1,450,000 Cost to date: \$0 This Qtr: \$0 Next Qtr: \$0	Budget: \$250,000 Cost to date: \$63,103 This Qtr: \$12,638 Next Qtr: \$35,000
Status:	Will continue to work closely with Dr. Montalto in scheduling and completion of companion project tasks for inclusion into development of proposed BMPs and LIDs under this proposal.	Field verification complete of individual parcels and develop watershed summary of available vacant parcels.	Field verification complete of individual parcels and develop watershed summary of available vacant parcels.	DEC Letter Agreements with YMPJ and Drexel have been completed. Drexel is refining the LIDRA model. YMPJ is designing two types of tree pits for installation in the HP- 009 CSO-Shed. Locations for GI are being selected for the Newtown CSO-Shed.
Other Issues:				

# 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 **June 2009**:

**Table 20 – Consent Order Milestone Dates** 

I able 20 – Consent Order Milestone Dates  ITEM DESCRIPTION START DATE   DUE DATE   % COMPLETE						
	START DATE	DOEDATE	% COMPLETE			
I. Alley Creek CSO						
A. Facility Plan Development						
Submit Modified Facility Plan Report	-	Completed	100			
Submit Approvable Additional Modified Facility Plan Report	-	Feb. 2004	100			
3. Submit Form 2A SPDES Application	-	June 2003	100			
B. Comprehensive Watershed Planning						
1. Submit Approvable Alley Creek Waterbody / Watershed Facility Plan Report	-	June 2007	100			
2. Submit Approvable East River Waterbody / Watershed Facility Plan Report	-	June 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	51			
E. Drainage Basin Specific LTCPs	1		I			
Submit Approvable Drainage Basin Specific LTCP for	-	6 mos. after	50			

ITI	EM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
	Alley Creek		approval of I.B.1.	
	2. Submit Approvable Drainage Basin Specific LTCP for East River	-	6 mos. after approval of I.B.2.	50
	Outer Harbor CSO			
A.	Facility Plan Development			
	Submit Modified Facility Plan Report	-	Completed	100
	Submit Additional Modified Facility Plan Report	-	Feb. 2004	100
В.	Comprehensive Watershed Planning			
	1. Submit Approvable Open Waters Waterbody / Watershed Facility Plan Report	-	June 2007	100
C.	Regulator Improvements - Fixed Orifices			•
	1. Initiate Final Design	Jan. 2004	-	100
	2. Final Design Completion Including CPM Analysis	-	April 2005	100
	3. Notice to Proceed to Construction	Feb. 2006	-	100
	4. Construction Completion	-	July 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	-	June 2010	45
E.	Port Richmond Throttling Facility			I
	Initiate Final Design	June 2004	-	100
	2. Final Design Completion Including CPM Analysis	-	Aug. 2005	100
	3. Notice to Proceed to Construction	June 2006	-	100
	4. Construction Completion	-	Nov. 2009	95
	Submit Approvable Drainage Basin Specific LTCP for Open aters	-	6 mos. after approval of II.B.1.	50
III	. Inner Harbor CSO			
A.	Facility Plan Development			
	Submit Modified Facility Plan Report	-	Completed	100
	I .			1

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Submit Additional Modified Facility Plan Report	-	Feb. 2004	100
B. Comprehensive Watershed Planning			
Submit Approvable Gowanus Canal Waterbody / Watershed Facility Plan Report	-	June 2007	100
C. Regulator Improvements - Fixed Orifices			
1. Initiate Final Design	Mar. 2000	-	100
2. Final Design Completion Including CPM Analysis	-	Sept. 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	-	June 2010	45
E. In-Line Storage			1
1. Initiate Final Design	July 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	70
F. Submit Approvable Drainage Basin Specific LTCP for Gowanus Canal	-	6 mos. after approval of III.B.1.	50
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	-	July 2002	100
B. Comprehensive Watershed Planning	l		I
Submit Approvable Paerdegat Basin Waterbody / Watershed Facility Plan Report	-	Mar. 2003	100
C. Influent Channel	l	<u> </u>	1
1. Initiate Final Design	Oct. 1994	-	100
			I

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
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			- <u>l</u>
1. Initiate Final Design	Oct. 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Aug. 2001	100
3. Notice to Proceed to Construction	June 2002	-	100
4. Construction Completion	-	Feb. 2009	97
E. Structures and Equipment			<u>. I                                   </u>
1. Initiate Final Design	Oct. 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Nov. 2004	100
3. Notice to Proceed to Construction	Sept. 2005	-	100
4. Construction Completion	-	May 2011	80
F. Submit Approvable Drainage Basin Specific LTCP for Paerdegat Basin	-	Nov. 2005	100
Submit Joint Application Permit to USACE and DEC to associated with dredging at the head-end and mouth of Paerdegat Basin		December 2008	100
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	-	June 2003	100
B. Comprehensive Watershed Planning			
Submit Approvable Flushing Bay Waterbody / Watershed Facility Plan Report	-	June 2007	100
2. Submit Approvable Flushing Creek Waterbody / Watershed Facility Plan Report	-	June 2007	100
C. CS4-1 Reroute and Construct Effluent Channel			
1. Initiate Final Design	Oct. 1992	-	100
2. Final Design Completion Including CPM Analysis	-	Sept. 1994	100
3. Notice to Proceed to Construction	June 1995	-	100
<u> </u>	1		

ITEM DESCRIPTION		START DATE	DUE DATE	% COMPLETE
	4. Construction Completion	-	June 1996	100
D.	CS4-2 Relocate Ballfields			
	Initiate Final Design	Oct. 1992	-	100
	2. Final Design Completion Including CPM Analysis	-	Sept. 1994	100
	3. Notice to Proceed to Construction	Apr. 1995	-	100
	4. Construction Completion	-	Aug. 1995	100
E.	CS4-3 Storage Tank			1
	1. Initiate Final Design	Dec. 1993	-	100
	2. Final Design Completion Including CPM Analysis	-	Sept. 1996	100
	3. Notice to Proceed to Construction	July 1997	-	100
	4. Construction Completion	-	Aug. 2001	100
F.	CS4-4 Mechanical Structures - Initiate Final Design			
	Initiate Final Design	Dec. 1993	-	100
	2. Final Design Completion Including CPM Analysis	-	Feb. 2000	100
	3. Notice to Proceed to Construction	Mar. 2002	-	100
	4. Construction Completion	-	May 2007	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			
	Final Design Completion Including CPM Analysis	-	May 2003	100
	2. Notice to Proceed to Construction	Feb. 2004	-	100
	3. Construction Completion	-	June 2005	100
Ι	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

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE		
J. Tallman Island WPCP and associated sewer system are capab	le of delivering, a	ccepting and tr	eating 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	12		
3. Notice to Proceed to Construction	Dec. 2011	-	-		
4. Construction Completion	-	Jul. 2015	-		
VI. Jamaica Tributaries CSO					
A. Facility Plan Development					
1. Submit Modified Facility Plan Report	-	April 2003	100		
2. Submit Additional Modified Facility Plan Report	-	Feb. 2004	100		
B. Comprehensive Watershed Planning	Comprehensive Watershed Planning				
1. Submit Approvable Bergen Basin Waterbody / Watershed Facility Plan Report	-	June 2007	100		
2. Submit Approvable Thurston Basin Waterbody / Watershed Facility Plan Report	-	June 2007	100		
C. Meadowmere & Warnerville DWO Abatement			I		
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	90		
Expansion of Wet Weather Capacity of Jamaica WPCP					
1. Initiate final Design	June 2009	-	-		
2. Submit Form 2A SPDES Application	-	June 2010	-		
3. Final Design Completion Including CPM Analysis	-	June 2011	-		
4. Notice to Proceed to Construction	June 2012	-	-		
5. Construction Completion	-	June 2015	-		
E. Destratification Facility			I		
1. Initiate Final Design	Jan. 2006	-	100		
2. Final Design Completion Including CPM Analysis	-	Dec. 2007	100		
3. Notice to Proceed to Construction	Apr. 2009	-	0		
4. Construction Completion	-	Nov. 2010	-		
F. Laurelton and Springfield Blvd.	1		1		

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
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	-	June 2010	45
H. Drainage Basin Specific LTCPs			•
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			I
Submit Approvable Coney Island Creek Waterbody / Watershed Facility Plan Report	-	June 2007	100
C. Avenue V Pumping Station Upgrade			1
1. Initiate Final Design	April 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	44
D. Avenue V Force Main			
1. Initiate Final Design	Apr. 1998	-	100
2. Final Design Completion Including CPM Analysis	-	Sept. 2006	100
3. Notice to Proceed to Construction	July 2007	-	100
4. Construction Completion	-	June 2012	64
E. Submit Approvable Drainage Basin Specific LTCP for Coney Island Creek	-	6 mos. after approval of VII.B.1.	50
VIII. Newtown Creek CSO			· 
A. Facility Plan Development			

ΙT	EM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
	1. Submit Modified Facility Plan Report	-	Oct. 2003	100
В.	Comprehensive Watershed Planning			
	Submit Approvable Newtown Creek Waterbody / Watershed Facility Plan Report	-	June 2007	100
C.	Aeration Zone I			1
	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	June 2007	-	100
	2. Final Design Completion Including CPM Analysis	-	June 2010	20
	3. Notice to Proceed to Construction	June 2011	-	-
	4. Construction Completion	-	June 2014	-
E.	Relief Sewer / Regulator Modification			
	1. Initiate Final Design	June 2007	-	100
	2. Final Design Completion Including CPM Analysis	-	June 2009	10
	3. Notice to Proceed to Construction	June 2010		-
	4. Construction Completion	-	June 2014	-
F.	Throttling Facility			
	1. Initiate Final Design	Dec. 2005	-	100
	2. Final Design Completion Including CPM Analysis	-	June 2008	100
	3. Notice to Proceed to Construction	June 2009	-	-
	4. Construction Completion	-	Dec. 2012	-
G.	CSO Storage Facility			
	1. Initiate Final Design	Nov. 2010	-	-
	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	-
	Submit Approvable Drainage Basin Specific LTCP for ewtown Creek	-	Feb. 2016	50

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
IX. Westchester Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr. 2003	100
2. Submit Form 2A SPDES Application	-	June 2009	-
B. Comprehensive Watershed Planning			
Submit Approvable Westchester Creek Waterbody / Watershed Facility Plan Report	July 2004	June 2007	100
C. Phase I (Influent Sewers)			1
1. Initiate Final Design	Jan. 2004	-	100
2. Final Design Completion Including CPM Analysis	-	June 2010	20
3. Notice to Proceed to Construction	June 2011	-	-
4. Construction Completion	-	June 2015	-
D. CSO Storage Facility			
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			
Submit Modified Facility Plan Report	-	Sept. 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	-	June 2007	100
C. Floatables Control			1
1. Initiate Final Design	Jan. 2006	-	100
2. Final Design Completion Including CPM Analysis	-	July 2008	100
3. Notice to Proceed to Construction	June 2009	-	100
4. Construction Completion	-	June 2012	-
D. Submit Approvable Drainage Basin Specific LTCP for Bronx River	-	Aug. 2009	50
XI. Hutchinson River CSO			

ITEM DESCRIPTION		START DATE	DUE DATE	% COMPLETE		
A.	A. Facility Plan Development					
	Submit Modified Facility Plan Report	-	July 2003	100		
	2. Submit Form 2A SPDES Application	-	June 2009	-		
В.	Comprehensive Watershed Planning			1		
	Submit Approvable Hutchinson River Waterbody / Watershed Facility Plan Report	-	June 2007	100		
C.	Phase I of the Storage Facility			•		
	1. Initiate Final Design	Apr. 2005	-	100		
	2. Final Design Completion Including CPM Analysis	-	June 2010	10		
	3. Notice to Proceed to Construction	June 2011	-	-		
	4. Construction Completion	-	June 2015	-		
D. Future Phases						
	Notice to Proceed to Construction	Dec. 2016	-	-		
	2. Construction Completion	-	Dec. 2023	-		
	Submit Approvable Drainage Basin Specific LTCP for tchinson River	-	Feb. 2017	50		
ΧI	I. Jamaica Bay CSO					
A.	Facility Plan Development					
	Submit Modified Facility Plan Report	-	Dec. 2003	100		
В.	Comprehensive Watershed Planning					
	1. Submit Approvable Jamaica Bay Waterbody / Watershed Facility Plan Report	-	June 2007	100		
	2. Submit Approvable Spring Creek Waterbody / Watershed Facility Plan Report	-	June 2007	100		
	3. Submit Approvable Fresh Creek Waterbody / Watershed Facility Plan Report	-	June 2007	100		
	4. Submit Approvable Hendrix Creek Waterbody / Watershed Facility Plan Report	-	June 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	-	June 2003	100		
	4. Notice to Proceed to Construction	Mar. 2003	-	100		

ITEM DESCRIPTION		START DATE	DUE DATE	% COMPLETE		
	5. Construction Completion	-	April 2007	100		
D.	26th Ward Drainage Area Sewer Cleaning and Evaluation					
	Initiate Final Design	Jan 2007	-	100		
	2. Final Design Completion Including CPM Analysis	-	June 2007	100		
	3. Notice to Proceed to Construction	-	June 2008	100		
	4. Construction Completion	-	June 2010	70		
E.	Hendrix Creek Dredging					
	Initiate Final Design	Jan 2007	-	100		
	2. Final Design Completion Including CPM Analysis	-	June 2007	100		
	3. Notice to Proceed to Construction	-	August 2009	-		
	4. Construction Completion	-	August 2011	-		
F.	26th Ward Wet Weather Expansion					
	Initiate Final Design	June 2006	-	100		
	2. Final Design Completion Including CPM Analysis	-	June 2010	15		
	3. Submit Form 2A SPDES Application	-	June 2009	-		
	4. Notice to Proceed to Construction	June 2011	-	-		
	5. Construction Completion	-	Dec. 2015	-		
G.	Drainage Basin Specific Long Term Control Plans					
	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		
Н.	Rockaway WPCP Conveyance Improvements		Dec. 2017	-		
ΧI	II. Citywide Comprehensive Floatables Plan					
A.	A. Facility Plan Development					
	Submit Modified Facility Plan Report	-	Dec. 2004	100		
ΧI	V. Submit Approvable City-Wide LTCP					
		-	Dec 2017	-		

# **5.0.** Community Relations

A public meeting has been scheduled for Wednesday, August 19, 2009 at 6:00 PM to review the Bronx River Waterbody/Watershed Facility Plan. Copies of the Plan will be placed at three local repositories and posted online for public review.

# **6.0.** Key Personnel Changes

There were no Key Personnel Changes during the Second Quarter of 2009.

## 7.0. Other Issues

As identified in the report, the following issues may materially affect the work required by this Order:

#### 1. Alley Creek CSO - Abatement Facilities - Phase I, Stage 2, Contract ER-AC2

In mid-November 2007, the DEP issued a registered letter to the DEC regarding a Notice of Force Majeure for stoppage of all construction activities on the interim pumping station due to the deteriorated condition of an existing pile-supported, 36-inch diameter influent sewer within the work zone. DEP has not yet determined the impact that this event will have on compliance with the construction completion milestone date. An update on this Force Majeure event was submitted to DEC in a letter dated August 20, 2008, and in a letter dated February 3, 2009 that responded to DEC's letter of December 11, 2008.

#### 2. Outer Harbor CSO - Phase II Throttling Facility

DEP submitted a Notice of Force Majeure in November 2007 to DEC due to an unanticipated subsurface condition encountered by the contractor. DEP has not yet determined the impact that this event will have on compliance with the construction completion milestone date. On February 15, 2008, DEP submitted an update to the November 2007 Force Majeure event. Another update was submitted to DEC in a letter dated August 29, 2008.

DEP submitted a Request for Modification of Milestone associated with the Port Richmond Throttling Facility to DEC on October 31, 2008. The basis for this request was unanticipated subsurface conditions encountered by the contractor, a Force Majeure event. DEP submitted a Notice of Force Majeure in November 2007 to DEC related to the subsurface conditions, and updates on this Force Majeure event were submitted in November 2007 and February 2008. DEC concurred with the Force Majeure event occurrence and approved the Request for Modification in a letter dated January 15, 2009.

## 3. Inner Harbor CSO - 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 to DEC in a letter dated August 20, 2008.

# 4. Paerdegat Basin CSO

DEP submitted a Request for Modification of a Minor Milestone associated with the Paerdegat Basin Foundations and Substructures work to DEC on December 29, 2008. The basis for this request stems from delays associated with the default of the Foundations and Substructures contractor on December 6, 2007. This modification request was denied and an NOV issued on March 27, 2009. Negotiations regarding the NOV continue.

A Notice of Force Majeure regarding changes to navigational conditions in Paerdegat Basin was submitted by DEP on June 10, 2009. A sand bar was identified near the mouth of Paerdegat Basin that could not be cleared with conventional construction and dredging barges. The removal of this obstruction requires modification to the existing dredging permits associated with Paerdegat Contract 4B.

#### 5. Jamaica Tributaries CSO

DEP submitted a Notice of Force Majeure and a Request for Modification of milestones associated with the Shellbank Basin Destratification facility to the DEC on June 9, 2008. The basis for the request was an unanticipated permit stipulation by DEC to conduct additional water quality monitoring during the summer and into the fall of 2008.

DEP completed the water quality monitoring program, however, as of the end of the second quarter of 2009, no permit has been received from DEC to advance this project.

## 6. Jamaica Tributaries - Warnerville Pump Station and Force Main

DEP submitted a Notice of Force Majeure on February 15, 2008 to DEC due to unanticipated subsurface conditions encountered by the contractor. DEP has not yet determined the impact this event will have on compliance with the construction completion milestone date. An update on this Force Majeure event was submitted to DEC in a letter dated August 20, 2008.

### 7. Jamaica Bay CSO

DEP submitted the Jamaica Bay and CSO Tributaries Waterbody/Watershed Plan to DEC on June 30, 2007, as required by the Order. This report documents a more effective CSO management strategy, as compared to the expansion of the wet weather capacity of the Jamaica WPCP. This alternative to treatment plant expansion relies on sewer system improvements to maximize the use of the plant's 200 mgd wet weather capacity.

DEP submitted a revised Request for Modification of project and milestones associated with the expansion of the wet weather capacity of the Jamaica WPCP to DEC on November 14, 2008. The basis of this request is the identification of an alternative approach that is expected to result in a greater degree of CSO reduction. However, based on discussions with the DEC this modification request will need to be modified to achieve construction completion in a similar time frame as current mandated projects and will include a period to conduct field flow measurements. Negotiations are ongoing.

#### 8. Gowanus Canal

The Gowanus Canal Waterbody/Watershed Facility Plan includes improvements to the Gowanus Pumping Station and the Flushing Tunnel. In February 2009, DEP was notified by the Environmental Facilities Corporation that EFC was disbursing New York State's share of the federal stimulus funding and were expecting to fund the Gowanus Canal and Bronx River Floatables projects. In order to qualify for funding, each project must be "shovel-ready" (i.e., ready to proceed to construction) by February 17, 2010.

DEP was on track to meet this deadline and qualify for federal stimulus funding for the Gowanus Canal capital projects when, in April 2009, the US Environmental Protection Agency (EPA) proposed adding the Gowanus Canal to the Superfund National Priorities List (NPL). Listing would allow EPA to expand its investigations to further define the nature and extent of contamination, listed in the proposal as PCBs, coal tar wastes, heavy metals and volatile organics resulting from "years of discharges, storm water runoff, sewer outflows and industrial pollutants." The City of New York evaluated the implications of this listing, including impacts to the CSO Program, and

temporarily delayed the award of the construction contracts for the Gowanus Pumping Station and Flushing Tunnel. The 60-day comment period ends July 8, 2009.

# 9. Additional Waterbody/Watershed Modification Requests

In accordance with the CSO Consent Order; the DEP proposed modifications to the Newtown Creek, Westchester Creek, and Hutchinson River CSO plans as part of the June 30, 2007 - Waterbody/Watershed Plans submittal. These revised plans would require modifying particular milestones currently contained in the CSO consent order and that DEP believes would achieve equivalent or better water quality benefits.

The Newtown Creek Request for Modification was submitted in April 2009, and negotiations are ongoing. DEC provided comments on the Hutchinson River WB/WS Plan, and DEP and DEC are continuing to negotiate the modifications proposed in this watershed. It is important to resolve this issue as soon as possible, as many of these consent order milestones that the WB/WS Plans proposed to modify have already commenced or are scheduled to commence in the near future. The DEP is currently revising its consent order modification request to try to expedite design and construction of the proposed elements to the maximum extent possible.

# 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



DEPARTMENT OF ENVIRONMENTAL PROTECTION

96-05 Horace Harding Expressway Corona, New York 11368

Steven W. Lawitts Acting Commissioner

James G. Mueller, P.E. Deputy Commissioner

Tel. (718) 595-5973 Fax. (718) 595-5999 jmueller@dep.nyc.gov

Bureau of Engineering Design & Construction Mr. Joseph DiMura, P.E. Director, Bureau of Compliance New York State Department of Environmental Conservation Division of Water 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3500

Re: Order on Consent (CSO Order)

DEC Case #CO2-20000107-8

Appendix A, X. Bronx River CSO, C. Floatables

Control, 3. Notice to Proceed Construction Certification

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 compliance with a milestone contained in the Order by the New York City Department of Environmental Protection (DEP). Specifically, notice to proceed to construction has been transmitted to the general contractor for the Bronx River CSO Floatables Control Facilities, in conformance with milestone X.C.3 in Appendix A of the Order. A copy of the order to commence work is attached.

Please contact me at (718) 595-6208 if you have any questions regarding this certification.

Very truly yours,

Roy Tysvaer, P.E.

Director, Wastewater Treatment and

Water Quality

Attachment



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

cc: James DeZolt

Director, Division of Water New York State Department of Environmental Conservation 625 Broadway, 4<sup>th</sup> Floor Albany, NY 12233-3500

Robyn Adair, Esq.
Water Compliance Counsel
New York State Department of Environmental Conservation
625 Broadway, 4<sup>th</sup> Floor
Albany, NY 12233-3500

Gary E. Kline, P.E. Division of Water New York State Department of Environmental Conservation 625 Broadway 4<sup>th</sup> Floor Albany, NY 12233-3500

Robert Elburn, P.E.
Regional Water Engineer
Division of Water, Region 2
New York State Department of Environmental Conservation
47-40 21<sup>st</sup> Street
Long Island City, New York 11101

Timothy Burns, P.E. New York State Environmental Facilities Corporation 625 Broadway Albany, New York 12207

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

DEP: H. Donnelly, K. Mahoney, D. Chao, M. Osit, J. Romano, K. Tong, P. Young (H&S), File



June 18, 2009

DEPARTMENT OF ENVIRONMENTAL PROTECTION

59-17 Junction Boulevard Flushing, New York 11373 Northeast Remsco Construction 1433 Route 34 South - Building B Farmingdale, NJ 07727

RE: ORDER TO COMMENCE WORK FOR CONTRACT ER-BR-1

Steven W. Lawitts
ACTING COMMISSIONER

Tel: (718) 595-6576 Fax: (718) 595-3557 SLawitts@DEP.NYC.GOV Dear Contractor:

Transmitted herewith is your duly executed contract ER-BR-1 for furnishing all labor and materials necessary and required for the East River CSO Retention Facilities, Bronx River Floatables Control Facilities, Bronx NY.

The Contract was:

Carol E. Fenves

Tel: (718) 595-3225 Fax: (718) 595-3278 CFenves@DEP.NYC.GOV Awarded to you on Executed on Registered by the Comptroller on

March 27, 2009 April 09, 2009 June 12, 2009

The Contract was awarded in the amount of \$26,473,401.00 and the registration number is CTC 826 20090033043.

The commence work date is June 22, 2009. You must complete the work within 1095 consecutive calendar days as fixed in the General Conditions, or within the time such completion may be extended. The date to complete all work is June 21, 2012.

Upon receipt of this order please contact Reza Marandi, located at 96-05 Horace Harding Expressway, 5th Floor, (718) 595-5932.

Yours truly,

Debra E. Butlien

Deputy Agency Chief Contracting Officer



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