NEW YORK CITY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION
DEC CASE # CO2-20070101-1

Combined Sewer Overflow Order on Consent

Quarterly Progress Report – Third Quarter 2009

October 2009

New York City Department of
Environmental Protection
www.nyc.gov/dep

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Bureau of Engineering
Design & Construction

OCT 28 2009

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

Re: Order on Consent (CSO Order)
DEC Case # CO2-20000107-8
Citywide CSO Program - Quarterly Report

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 July 1 through September 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

Xc: M. Eckels, H. Donnelly, D. Hammerman, A. Spangel, M. Osit, K. Clarke, R. Marandi, R. Meshkati, K. Mahoney, D. Chao, File

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Department of Environmental Protection
Bureau of Engineering Design & Construction

CSO Order on Consent
DEC Case # CO2-**20070101-1**

QUARTERLY PROGRESS REPORT
THIRD QUARTER 2009
(July 1 – September 30)

October 30, 2009

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1.0 Executive Summary

The Combined Sewer Overflow "CSO" Order on Consent, DEC Case # CO2-**20070101-1** (the "Order"); was entered into by the City of New York ("City") and the New York State Department of Environmental Conservation ("DEC") on January 14, 2005 and modified on April 14, 2008. 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 July 1, 2009 to September 30, 2009.

Critical Events This Quarter:

The following critical events occurred this quarter:

1) DEC approved the Plans and Specifications for the Gowanus Pump Station and Flushing Tunnel on July 14, 2009.

2) A notice to proceed with construction was issued to the G contractor for the Gowanus Facilities Upgrades on September 14, 2009. The milestone date for the NTP in the Order is February 2010.

3) On July 14, 2009, DEC approved the Gowanus Canal Waterbody / Watershed Facility Plan submitted August 2008 and amended April 2009. The approval established the proposed Plan elements as items F through I under part III (Inner Harbor CSO) of Appendix A of the CSO Consent Order and enforceable under the Order by reference. This approval also establishes the due date of the subsequent LTCP to be January 14, 2010, i.e., 6 months after approval of the Waterbody / Watershed Facility Plan.

4) The Surety's completing contractor for dredging work under Paerdegat Basin Contract 4B completed removal of the sand bar navigational hazard and began mobilization for removal of the remaining derelict steel barge and the dredging of the area in front of the tanks. The sand bar had been identified in DEP's June 10, 2009 Notice of Force Majeure as an unforeseen change to navigational conditions in Paerdegat Basin that could not be cleared with conventional construction and dredging barges. The completing contractor performed the dredging after receiving a waiver from the National Marine Fisheries Service (NMFS) to perform dredging prior to the environmental window.

5) DEP and DEC signed the 2009 Modification to Order on Consent resolving the Notice of Violation (NOV) issued by DEC on July 15, 2008 in connection with the Construction Completion Milestone for CS4-4 (V.F.4 of the CSO Consent Order). A new construction completion date of September 2009 was established in the 2009 Modification, and Appendix B was appended to the CSO Consent Order, containing requirements for corrective actions at the Flushing Bay CSO Retention Facility related to flow metering, odor control systems, bar screens, and Tallman Island Regulator 9. DEP responded to eight of the nine newly-established Appendix B requirements during the quarter; the ninth

item is Item 1(b), which requires the submission of effluent overflow volumes on a monthly basis. This milestone is contingent on DEC approval of the submittal under 1(a), which has not been received as of the end of the third quarter of 2009.

6) DEP Certified Construction Completion of the Meadowmere & Warnerville DWO Abatement facilities on July 31, 2009 in accordance with the modified construction completion milestone. DEC accepted the certification on August 31, 2009.

7) On July 15, 2009, DEC approved the Coney Island Creek Waterbody / Watershed Facility Plan submitted June 2009 and amended July 2009. This approval establishes the due date of the subsequent LTCP to be January 15, 2010, i.e., 6 months after approval of the Waterbody / Watershed Facility Plan.

8) DEP certified that the Notice to Proceed to Construction for the Kent Avenue Throttling Facility had occurred prior to the June 2009 milestone in a letter dated September 29, 2009. The construction is occurring under Newtown Creek WPCP contract NC-36.

9) On July 10, 2009, DEC approved DEP's request to modify the Bronx River LTCP Submittal milestone from August 2009 to "6 months after approval of X.B.1" (i.e., the Waterbody/Watershed Facility Plan).

10) The DEC agreed to modify the Notice to Proceed to Construction milestone for the Hendrix Street Canal Interim Dredging Project to February 2010 and the Construction Completion milestone to February 2012 per DEP's June 15, 2009 request. 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.

11) DEP received and opened bids for the Hendrix Street Canal Interim Dredging project (Contract CSO-HC) on July 17, 2009.

Major Actions This Quarter:

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

As stipulated by the Order, DEP and DEC held a Quarterly Progress Meeting on **September 16, 2009. The meeting was held at the Hunts Point WPCP** 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:

Table 3 shows milestones to be met next quarter. The following major actions are expected to occur between October 2009 and December 2009:

- **Schedule and hold the next Quarterly Progress Meeting between DEC and DEP.**
- **Complete construction of the Port Richmond Throttling Facility.**

Table 1 – Milestones This Quarter (Jul 2009 – Sep 2009)

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	ACTION REQUIRED	MILESTONE DATE	STATUS
Flushing Bay	CS4-4 Mechanical Structures	Construction Completion	9/1/2009 as Modified	Certified
Flushing Bay CSO Facility	Flow Meters	a) Submit Methodology b) Submit Monthly Reports	See Note(1)	a) Submitted 7/31/2009 b) Pending 1(a) approval
Flushing Bay CSO Facility	Odor Control System	a) CBS registration b) Start-up c) Demonstration d) Construction completion	a) 9/1/2009 b) 9/1/2009 c) 9/1/2009 d) 9/1/2009	a) Certified 9/1/2009 b) Certified 6/30/2009 c) Demo 9/16/2009(2) d) Certified 9/1/2009
Flushing Bay CSO Facility	Bar Screens	a) Report on repairs b) Demonstrate full operation	a) 6/1/2009 b) 9/1/2009	a) Certified 6/30/2009 b) Demo 9/16/2009
Flushing Bay CSO Facility	Tallman Island Regulator 9	a) Submit SCADA report	a) 5/31/2009	a)Submitted 5/29/09
Jamaica Tributaries	Meadowmere & Warnerville DWO Abatement	Construction Completion	Jul 2009	Complete. Certified 7/31/2009; Accepted 8/31/2009
Newtown Creek	Throttling Facility	Notice to Proceed to Construction	Jun 2009(3)	Complete. Certified 9/29/2009
Bronx River	Submit Approvable LTCP	Submit Plan	Aug 2009	Modified to 6 months after approval of WBWS Plan
Jamaica Bay	Hendrix Creek Dredging	Notice to Proceed to Construction	Aug 2009	Modified to Feb 2010

Notes: (1) The 1(a) submittal is due 30 days after completion of methodology testing but no later than 7/31/2009; 1(b) is due with the next SPDES monthly operating report 60 days after DEC approval. (2) DEC requested that the inspection be done 9/16 instead of 9/1 for scheduling reasons. (3) Milestone occurred in previous quarter but was certified in the present quarter.

Table 2 – Milestones to be Considered for Potential Modification

LOCATION / PROJECT AREA	ITEM DESCRIPTION	ACTION REQUIRED	REASON FOR MODIFICATION
Alley Creek	CSO Retention Facility	Construction Completion	**Modification Request to be submitted next Quarter due to Force Majeure**
Inner Harbor	Gowanus Canal LTCP	Submittal	**Modification Request to be submitted next Quarter**
Coney Is Creek	Submit Approvable LTCP	Submittal	**Modification Request to be submitted next Quarter**

Table 3 – Milestones to be Met Next Quarter (Oct 2009 - Dec 2009)

LOCATION/ PROJECT AREA	ITEM DESCRIPTION	ACTION REQUIRED	MILESTONE DATE	STATUS
Alley Creek	CSO Retention Facility	Construction Completion	Dec 2009	Modification Request **to be submitted next Quarter**
Outer Harbor	Port Richmond Throttling Facility	Construction Completion	Nov 2009	On Schedule

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
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 Sand Shoal	Construction Completion Feb 2009	NOV issued; Recovery in process
Bronx River	Submit Approvable LTCP	Mod Request	Pending Waterbody/ Watershed Plan approval	Aug 2009	Modified to "6 months after approval of WB/WS Facility Plan"
Jamaica Tributaries	Destratification Facility	Mod Request	Land Acquisition delays; Permit Issue	NTP Apr 2009; Construction Completion Nov 2010	Modified to Sep 2010 and Mar 2012
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
Newtown Creek	Aeration Zone II Sewer Modifications Throttling Facility Storage Facility	Proposed Mod Request & WWFP	Cost-Effective Alternative	Jun 2010* Jun 2009* Jun 2009* Nov 2010*	Under negotiation between DEC and DEP
*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

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	92%	62%
Outer Harbor	Regulator Improvements - Fixed Orifices	Feb 2006	Jul 2008	100%	100%
	Regulator Improvements - Automation	Nov 2007	Jun 2010	71%	70%
	Port Richmond Throttling Facility	Jun 2006	Nov 2009 as modified	95%	95%
Inner Harbor	Regulator Improvements - Fixed Orifices	Feb 2003	Apr 2006	100%	100%
	Regulator Improvements - Automation	Nov 2007	Jun 2010	71%	70%
	In-Line Storage	Aug 2007	Aug 2010	69%	65%
	Gowanus Flushing Tunnel Modernization	Feb 2010	Sep 2014	-	-
	Gowanus Pump Station Reconstruction	Feb 2010	Sep 2014	-	-
	Dredging of Gowanus Canal	3 years post permit	5 years post permit	-	-
Paerdegat Basin	Influent Channel	Feb 1999	Feb 2002	100%	100%
	Foundations and Substructures	Jun 2002	Feb 2009	100%	97%
	Structures and Equipment	Sep 2005	May 2011	71%	86%
Flushing Bay	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%
	Mechanical Structures	Mar 2002	Sep 09	100%	100%
	Tide Gates	Dec 2000	Apr 2002	100%	100%

WATERBODY	ITEM DESCRIPTION	NOTICE TO PROCEED	CONSTRUCTION COMPLETION	% OF TIME ELAPSED	% OF CONSTRUCTION COMPLETED*
	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	100%	95%(1)
	Expansion of Wet Weather Capacity of Jamaica WPCP	Jun 2012	Jun 2015	-	-
	Destratification Facility	**Sep 2010**	**Mar 2012**	-	-
	Regulator Automation	Nov 2007	Jun 2010	71%	70%
Coney Island Creek	Avenue V Pumping Station Upgrade	Nov 2005	Apr 2011	71%	47%
	Avenue V Force Main	Jul 2007	Jun 2012	44%	67%
Newtown Creek	Aeration Zone I	Dec 2005	Dec 2008	100%	100%
	Aeration Zone II	Jun 2011	Jun 2014	-	-
	Relief Sewer / Regulator Modification	Jun 2010	Jun 2014	-	-
	Throttling Facility	Jun 2009	Dec 2012	7%	**33%**
	CSO Storage Facility	Dec 2015	Dec 2022	-	-
Westchester Creek	Phase I (Influent Sewers)	Jun 2011	Jun 2015	-	-
	CSO Storage Facility	Dec 2015	Dec 2022	-	-
Bronx River	Floatables Control	Jun 2009	Jun 2012	8%	0%
Hutchinson River	Phase I of the Storage Facility	Jun 2011	Jun 2015	-	-
	Future Phases	Dec 2016	Dec 2023	-	-
Jamaica Bay	Spring Creek AWPCP Upgrade	Mar 2003	Apr 2007	100%	100%
	26th Ward Drainage Area Sewer Cleaning and Evaluation	Jun 2008	Jun 2010	63%	90%
	Hendrix Creek Dredging	**Feb 2010**	**Feb 2012**	-	-
	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) Facilities necessary to operate Warnerville Pump Station are completed. Certification of Construction Completion submitted to DEC in July 2009

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

Construction

- Alley Creek Drainage Area Improvements – Phase I, Stage 1, Contract ER-AC1
  - **Construction activities have been completed and the project is being closed out**
- Alley Creek CSO Abatement Facilities – Phase I, Stage 2, Contract ER-AC2
  - Activities continued for Contract ER-AC2. The principal work included **construction of the ODPS Electric Chamber, the Grinder Room of ODPS and the completion of the reconstruction of Outfall TI-008, installation of mechanical piping, equipment, electrical conduit,** obtaining permits and approvals from regulatory/ approval agencies,

and submittal and review of shop drawings. Construction of Contract ER-AC2 is currently about **62** percent complete.

- The DEP and CM have been coordinating with the contractor to develop alternatives to help recover time and update the CPM accordingly. 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, the CM, and the designer on recovering time. The Contractor is currently working overtime on select items to escalate the project progress.**
- **Monthly Recovery Meetings were held on August 14, 2009 and September 18, 2009 to identify key work tasks on the CPM Critical path that can be expedited. The NYCDEP, Contractor, CM, and the Designer then establish monthly goals for expediting these critical tasks to escalate the overall project progress. These items are reviewed on a monthly basis until completed.**
- The Contractor activated the Interim Pumping Station (IPS) on May 26, 2009 and shut down the Old Douglaston Pumping Station (ODPS). **The renovation of the ODPS is ongoing.**
- **Construction progress meetings were held on July 10, 2009, August 7, 2009 and September 11, 2009 at the Engineer's field office for Contract ER-AC2.**
- **Issues and Tasks meetings were held on July 24, 2009, August 28, 2009 and September 25, 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
  - **Final Payment to be issued to the Contractor and the project will be closed out.**
- Alley Creek CSO Retention Facilities – Phase I, Stage 2, Contract ER-AC2
  - Construction under Contract ER-AC2 will continue, primarily focusing on activating the Old Doug Pump Station. Other activities will include installing instrumentation and controls along with developing startup procedures.
  - **Monthly Recovery Meetings will continue to be held, typically on the third Friday of the month, at the Engineers Field Office, to coordinate activities which can be accelerated to make up lost time to advance the project completion date**.
  - 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 submit a modification request for the construction completion milestone of December 2009 for the Alley Creek CSO Retention facility. The basis of this request, the unexpected deteriorated influent sewer to the Old Douglaston Pumping Station, was reported to DEC in a Force Majeure event letter dated November 20, 2007 and updated on August 20, 2008 and February 3, 2009.**

Table 6 – Alley Creek CSO Project

	Phase I, Stage 1	*Phase I, Stage 2*
Plan Elements:	Alley Creek Drainage Area Improvements	Alley Creek CSO Abatement Facilities
Location:	46th Avenue, 53rd Avenue, 56th Avenue, Bell Boulevard, Luke Place, 214th Street, 215th Street, 216th Street, 217th Street, Springfield Boulevard, Cloverdale Boulevard, Cross Island Parkway, Northern Boulevard and Alley Park in Bayside, Queens	Northern Boulevard and Alley Park in Bayside, Queens
Actions:	Construction of additional water mains, stormwater and combined sewers, catch basins, outfall sewer and outfall structure to effect improved drainage in areas upstream of CSO Outfall TI-008 in Bayside, Queens; construction of 5 MG CSO storage facility for CSO abatement within Alley Creek	Design and construction of modifications to the Old Douglaston Pumping Station including air treatment facilities to treat air exhausted from the CSO storage facility and the pumping station; design and construction of hydraulic control structures and facilities to activate the 5 MG CSO storage facility constructed under Phase I, Stage 1; rehabilitation of the CSO Outfall TI-008 structure; restoration of a 2.5-acres of wetland/upland area surrounding CSO Outfall TI-008. **The wetland/upland restoration work has been transferred to Contract ER-AC3**
Cost:	$98,850,487.61	**$32,784,211.44**
Status:	Construction completed. Final close-out period.	**62%** complete with construction activities 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

Construction

- Regulator Automation
  - Construction activities continued during this quarter. The Contractor is conducting contract work at regulator sites, performing site inspections, obtaining necessary permits and performing change/modification work.
  - **Negotiation meetings for Change Order No. 10 occurred on July 2, 2009 and for Change Order No. 11 on July 20, 2009. All negotiation meetings involved the Construction Manager, Design Engineer, Contractor, and DEP.**
  - **Weekly construction meetings occurred on July 2, July 16, July 23, July 30, August 6, August 13, August 20, September 3, September 10, September 17, September 24, and September 30, 2009. No Monthly Progress Meeting occurred in the months of July and August 2009. A monthly Progress Meeting occurred on September 17, 2009.**
  - **CPM Schedule update 13, which was submitted by the Contractor on September 15, 2009, showed a construction completion date beyond the Consent Order date. The schedule update 13 was not accepted and DEP requested a re-submittal including the recovery plan (as agreed in Change Order No. 9) to accelerate the schedule that will bring the completion of the contract to April 2010, in compliance with the Consent Order.**
- 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.
  - **General contractor has completed 95% of contract work. Site restoration work including construction of new concrete curb and sidewalks and installation of asphalt along Richmond Terrace was completed.**
  - **The Contractor continues working on the installation of ultrasonic level sensors at the Port Richmond WPCP forebay and on installation of the pressure level sensors at throttling facility chamber.**
  - **Completed installation of panels, conduit, and electrical connections for the throttling gate actuator.**
  - **Initiated equipment start-up and testing procedures for the actuator.**
  - **Regular monthly construction progress meetings were held on July 7, August 4, and September 1, 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

Construction

- Regulator Automation
  - **Construction activities will continue. The Contractor will conduct contract work and perform site visits at multiple sites; obtaining and maintaining necessary permits, conducting Factory Acceptance Tests (FAT), and start up services.**
  - **The Contractor will provide a revised schedule update to recover the substantial completion date to April 30, 2010, as agreed with the DEP.**
- Phase II Throttling Facility
  - Continue to address Design Services During Construction activities for the ongoing construction.
  - **The contractor will continue construction activities including completing the installations of level sensing instruments and ships ladder.**

- **The contractor will begin training, field testing and startup activities. Anticipate submitting certification of construction completion in the next quarter, in compliance with the modified construction completion date.**

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	**$5,737,821**	$15,721,000*
Status:	Construction Complete	**Construction 95% complete.**	**Construction 70% Complete**
Other Issues:	-	Delays to project due to unanticipated field conditions (dewatering). **DEC granted Modification Request; revised Construction Completion date is November 20, 2009.**	-
***Note – Construction cost represents original contract amount for REG-026**			

3.3. Inner Harbor CSO

The Inner Harbor CSO Facility Planning area consists of the drainage areas of the North River, Newtown Creek, and Red Hook 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), Phase II (In-Line Storage), and the automation of key regulators to be accomplished under the Citywide SCADA Project. **In addition, the proposed elements of the August 2008 Gowanus Canal Waterbody / Watershed Facility Plan (as amended April 2009) became enforceable under the CSO Consent Order by reference upon approval by DEC, which was granted on July 14, 2009.**

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

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

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.

- **Gowanus Canal**
  - **The Gowanus Canal Waterbody / Watershed Facility Plan was submitted to NYSDEC in August 2008 and approved on July 14, 2009 as amended.**
  - **Design completion and bid documents were prepared.**

- **Bids were received and evaluated.**

Construction

- Regulator Automation
  - Construction activities continued during this quarter. The Contractor is conducting contract work at regulator sites, performing site inspections, obtaining necessary permits and performing change/modification work.
  - **Negotiation meetings for Change Order No. 10 occurred on July 2, 2009 and Change Order No. 11 occurred on July 20, 2009. All negotiation meetings involved the Construction Manager, Design Engineer, Contractor, and DEP.**
  - **Weekly construction meetings occurred on July 2, July 16, July 23, July 30, August 6, August 13, August 20, September 3, September 10, September 17, September 24, and September 30, 2009. No Monthly Progress Meeting occurred in the months of July and August 2009. A monthly Progress Meeting occurred on September 17, 2009.**
  - **CPM Schedule update 13, which was submitted by the Contractor on September 15, 2009, showed a construction completion date beyond the Consent Order date. The schedule update 13 was not accepted and DEP requested a re-submittal including the recovery plan (as agreed in Change Order No. 9) to accelerate the schedule that will bring the completion of the contract to April 2010, in compliance with the Consent Order.**
- 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 completed the work, and requested an inspection by the operating bureau. The dam was tested by the contractor.
  - **At the R-20 site, the contractor continued the change order related work for the construction of the dam chamber.**
- **Gowanus Canal – Rehabilitation of Flushing Tunnel and Reconstruction of Gowanus Pump Station**
  - **A Notice to Proceed with Construction was issued to the G contractor for the Gowanus Facilities Upgrades on September 14, 2009. The milestone date for the NTP in the Order is February 2010.**

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.**

Construction

- Regulator Automation
  - **Construction activities will continue. The Contractor will conduct contract work and perform site visits at multiple sites; obtaining and maintaining necessary permits, conducting Factory Acceptance Tests (FAT), and start up services.**
  - **The Contractor will provide a revised schedule update to recover the substantial completion date to April 30, 2010, as agreed with the DEP.**
- In-line Storage
  - At the B-6 site the contractor will begin site restoration and test the dam.
  - At the R-20 site the contractor will finish removing the bottom of the existing sewer and install a flume in order to continue with the construction of the chamber.
  - **Submit a milestone certification letter for Construction Completion**
- **Gowanus Canal – Rehabilitation of Flushing Tunnel and Reconstruction of Gowanus Pump Station**
  - **Initiation of construction activities**
  - **Submit a milestone certification letter for the NTP for the Gowanus Facilities Upgrades.**

Table 8 – Inner Harbor CSO Project

	Phase I	*Phase II*	*Citywide SCADA*	***Gowanus Canal Pumping Station and Flushing Tunnel***	***Dredging***
Plan Elements:	Regulator Improvements – Fixed Orifices	In-Line Storage	Regulator Improvements – Automation	**Rehabilitation of Pumping Station and Flushing Tunnel**	**Dredging Gowanus Canal Head End**
Location:	72 regulator sites in Manhattan and Brooklyn	Upstream of regulators B-6 and R-20 in Brooklyn	Regulator sites in Manhattan and Brooklyn	**Gowanus Pumping Station Property, Brooklyn**	**Gowanus Canal**
Actions:	Conversion to fixed orifices	Installation of two inflatable dams in the combined sewer systems	Conversion to automated regulators	**NTP Issued**	**$TBD**
Construction Cost:	$9,500,000	$**11,200,000**	**$15,721,000***	**$116,948,969**	
Status:	Construction Complete	**Under construction, 75% complete**	**Construction 70% Complete**	**Contractor to Mobilize**	**Design Contract procurement in progress**
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 4th 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.

Construction

- Phase I A – Influent Channels
  - Construction completed in 2002.

- Phase II – Foundations and Substructures
  - Construction work had ceased at approximately 97% complete due to the default of the contractor on December 6, 2007 by the Department pursuant to Articles 48.1.3, 48.1.4, 48.1.9, 48.1.10, 48.1.11 and 48.1.12 of the Contract.
  - **The Surety's completing contractors completed removal of the slurry wall to elevation +2.0; completed removal of the slurry wall tiebacks; completed installation of the instrumented tiedown anchor conduit remedial work. The completing contractors also continued drilling and injecting expandable grout to stop water infiltration in the tanks and continued placing concrete fill in the CSO tanks.**

    The Surety's completing contractor for dredging work also received a waiver from the NMFS to perform dredging prior to the start of the environmental window which allowed the contractor to complete removal of the sandbar navigational hazard and begin mobilization for removal of the remaining derelict steel barge and the dredging of the area in front of the tanks.
  - 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 **86 percent** complete.
  - **The 5G Contractor has:**
    - **Completed installation of the flushing gates and the hydraulic operators in the CSO Tanks and began testing;**
    - **Continued installation of the CSO Pump Back Pumps, Grit Pumps and Sump Pumps in the Pump Back Building (PBB); .**
    - **Continued installation of the sluice and slide gates in the Screenings building and began testing;**
    - **Completed installation of piping for the 42-inch force main and 12-inch grit lines and began testing of the same;**
    - **Continued installation of concrete topping throughout the CSO facility and continued installation of the ornamental fences and gates around the perimeter of the property;**
    - **Completed installation of Asphalt pavement for the CFS Building north parking lot and the east and west sides of the Process Buildings;**
    - **Continued installation of panels and local control panels for various pieces of mechanical equipment including the Odor Control Vessel Exhaust stacks and exhaust fans;**

- **Completed removal of the soil stockpiled from the excavation of the 5-Barrel Influent Channel and the New Influent Channels;**
- **Continued planting of wetland plants on the north and south sides of the Basin and continued the mandated monitoring program..**

- The 5E Contractor completed installation of the telephone and paging systems in the process buildings, performed integration with the existing CFS Building and tested the two systems. The Contractor also:
  - **Continued pulling cable and wire to various pieces of equipment in the PBB, OCB and SB;**
  - **Continued terminating conductors for power, control and fire alarm in the PBB, OCB and SB;**
  - **Continued installation of duct banks on the west side of the Pump Back Building, Odor Control Building and Screenings Building;**
  - **Continued pulling wires to security devices on the west side of the process buildings;**
  - **Continued pulling and terminating wires to sensors and devices throughout the Process Buildings and CSO tanks;**
  - **Completed installation of light poles on the CSO Tanks.**
- **The 5H Contractor:**
  - **Continued installation of stainless steel ductwork, plenums and seismic hangers in the process buildings;**
  - **Continued installation of HWS & HWR piping and seismic hangers in the PBB, OCB and SB;**
  - **Continued pulling and terminating control wiring in the PBB, OCB and SB;**
  - **Requested and received a DEP inspection of the boilers and is correcting deficiencies in preparation for a follow up inspection and the impending heating season.**
- **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.**
  - **Disinfected all sanitary piping in the Process Buildings.**

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. A compliance meeting was held May 13, 2009 and informal negotiations are ongoing.

Anticipated Activities for Next Quarter

Construction

- Phase II - Foundations and Substructures
  - **The completing contractor will:**
    - **Complete installation of fill concrete in the CSO Tank effluent troughs;**
    - **Complete installation of instrumented tiedowns and caps in the CSO Tanks;**
    - **Complete installation and testing of sluice gates in the CSO Tank corridor;**
    - **Complete dredging in front of the CSO Tanks and perform a bathymetric survey;**
    - **Continue removing derelict equipment and machinery from the site; begin removal of soil from Parks and Recreation Property;**
    - **Leak test the CSO Tank and if necessary apply capillary waterproofing.**
  - **Submit a milestone certification letter for Construction Completion**
- 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 test of the 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;**
    - **Continue installation of odor control system including exhaust fans, valves, dampers, stacks and silencers in the OCB;**
    - **Complete installation of service air piping system in the PBB, OCB and SB;**
    - **Complete testing of the 42-inch CSO force main, 12-inch grit piping and associated valves in the PBB; complete installation of the 10-foot ornamental picket fence and motorized gates around the project site and begin installation of associated security system;**

- **Complete installation of concrete topping on the ground floors of the PBB, OCB and SB;**
- **Continue phased demolition of the existing 5-barrel effluent channel and begin diversionary connection to the new 5-barrel influent channel while maintaining operation of the existing facility;**
- **Begin installation of new equipment in the Existing Pump Station while maintaining operation of the existing facility;**
- **Begin training DEP personnel on various pieces of equipment throughout the CSO 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;**
  - **Complete installation of the emergency generator and request inspection of the same;**
  - **Complete installation of RGS conduit and conduit racks for lighting and fire alarms 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;**
  - **Begin requesting inspections by the FDNY and NYCDOB Bureau of Electrical Controls.**

- **The 5H Contractor will:**
  - **Complete punchlist work in the CFS Building;**
  - **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;**
- **Begin installation of exhaust fans EF-7304 and EF-7305 in the SB;**
- **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	*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	**$ 190,746,073**
Status:	Construction completed.	NTP issued on 6/24/02. Construction 97% complete.	NTP issued on 9/26/05. Construction **86%** 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. **A change order was initiated and negotiated to remove a sand bar which was a navigational hazard delaying the remaining dredging work.**	**After activation of the first two channels of the 5-Barrel a tidal event occurred flooding the system. A new protocol was devised which will allow work to continue. A change order has been initiated and negotiated.**

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 was resolved and a construction completion date of September 2009 was included in the 2009 Modification to Order on Consent.**

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 and Regulator improvements at 10, 10A, 10B and 13.

The 2009 Modification to Order on Consent included another date modification for the Flushing Bay CS4-4 milestone, as well as an Appendix B containing requirements for corrective actions at the Flushing Bay CSO Retention Facility related to flow metering, odor control systems, bar screens, and Tallman Island Regulator 9.

Work Performed During This Quarter

Design

- Tallman Island Wet Weather Maximization
  - **Completed geotechnical and environmental drilling program along proposed route of the new Whitestone Interceptor. Began permit closeout phase for NYSDEC and NYCDPR permits that were obtained in order to perform this field work.**
  - **Initiated preparation of subsurface geotechnical boring and environmental sampling reports.**
  - **Received comments from BEPA relative to the first draft of the Environmental Assessment Statement (EAS). Initiated preparation of Draft #2 of the EAS.**
  - Continued preparation of 30% design documents for the new Whitestone Interceptor, from 11th Avenue and 131st 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.
  - Continued coordination with NYCDPR regarding property encroachments along the proposed route of the new Whitestone Interceptor.
  - **Scheduled a 30% Value Engineering (VE) Session with the NYC Office of Management and Budget (OMB) for the week of November 16-20, 2009. In addition, a VE Orientation Meeting and site visit with OMB has been scheduled for October 22, 2009.**

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 has been resolved through a 2009 Modification to the Order. The new construction completion date for CS4-4 is September 2009.**
  - **DEP has responded to eight of the nine newly-established Appendix B requirements. Certification letters are attached. The ninth item is Item 1(b), which requires the submission of effluent overflow volumes on a monthly basis. This milestone is**

contingent on DEC approval of the submittal under 1(a) related to metering methodology, and as of the end of the third quarter of 2009 no approval had been received on the methodology DEP submitted on July 31, 2009.

- **DEP received unofficial comments from DEC on September 24, 2009 for the flow metering submittals and is working to revise the flow-metering methodology accordingly.**
- **Final inspection by DEC occurred on September 16, 2009 rather than September 1, 2009 per DEC's request. During final inspection, DEP demonstrated use of the odor control system and bar screens, milestones 2(c) and 3(b), respectively.**
- **The Chemical Bulk Storage (CBS) registration and variance applications associated with the Odor Control System were certified as submitted on September 1, 2009. Start-up of the Odor Control System was certified on June 30, 2009, and construction completion was certified on September 1, 2009. These are milestones 2(a), 2(b), and 2(d), respectively**
- **Reports on the repairs of the Bar Screens were certified on June 30, 2009. This is milestone 3(a)**
- **Milestone 4(a), the submission of the Tallman Island Regulator 9 SCADA report, was certified on May 29, 2009.**

Anticipated Activities for Next Quarter

Design

- Tallman Island Wet Weather Maximization
  - **Complete 30% complete design package and begin work towards the 60% complete design package.**
  - **Prepare for and attend the VE Orientation Meeting with OMB on October 22, 2009.**
  - **Prepare for and attend the project VE Session with OMB during the week of November 16-20, 2009.**
  - Continue addressing legal with property encroachment issues along proposed Whitestone alignment.

Construction

- 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 11th Avenue and 130th 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 and improvements to regulators 10, 10A, 10B, and 13
Cost:	$291,000,000	$67,252,171
Status:	Construction Completion certified on 5/31/07; **DEC issued NOV 7/15/2008; Consent Order Modification 7/15/09 established new construction completion date of September 2009**	**Design 18% complete**
Other Issues:	**2009 Consent Order Modification included required corrective actions at the Flushing Bay CSO Retention Facility**	

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 9 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
  - **Updated contract documents submitted for Legal review. Preparing and finalizing contract documents for obtaining bids on facility construction.**
  - **The property was acquired on September 29, 2009. Developing permit application for construction approval, to be submitted to the Department of Buildings.**
- 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 the original Request for Modification was the identification of an alternative approach that is expected to result in a greater degree of CSO reduction. However, DEC requested that the schedule in the original Request for Modification be revised to achieve construction completion in a similar time frame as the currently mandated projects and include a period to conduct field flow measurements. To date, no written response to the November 14, 2008 submittal has been received. **The DEP and DEC have continued discussing this proposed modification and last discussions took place on October 1, 2009 at the CSO technical meeting.**

Construction

- Regulator Automation
  - Construction activities continued during this quarter. The Contractor is conducting contract work at regulator sites, performing site inspections, obtaining necessary permits and performing change/modification work.
  - **Negotiation meetings for Change Order No. 10 occurred on July 2, 2009 and Change Order No. 11 occurred on July 20, 2009. All negotiation meetings involved the Construction Manager, Design Engineer, Contractor, and DEP.**
  - **Weekly construction meetings occurred on July 2, July 16, July 23, July 30, August 6, August 13, August 20, September 3, September 10, September 17, September 24, and September 30, 2009. No Monthly Progress Meeting occurred in the months of July and August 2009. A Monthly Progress Meeting occurred on September 17, 2009.**
  - **CPM Schedule update 13, which was submitted by the Contractor on September 15, 2009, showed a construction completion date beyond the Consent Order date. The**

schedule update 13 was not accepted and DEP requested a re-submittal including the recovery plan (as agreed in Change Order No. 9) to accelerate the schedule that intended to bring the completion of the contract to April 2010, in compliance with the Consent Order.

- Meadowmere/Warnerville
  - **Submitted a certification of construction completion to DEC in July in compliance with the milestone completion date.**
  - **Continued DSDC activities for the Meadowmere & Warnerville project. Construction is 95% complete, with 100% of the CSO Consent Order work completed.**
  - **The G contractor completed installation of the 2 air relief valves in the force main manhole.**
  - **The G contractor has completed restoration of all sidewalks and final paving in the two communities.**
  - **The Electrical Contractor is performing the change order modifications to the electrical and wiring equipment in the wet wells.**
  - **The G contractor currently has miscellaneous change order work on hold until previous change order registration issues are resolved.**
  - **Field testing of instrumentation and installed equipment has been completed.**
  - **After a calibration check of the mag flow meter was performed, it was determined that both the meter and associated transmitter were not functioning properly. Both units have been replaced.**
  - **Monthly Construction I&T meetings were held on July 8, August 12 and September 9, 2009.**
  - **The CM and design engineer staff continued final permitting activities regarding DOB TR-1 signoffs, controlled inspections, Certificate of Occupancy and Builder's Pavement Plan.**
  - **The DEC final inspection was held at the project site on August 20, 2009.**
  - **DEC acceptance of construction completion certification received August 31, 2009**

Anticipated Activities for Next Quarter

Design

- Destratification Facility
  - **Finalize contract documents toward bid advertisement for construction procurement.**

- **Meet with Permit Resource Division and submit permit application to DSBS for construction approval.**

Construction

- Regulator Automation
  - **Construction activities will continue. The Contractor will conduct contract work and perform site visits at multiple sites; obtaining and maintaining necessary permits, Conducting Factory Acceptance Tests (FAT), and start up services.**
  - **The Contractor will provide a revised schedule update to recover the substantial completion date to April 30, 2010, as agreed with the DEP.**
- Meadowmere/Warnerville
  - **General contractor to: complete punchlist items and remaining change order work, continue with training and O&M activities, replant deficient plantings.**
  - Continue permitting activities and filing with DOB on various requirements.
  - **Begin training tasks for DEP operations personnel.**

Table 11 – Jamaica Tributaries CSO Project

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:	**$37,637,569**	$120 million	$3,800,000	To be determined	**$15,721,000***
Status:	**Construction 100% 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**	**Finalizing contract documents for bid solicitation.** **Preparing permit application for construction approval.**	Drainage planning complete.	Construction **70%** Complete.
***Note – Construction cost represents original contract amount for REG-026.**					

3.7. Coney Island Creek CSO

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

Work Performed During This Quarter

Design

- Avenue V Pumping Station Upgrade
  - DSDC activities continued, including:
    - Shop Drawing Review
    - Coordination Drawing Review
    - Change Order Preparation
    - Main Building Structural Inspection.
    - Architectural Terra Cotta Inspection.
- New Force Mains
  - DSDC activities continued, including:
    - SPDES Preparation
    - LI Well Permit Preparation
    - Shop Drawing Review
    - Change Order Preparation

Construction

- Avenue V Pumping Station Upgrade
  - Work during the quarter included:
    - Operation and Maintenance of the Temporary Pumping System.
    - **Installation and Calibration of Temporary Pumping System Instrumentation/Controls.**
    - **Operation and Maintenance of Dewatering System.**
    - **De-energization of the Existing Pumping Station Power.**

- **Relocation of Salvageable Material.**
- **Demolition of Electrical and Mechanical Equipment.**
- **Demolition of Switchboard Room and Pump Room B.**
- **Demolition of Existing Wet Well.**
- **Remediation of Hazardous Material.**
- **Core Drill Piping Penetrations.**
- **Core Drill Grout Holes.**
- **Construction of Concrete Columns and Shear Walls.**
- **Construction of Concrete Walls and Top Slabs of By-Pass Manholes.**
- **Construction of Concrete Meter Vaults.**
- **Installation of Electrical Conduit and Concrete Duct Bank.**
- **Installation of Temporary Construction Power for Main PS Building.**
- **Installation of Exterior Roof Scaffolding.**
- General Site Maintenance.

- New Force Mains
  - **Construction activities during this quarter included:**
    - **Open Cut Pipe installation (Approximately 75% complete)**
      - 42" – Verrazano Bridge to Bay 8th St. Bay 8th St. to Bay Parkway (WIP); Bay Parkway to Bay 40th St.
        - Total: 11,305 LF
      - 48" – Bay 16th St. to Bay Parkway; Bay Parkway to 25th Ave.
        - Total: 5,016 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 60% Complete)**
      - **66" casing pipe for 42" carrier pipe – Total: 735 LF with carrier pipe.**
      - 66" casing for 48" carrier pipe – Total: 160 LF installed with carrier pipe.
      - **Jacking operation at Bay 8th St. exit 4 ramp complete.**
      - **Prepare (Excavation, Dewatering) for Bay Parkway Jacking Operation.**
    - **Microtunneling pipe installation (Approximately 70% Complete)**
      - **60" casing pipe installed for 48" carrier pipe. – Total: 2,191 LF (71% of 48").**

- **60" casing pipe installed for 42" carrier pipe. – Total: 1,231 LF (72% of 42").**
- **Cropsey Ave. – Final microtunneling push**

- **Complete 42" discharge chamber manhole at existing manhole # 18.**
- Change Order Work: Installation of access manholes for air valves.
- **Leakage tests (42") completed from MH#18 to Bay 8th St.**
- **Prepare for landscape restoration along Belt Parkway.**

Missed Milestones

- There are no missed milestones.

Anticipated Activities for Next Quarter

Design

- **DSDC Activities**

Construction

- Avenue V Pumping Station Upgrade
  - Operation and Maintenance of Temporary Pumping System.
  - **Operation and Maintenance of Dewatering System.**
  - **Demolition of Existing Wet Well.**
  - **Installation of Wet Well SOE.**
  - **Installation of Wet Well Mini-piles.**
  - **Remediation of Hazardous Material.**
  - **Construction of Concrete Columns and Shear Walls.**
  - **Core Drill Grout Holes.**
  - **Installation of Foundation Grout.**
  - **Core Drill Piping and Duct Penetrations.**
  - **Construction of Concrete Meter Vaults.**
  - **Installation of Exterior Roof Scaffolding.**
  - **Installation of Interior Roof Scaffolding.**
  - **Demolition of Existing Concrete Roof.**
  - **Construction of New Concrete/Steel Roof.**
  - **Reconstruction/Repair of Structural Components.**

- **Relocation of Temporary Construction Power for Main PS Building.**
- **Installation of Electrical Conduit and Concrete Duct Banks.**
- **Installation of Roof Drain Downspout Piping.**
- **General Site Maintenance.**

- New Force Mains
  - **Open cut single pipe installation (42" DIP) in the vicinity of 20th & 25th Ave. outfalls.**
  - **Installation of 42" DIP @ Bay 8th St.**
  - **Subcontractor Northeast Remsco to complete microtunneling 60" casing pipe below Cropsey Ave. from Jacking Pit O to Receiving Pit N (Bay 40th St.) and P (27th Ave.)**
  - **Jacking operations at Bay Parkway.**
  - **Installation and maintenance of wells for dewatering as per NYSDEC permits.**
  - **Tree remediation activities.**
  - **Landscape restoration and tree planting. (Verrazano Bridge to Bay Parkway)**
  - **Open Cut force main installation (42"/48" DIP) on 27th Ave.**
  - **Continue installation and removal of steel sheeting as necessary.**
  - **Leakage tests for installed pipe.**
  - **Clean and inspect SE-133.**
  - **Bay 16th Str.-Complete sanitary repair and force main installation @ Cropsey Ave.**
  - **Structural work at discharge chambers (CO # 2).**
    - **Start 48" discharge chamber at Bay 16th St. & Bath Ave.**
  - **Continue installation of air valves and access manholes (CO # 1).**
  - **Sewer relocations on 27th Ave.**

Table 12 – Coney Island Creek CSO Project

	Contracts *PS-79G, H, P, E*	*Contract* *PS-79F*
Plan Elements:	Upgrade Avenue V Pumping Station	New Force Mains
Location:	Avenue V PS (Avenue V and West 11th Street)	42-inch to SE-133 (Shore Pkwy. Vic. Verrazano Bridge); 48-inch to vic. Reg. 9A
Actions:	Comprehensive upgrade to automate and increase station capacity to 80 mgd; Lower Wet Well operating level to reduce sewer surcharges; Network Protector Structure to reliably transform utility power; Generator system to improve station reliability; Architectural restoration of Main Building to 1915 appearance	New force mains to convey DWF and WWF
Cost:	$68,307,000	$97,756,000
Status:	Notice to Proceed issued on 12/16/05. **Construction is 47% complete.**	Notice to Proceed issued on 7/23/07. **Construction is 67% complete.**

3.8. Newtown Creek CSO

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

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

Maximizing flow through the Morgan Avenue Interceptor will include raising the overflow weir in Regulator B1; increasing the sluice gate openings to the interceptor; providing a relief sewer from the St. Nicholas weir to Regulator B1; and providing a throttling gate on the Kent Avenue Interceptor. The Aeration Facilities (Zone I) includes construction of a landside compressor station and installation of an air header in the creek bottom of the Upper English Kills. Based upon the performance evaluation of the Zone I aeration testing, Zone II aeration may be implemented to expand in-stream aeration to include the Lower English Kills, the East Branch and Dutch Kills. The off-line storage facility will control CSO discharge to the English Kills and will include a 9 million gallon tank, a pumping station, and a new gravity drain to drain the tank for treatment at the Newtown Creek 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 25th 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 26th 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.
- **Performance sampling in accordance with the Field Analysis and Sampling Plan continued through September. Collection of dissolved oxygen and temperature data under the Harbor Survey continued.**
- **Sampling for the First Year Post-Operational Habitat Monitoring was performed.**

- 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.

- **The 60% design completion Contract Drawings and Specifications for the addition of a third blower to the Phase I Aeration Facilities and associated aeration system for the lower English Kills was started.**

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:
    - NC-EK11G
      - **Completed site work**
      - **Tied in roof drains into site stormwater sewer system**
- 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.
  - **DEP certified that the Notice to Proceed to Construction for the Kent Avenue Throttling Facility had occurred prior to the June 2009 milestone in a letter dated September 29, 2009. The construction is occurring under Newtown Creek WPCP 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. **DEP submitted a Modification Request addressing these changes on April 30, 2009 that is currently under DEC review.**

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
  - **Conclude 2009 season start-up, performance sampling in accordance with the FSAP and prepare first year post-operational habitat monitoring report.**
- 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 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 percent 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:
    - NC-EK11G
      - Train DEP personnel on equipment operation for Facility
    - NC-EK11E
      - Train DEP personnel on electrical equipment operation for Facility
    - 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 capacity of 12 MG (including the storage capacity within the supply/storage conduit) to provide abatement at CSO Outfall HP-014 on Westchester Creek; design and construction of an operations building; 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 environmental soil boring investigation and laboratory analysis have been completed.**
- 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.
- **The NYSDEC issued the Joint Wetlands Permit for the Bronx River Floatables Control Facilities Project on September 4, 2009.**
- **The NYCDOT issued traffic stipulations for the local detour route around Bronx Park Ave for the Bronx River Floatables Control Facilities Project.**

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.
- **The Health and Safety Plan was submitted on July 28, 2009 and requires additional responses from the Contractor for approval.**

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.
- *Construction*
  - **Approval of the Health and Safety Plan.**
  - 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:	

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 233rd Street, serves a drainage area of approximately 1,100 acres. For this CSO planning area, the Waterbody/Watershed Facility Plan, currently under review by the DEC, analyzes cost effective CSO control measures for this waterbody and proposes modifications to the scope of the existing CSO facilities plan, as permitted in the Order in Section III, Paragraph A, Section 3.

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

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

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 26th 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 26th Ward drainage area and interim dredging of the head-end of Hendrix St Canal. Subsequent phases include development of waterbody/watershed plans for the 26th Ward tributaries under the Citywide Long Term Control Plan for CSO and expansion of the wet weather capacity of the 26th Ward 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
  - **DEP received and opened bids for Contract CSO-HC; Hendrix Street Canal Interim Dredging on July 17, 2009.**
- Expansion of 26th Ward WPCP Capacity
  - 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 2007 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.
- 26th Ward Drainage Area Sewer Cleaning and Evaluation
  - **Work was completed on removal of debris from the Hegeman and Flatlands Avenue sewers as well as the three (3) and four (4) barrel sewers 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 and the Construction Completion milestone for the Hendrix Street Canal Interim Dredging Project to February 2012.**
  - **DEP is processing the award folder for the low bidder "Mobile Dredging".**

Anticipated Activities for Next Quarter

- Dredging
  - **Registration of the contract and issuance of a NTP to the dredging contractor for the Hendrix Street Canal Interim Dredging Project.**
- Cleaning of Certain Combined Sewers
  - **Completion of sewer cleaning activities by the contractor.**
- Expansion of 26th 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

Plan Elements:	Dredging	26th Ward Drainage Area Sewer Cleaning and Evaluation	Expansion of 26th 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- 26th 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[1] ▪ 26W-22: $424 million[1] ▪ 26W-23: $58 million[1] [1]Conceptual estimate	$87 million	TBD
Status:	**Bid evaluation.**	**90% 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 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 and third quarters of 2009, beach surveys were conducted. Data collected during these surveys are being logged and will be analyzed in the next quarter.**

    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). **Beach cleanups continued throughout the third quarter of 2009.**

- 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.

- **Based on the CY2008 results of the floatables monitoring program, site-specific investigations of the three sites with the most persistently poor floatables ratings (i.e., Gowanus Canal 9th St Bridge [BS-41], Gerritsen Beach Canton Ave [BS-40], and Staten Island Page Ave [BS-30]) were identified. Dry-weather investigation of these sites was performed on September 8. A wet-weather investigation will also be performed as soon as practicable.**

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 monitoring data from the Harbor Water Quality Survey, the PCM program, and the Environmental Benefit Fund Shoreline Cleanup Program
- **Analysis of data collected through the floatables monitoring program.**
- **Conduct a wet-weather investigation at the three floatables-monitoring program sites having the most persistently poor floatables ratings (BS-30, BS-40, BS-41)**.
- **Continue the Beach cleanups under the Nitrogen Consent Judgment Environmental Benefit Project.**

3.14. Environmental Benefits Projects

These projects were undertaken in connection with the settlement of an enforcement action taken by New York State and DEC for violations of New York State law and DEC regulations. The 2008 Modification to the CSO Consent Order requires not less than four million dollars ($4,000,000) worth of DEP-funded Environmental Benefit Projects (EBPs) designed to abate CSOs and/or address wet weather water quality impacts of CSOs and to benefit the waters in and around New York City. The 2008 Order further stipulates that the Quarterly Reports required by Section IV of the 2005 CSO Order shall include a report on the status of these EBPs and funds expended on the EBPs during the prior quarter, including a detailed EBP status and cost accounting of all funds expended, and general estimates of the costs expected to be incurred during the following quarter.

DEP submitted an approvable CSO EBP Plan to DEC in March 2008 that included the implementation of a suite of stormwater management techniques for the Bronx, Flushing, and Gowanus watersheds. The status of these programs is summarized below. The March 2008 EBP Plan was approved April 28, 2008. DEP has not submitted any alternative EBPs subsequent to the March 2008 submittal.

Work Performed During This Quarter

Bronx River

- **Developing Draft Contract for EDesign Dynamics (Franco Montalto) modeled after the Gaia contract under the Nitrogen Consent Order EBPs.**
- **Review of Draft "Invitation to Participate in a Green Infrastructure Pilot Project" (area homeowner survey).**
- **Continued refinement of BMP/LID technologies.**

Flushing Creek

- **Development and review of Draft Flyer announcing upcoming Stormwater Grant Program.**
- **Development of Draft Monitoring Plan for stormwater projects under CSO and Nitrogen Consent Order.**
- **Final development of Grant Application to be placed on DEP's website.**
- **Met with DEC to discuss Draft Monitoring Plan and received preliminary comments.**

Gowanus Canal

- **Development and review of Draft Flyer announcing upcoming Stormwater Grant Program**
- **Development of Draft Monitoring Plan for stormwater projects under CSO and Nitrogen Consent Order.**

- **Final development of Grant Application to be placed on DEP's website.**
- **Met with DEC to discuss Draft Monitoring Plan and received preliminary comments.**

DEC US Forestry Service Grant

- **YMPJ is no longer able to be a partner in this grant. In process of shifting this work to Gaia Institute for the development of a contract and plans and specs for tree pit installations in HP-009 CSO-Shed.**
- **Drexel continued to refine the LIDRA model.**
- **Held several calls with Riverkeeper to assist in prep of their scope of work and budget for a project in the Newtown Creek drainage basin. Drafted the letter agreement for Riverkeeper.**

Anticipated Activities for Next Quarter

Bronx River

- **Continue draft of proposed contract with EDesign Dynamics.**
- **Continue to refine draft monitoring plan.**

Flushing Creek

- **Finalize Program Flyer announcement and place on DEP website.**
- **Format Grant Application package for placement on DEP website.**

Gowanus Canal

- **Finalize Program Flyer announcement and place on DEP website.**
- **Format Grant Application package for placement on DEP website.**

DEC US Forestry Service Grant

- **Execute DEC Letter Agreement with Riverkeeper for their oversight of the work in the Newtown Creek drainage basin.**
- **Locations for GI will be selected for the Newtown Creek portion of the project.**
- **Development of contracts and plans and specsfor the tree pits in the HP-009 CSO-Shed in the Bronx will continue.**

Table 18 – 2008 Modified CSO Consent Order Environmental Benefits Projects

Plan Elements:	***Bronx River***	***Flushing Bay and Creek***	***Gowanus Canal***	***DEC US Forestry Service Grant***
Location:	HP-009 service area	Exact locations TBD	Exact locations TBD	Bronx River and Newtown Creek CSO-Sheds
Actions:	**Using the Nitrogen Consent Order EBP contract with the Gaia Institute as the template, developing draft contract document for Drexel University and Franco Montalto.** **Dr. Montalto developing draft "Invitation to Participate in a Bronx Green Infrastructure Pilot Project", an invitation to project area homeowners and residents to gauge acceptance of Green Infrastructure on their property or street. Will provide information on the types of Green Infrastructure being considered for the project and what might be suitable for their location.** **Continued refinement of BMP technologies.**	**Internal development and review of Draft Flyer announcing upcoming Stormwater Grant Program that will eventually be placed on DEP website.** **Development of Draft Monitoring Plan for stormwater projects under CSO and Nitrogen Consent Order. Received preliminary DEC comments on draft plan – will continue to revise and obtain additional information from other environmental stakeholder groups also installing stormwater BMPs in the region.** **Final development of Grant Application to be placed on DEP's website.**	**Internal development and review of Draft Flyer announcing upcoming Stormwater Grant Program that will eventually be placed on DEP website.** **Development of Draft Monitoring Plan for stormwater projects under CSO and Nitrogen Consent Order. Received preliminary DEC comments on draft plan – will continue to revise and obtain additional information from other environmental stakeholder groups also installing stormwater BMPs in the region.** **Final development of Grant Application to be placed on DEP's website.**	Continued to develop plans and specs for the Bronx project and scope of work, schedule, budget and letter agreement for the Newtown project.
Cost:	Budget: $850,000 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: $1,450,000 Cost to date: $0 This Qtr: $0 Next Qtr: $0	Budget: $250,000 Cost to date: $100,384 This Qtr: $36,445 Next Qtr: $45,000

Plan Elements:	***Bronx River***	***Flushing Bay and Creek***	***Gowanus Canal***	***DEC US Forestry Service Grant***
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.	**Continue to refine Grant Application materials for placement on DEP website and continue development of draft monitoring plan for various stormwater BMP technologies.**	**Continue to refine Grant Application materials for placement on DEP website and continue development of draft monitoring plan for various stormwater BMP technologies.**	Drexel continues to refine the LIDRA model. Gaia 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:				YMPJ has withdrawn as a partner on this grant. Gaia is taking their place.

4.0 Compliance Status

4.1. Unresolved Delays

See **Section 7.0**, Other Issues.

4.2. Compliance Charts

The following table summarizes the milestone dates developed in the draft Consent Order and updates available through **September 2009**:

Table 19 – Consent Order Milestone Dates

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
I. Alley Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Approvable Additional Modified Facility Plan Report	-	Feb. 2004	100
3. Submit Form 2A SPDES Application	-	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	62
E. Drainage Basin Specific LTCPs			
1. Submit Approvable Drainage Basin Specific LTCP for	-	6 mos. after	50

ITEM 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
II. Outer Harbor CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100
2. Submit Additional Modified Facility Plan Report	-	Feb. 2004	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Open Waters Waterbody / Watershed Facility Plan Report	-	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	70
E. Port Richmond Throttling Facility			
1. 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
F. Submit Approvable Drainage Basin Specific LTCP for Open Waters	-	6 mos. after approval of II.B.1.	50
III. Inner Harbor CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Completed	100

ITEM DESCRIPTION		START DATE	DUE DATE	% COMPLETE
	2. Submit Additional Modified Facility Plan Report	-	Feb. 2004	100
B. Comprehensive Watershed Planning				
	1. Submit Approvable Gowanus Canal Waterbody / Watershed Facility Plan Report	-	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	70
E. In-Line Storage				
	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	**75**
F.	Submit Approvable Drainage Basin Specific LTCP for Gowanus Canal	-	6 mos. after approval of III.B.1.	50
G.	Flushing Tunnel Modernization			
	1. Notice to Proceed to Construction	Feb 2010	-	100
	2. Construction Completion	-	Sep 2014	-
H.	Gowanus Pump Station Reconstruction			
	1. Notice to Proceed to Construction	Feb 2010	-	100
	2. Construction Completion	-	Sep 2014	-
I.	Dredging of Gowanus Canal			
	1. Submittal of All Dredging Permit Applications	Dec 2010		-
	2. Notice to Proceed with Dredging		Within 3 years of final permit issuance	-

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
3. Complete Dredging		Within 5 years of final permit issuance	-
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			
1. Submit Approvable Paerdegat Basin Waterbody / Watershed Facility Plan Report	-	Mar. 2003	100
C. Influent Channel			
1. Initiate Final Design	Oct. 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Mar. 1997	100
3. Notice to Proceed to Construction	Feb. 1999	-	100
4. Construction Completion	-	Feb. 2002	100
D. Foundations and Substructures			
1. Initiate Final Design	Oct. 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Aug. 2001	100
3. Notice to Proceed to Construction	June 2002	-	100
4. Construction Completion	-	Feb. 2009	97
E. Structures and Equipment			
1. Initiate Final Design	Oct. 1994	-	100
2. Final Design Completion Including CPM Analysis	-	Nov. 2004	100
3. Notice to Proceed to Construction	Sept. 2005	-	100
4. Construction Completion	-	May 2011	86
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			

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
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			
1. 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
4. Construction Completion	-	June 1996	100
D. CS4-2 Relocate Ballfields			
1. 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. 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			
1. 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	-	**Sep. 2009**	100
G. CS4-5 Tide Gates			
1. Initiate Final Design	Aug. 1998	-	100
2. Final Design Completion Including CPM Analysis	-	Nov. 1999	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
3. Notice to Proceed to Construction	Dec. 2000	-	100
4. Construction Completion	-	Apr. 2002	100
H. CD-8 Manual Sluice Gates			
1. Final Design Completion Including CPM Analysis	-	May 2003	100
2. Notice to Proceed to Construction	Feb. 2004	-	100
3. Construction Completion	-	June 2005	100
I. Drainage Basin Specific LTCPs			
1. Submit Approvable Drainage Basin Specific LTCP for Flushing Bay	-	6 mos. after apprvl. of V.B.1.	50
2. Submit Approvable Drainage Basin Specific LTCP for Flushing Creek	-	6 mos. after apprvl. of V.B.2.	50
J. Tallman Island 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			
1. Initiate Final Design	Dec. 2007	-	100
2. Final Design Completion including CPM Analysis	-	Dec. 2010	**18**
3. Notice to Proceed to Construction	Dec. 2011	-	-
4. Construction Completion	-	Jul. 2015	-
B1. Flow Meters (2009 Modification, Appendix B)			
a) Submit flow metering protocols	**-**	**Jul. 2009**	**100**
b) Include effluent overflow volumes in monthly reports	**-**	**Within 60 days of DEC approval of 1(a)**	**-**
B2. Odor Control System (2009 Modification, Appendix B)			
a) Apply to register CBS & for inspection variance	**-**	**Sep. 2009**	**100**
b) Certify completion of start-up and testing	**-**	**Jun. 2009**	**100**
c) Demonstrate system to DEC using water	**-**	**Sep. 2009**	**100**
d) Certify construction completion	**-**	**Sep. 2009**	**100**
B3. Bar Screens (2009 Modification, Appendix B)			
a) Report on repairs and modifications	**-**	**Jun. 2009**	**100**
b) Demonstrate full operation to DEC	**-**	**Sep. 2009**	**100**
B4. Tallman Island Regulator 9 (2009 Modification, Appendix B)			

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
a) Submit report describing telemetry/SCADA systems	-	**May 2009**	**100**
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			
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			
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	**95**
D. 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			
1. Initiate Final Design	Jan. 2006	-	100
2. Final Design Completion Including CPM Analysis	-	Dec. 2007	100
3. Notice to Proceed to Construction	**Sep. 2010**	-	0
4. Construction Completion	-	**Mar. 2012**	-
F. Laurelton and Springfield Blvd.			
1. Submit Drainage Plan for Storm Sewer Build-out (extension granted by DEC letter, 2/29/08)	-	May 2008	100
G. Regulator Automation			
1. Initiate Final Design	Feb. 2005	-	100
2. Final Design Completion Including CPM Analysis	-	Nov. 2006	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
3. Notice to Proceed to Construction	Nov. 2007	-	100
4. Construction Completion	-	June 2010	70
H. Drainage Basin Specific LTCPs			
1. Submit Approvable Drainage Basin Specific LTCP for Bergen Basin	-	Aug. 2012	50
2. Submit Approvable Drainage Basin Specific LTCP for Thurston Basin	-	Aug. 2012	50
VII. Coney Island Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr. 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Coney Island Creek Waterbody / Watershed Facility Plan Report	-	June 2007	100
C. Avenue V Pumping Station Upgrade			
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	47
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	67
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			
1. Submit Modified Facility Plan Report	-	Oct. 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Newtown Creek Waterbody / Watershed Facility Plan Report	-	June 2007	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
C. Aeration Zone I			
1. Initiate Final Design	Mar. 2001	-	100
2. Final Design Completion Including CPM Analysis	-	Dec. 2004	100
3. Notice to Proceed to Construction	Dec. 2005	-	100
4. Construction Completion	-	Dec. 2008	100
D. Aeration Zone II			
1. Initiate Final Design	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	-	100
4. Construction Completion	-	Dec. 2012	**33**
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	-
H. Submit Approvable Drainage Basin Specific LTCP for Newtown Creek	-	Feb. 2016	50
IX. Westchester Creek CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Apr. 2003	100

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
2. Submit Form 2A SPDES Application	-	**Submit with final design plans & specs**	-
B. Comprehensive Watershed Planning			
1. Submit Approvable Westchester Creek Waterbody / Watershed Facility Plan Report	July 2004	June 2007	100
C. Phase I (Influent Sewers)			
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			
1. Notice to Proceed to Construction	Dec. 2015	-	-
2. Construction Completion	-	Dec. 2022	-
E. Submit Approvable Drainage Basin Specific LTCP for Westchester Creek	-	Feb. 2016	50
X. Bronx River CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	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. 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	0
D. Submit Approvable Drainage Basin Specific LTCP for Bronx River	-	**6 mos. after approval of X.B.1.**	50
XI. Hutchinson River CSO			
A. Facility Plan Development			

ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
1. Submit Modified Facility Plan Report	-	July 2003	100
2. Submit Form 2A SPDES Application	-	**Submit with final design plans & specs**	-
B. 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			
1. Notice to Proceed to Construction	Dec. 2016	-	-
2. Construction Completion	-	Dec. 2023	-
E. Submit Approvable Drainage Basin Specific LTCP for Hutchinson River	-	Feb. 2017	50
XII. Jamaica Bay CSO			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Dec. 2003	100
B. Comprehensive Watershed Planning			
1. Submit Approvable Jamaica Bay Waterbody / Watershed Facility Plan Report	-	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			
1. 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	90
E. Hendrix Creek Dredging			
1. Initiate Final Design	Jan 2007	-	100
2. Final Design Completion Including CPM Analysis	-	Jun. 2007	100
3. Notice to Proceed to Construction	**Feb. 2010**	-	-
4. Construction Completion	-	**Feb. 2011**	-
F. 26th Ward Wet Weather Expansion			
1. Initiate Final Design	June 2006	-	100
2. Final Design Completion Including CPM Analysis	-	June 2010	15
3. Submit Form 2A SPDES Application	-	**Submit with final design plans & specs**	-
4. Notice to Proceed to Construction	June 2011	-	-
5. Construction Completion	-	Dec. 2015	-
G. Drainage Basin Specific Long Term Control Plans			
1. Submit Approvable Drainage Basin Specific LTCP for Jamaica Bay	-	Aug. 2012	50
2. Submit Approvable Drainage Basin Specific LTCP for Spring Creek	-	Aug. 2012	50
3. Submit Approvable Drainage Basin Specific LTCP for Fresh Creek	-	Aug. 2012	50
4. Submit Approvable Drainage Basin Specific LTCP for Hendrix Creek	-	Aug. 2012	50
H. Rockaway WPCP Conveyance Improvements		Dec. 2017	-
XIII. Citywide Comprehensive Floatables Plan			
A. Facility Plan Development			
1. Submit Modified Facility Plan Report	-	Dec. 2004	100
XIV. Submit Approvable City-Wide LTCP			

	ITEM DESCRIPTION	START DATE	DUE DATE	% COMPLETE
		-	Dec 2017	-

5.0 Community Relations

A public meeting was held Wednesday, August 19, 2009 at 6:00 PM at the offices of the Bronx District Attorney to review the Bronx River Waterbody/Watershed Facility Plan.

6.0 Key Personnel Changes

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

7.0 Other Issues

The following action items were identified during the September 16, 2009 CSO Quarterly Meeting:

1) DEP will be submitting a modification request for the Alley Creek CSO Retention Facility Construction Completion Milestone due to a Force Majeure event that has impacted the schedule. DEP will provide a recovery plan and an updated CPM with this request, which is due October 31, 2009.

2) DEP will provide the CPM schedule for Paerdegat Basin contracts 4B and 5. The updated CPMs were expected to be available by the end of September; however, the re-sequencing of work related to the 5-barrel outfall was not incorporated into the schedule by the September monthly CPM meeting. The next monthly CPM meeting will occur on October 27, 2009, at which time the CM and contractor are expected to come to agreement on the CPM.

3) DEP will provide a response to the DEC Notice of Incomplete Application (NOIA) related to dredging in Paerdegat Basin.

4) DEP committed to providing design status details, schedule, and contract details for the 26th Ward wet weather expansion in the Quarterly Report.

5) DEP will submit final request for grants for Flushing and Gowanus Environmental Benefits Project.

6) DEP will provide a CPM for SCADA.

7) DEP and DEC committed to conducting a conference call to discuss the Responsiveness Summary for the Bronx River Waterbody/Watershed Facility Plan public meeting and comment period.

8) Legal counsels agreed to further discuss the EBP/NHT Funding before the next Quarterly meeting.

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. The Order specifies that the following elements shall be addressed: (1) Characterization, Monitoring, and Modeling of the Combined Sewer System; (2) Public Participation; (3) Consideration of Sensitive Areas; (4) Evaluation of Alternatives; (5) Cost/Performance Considerations; (6) Operational Plan; (7) Maximizing Treatment at the Existing WPCP Treatment Plant; (8) Implementation Schedule; and (9) Post Construction Compliance Monitoring.

DEP has submitted all of the required WB/WS Plans to DEC for review. Following is the status of each:

- **The Alley Creek Waterbody/Watershed Facility Plan Report was submitted to DEC June 2009. The report incorporates DEC's April 17, 2009 comments on the November 2008 Waterbody/Watershed Facility Plan Report.**

- **The Bronx River Waterbody/Watershed Facility Plan Report was submitted to DEC July 2009. The report incorporates DEC's May 11, 2009 comments on the June 2007 Waterbody/Watershed Facility Plan Report. A public meeting was held August 19, 2009 at the Bronx District Attorney's Office to review the Plan; a responsiveness document is under development to address all comments received during the public meeting and the public comment period. The accelerated review schedule that had been in place to take advantage of potential federal stimulus funding is no longer necessary as the funding is no longer available.**

- **The June 2009 version of the Coney Island Creek Waterbody/Watershed Facility Plan was approved July 15, 2009, as amended. The Coney Island Creek Long-Term Control Plan is therefore due on January 15, 2009, i.e., 6 months after approval of the Waterbody/Watershed Facility Plan.**

- The East River Open Waters Waterbody/Watershed Facility Plan Report was submitted to DEC June 2007.

- **The Flushing Creek and Flushing Bay Waterbody/Watershed Facility Plans were submitted to DEC on March 31, 2009 and June 30, 2009, respectively. The reports incorporate DEC's comments on the June 2007 Flushing Bay and Creek Waterbody/Watershed Facility Plan Report, including the recommendation that the Plan be split into two distinct planning areas and documents, i.e., one for Flushing Creek and one for Flushing Bay.**

- **The August 2008 version of the Gowanus Waterbody/Watershed Facility Plan was approved July 14, 2009 as amended. An Addendum to the August 2008 Report was submitted to DEC May 18, 2009 incorporating DEC's comments. The Gowanus**

Canal Long-Term Control Plan is therefore due on January 14, 2009, i.e., six months after approval of the Waterbody/Watershed Facility Plan.

- The Hutchinson River Waterbody/Watershed Facility Plan Report was submitted to DEC June 2007.
- The Newtown Creek Waterbody/Watershed Facility Plan Report was submitted to DEC June 2007.
- The Paerdegat Basin LTCP was approved February 2007.
- The Westchester Creek Waterbody/Watershed Facility Plan Report was submitted to DEC June 2007.
- The Jamaica Bay and CSO Tributaries Waterbody/Watershed Facility Plan Report was submitted to DEC June 2007. The plan covers Bergen Basin, Fresh Creek, Hendrix Creek, Jamaica Bay, Spring Creek, and Thurston Basin.

APPENDIX A

CONSENT ORDER CERTIFICATION LETTERS

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION

59-17 Junction Boulevard
Flushing, New York 11373

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Acting Commissioner

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General Counsel

Bureau of Legal Affairs

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July 31, 2009

By Email and Regular Mail

Robyn Adair, Esq.
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New York State Department of Environmental Conservation
625 Broadway, 14th Floor
Albany, New York 12233-5500

Re: Order on Consent (CSO Order)
DEC Case # CO2-20000107-8
Flushing Bay CSO Retention Facility
Proposed Compliance Schedule

Dear Ms. Adair:

In accordance with milestone 1 (a) of the proposed compliance schedule for the Flushing Bay CSO Facility included in the modification to the CSO Order, referenced above, and which is currently pending execution by the New York City Department of Environmental Protection (DEP) and the New York State Department of Environmental Conservation (DEC), enclosed is a certification of the completion of testing as of July 29, 2009 of the methodology to be used for measuring effluent overflow from the tanks in satisfaction of item 1 (a) of the compliance schedule.

The certification includes a description of the methodology used for measuring effluent overflow from the tanks. The results of the testing of the methodology are currently under DEP review. DEP expects to be able to complete the review and provide the testing results to DEC within the next 30 days. As discussed, I acknowledge that milestone 1(a) requires submittal of the results of the methodology testing. DEP thus requests a 30 day extension of the compliance date for milestone 1(a) with regards to submittal of the testing results to August 31, 2009.

In accordance with the compliance schedule, DEP will begin submitting to DEC monthly operating reports containing effluent overflow volumes, in accordance with the methodology in this submittal sixty days after DEC's approval of the methodology.

Thank you in advance for your consideration of this extension request. Please contact Heather Donnelly at (718) 595-6610 if you have any questions regarding this submittal.

Sincerely,

Marcella R. Eckels
Assistant Counsel

Enc: July 29, 2009 Certification

CC:

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Albany, New York 12233-3500

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Assistant Corporation Counsel
New York City Law Department
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New York, New York 10007

DEP: J. Mueller, V. Sapienza, R. Tysvaer, K. Mahoney, M. Osit, A. Spangel, J. Romano, N. Cholewka, D. Chao, H. Donnelly, File

URS

MEMORANDUM

To: Kenneth Moriarty, P.E.

From: Mirza Zakir, P.E.

Date: July 29, 2009

Subject: **WP-169, Flushing Bay CSO**
System Certification: Calculated Influent Flow Rate and Volume, and Overflow Volume

This memorandum certifies that the system and methodology, as outlined in the attached, to calculate influent flow rate and influent volume and overflow volume were field tested, calibrated and accepted and that the system is operational.

URS Corporation
650 From Road, Suite 475
Paramus, NJ 07652-3909
Tel: 201.262.7000
Fax: 201.262.9199

FLUSHING BAY CSO RETENTION FACILITY

Flow and Volume Measurement Methodology

Influent Flow/Retained Volume Calculation:

The influent flow is calculated by a volumetric method using the cell level as measured by a level indicator transmitter (LIT) mounted in each cell. The attached facility schematic shows the location of the 15 level indicators in the 15 storage cells. Each level sensor measures the instaneous elevation and multiplies the depth with the cross sectional area to obtain a volume. The SCADA system has been programmed to include the cross sectional area of each cell (and the existing influent sewer) at 1 foot increments. By knowing the water surface of the collected combined sewage and the cross sectional area, the volume stored in each cell and the influent sewer is calculated. See attached Sections A-A and B-B for additional details. The table adjacent to Section B-B provides the calculated volume for each cell, the influent channels and the influent sewer based on the water surface elevation.

An influent event is triggered when the level in cell No.1 or cell No.8 increases for three consecutive minutes. The difference in the current level and the previous level is multiplied by the volume constant for that level, giving the instantaneous flow in gallons per second. This calculation continues until the level in the cell exceeds El. (-)5.00. At this elevation CSO is overflowing over the cell wall into the next cell. At that point, the level sensor in the next cell will detect an increase in water surface elevation and the calculation for the adjoining cell begins. All cell elevations and volumes are calculated concurrently and the measurements are presented as a flow rate as well as a cumulative total. If the storm does not result in an overflow, the calculated influent volume is equal to the retained volume for that storm.

The overflow walls of each cell, other than the last two cells, is at El. (-)5.00. When the water rises above this level, the storage facility becomes one large tank and not 15 cells since the dividing walls become submerged. Between El. (-)5.00 and the height of the overflow weir (El. 2.00) at the end of the facility, the volume is calculated for cells 1 through 7 and for cells 8-15.

The volumetric calculation will continue until the water surface elevation reaches EL2.00 at which point the tank begins to overflow. At elevation EL 2.00 the facility has collected 29.75 million gallons (with an additional 15.4 million gallons stored in the influent sewers), the maximum volume of the facility.

The "Timed Volume" method (Flow Rate =Volume/Time) to estimate flow rate through the facility. The computer system logically divides each cell into multiple sub-volumes in increments of one (1) foot high starting from El (-) 20.00 (bottom of the cell). As each sub-volume fills up, the computer registers the average flow rate, which is a function of the fill time. The volumes of each sub-volume was calculated and tabulated into the computer program. As a cell's water level rises and fills each sub-volume, the previously filled sub-volume is added into the computer's totalizer.

The metering system on the pump-back pumps are used to measure flow that is sent to the Tallman Island WPCP. When estimating the influent flow rate based on the fill time, the flow rate of primary or secondary pumps is included in the computation. If during the fill event any of the pumps are in operation, the flow rate produced by the pump is added.

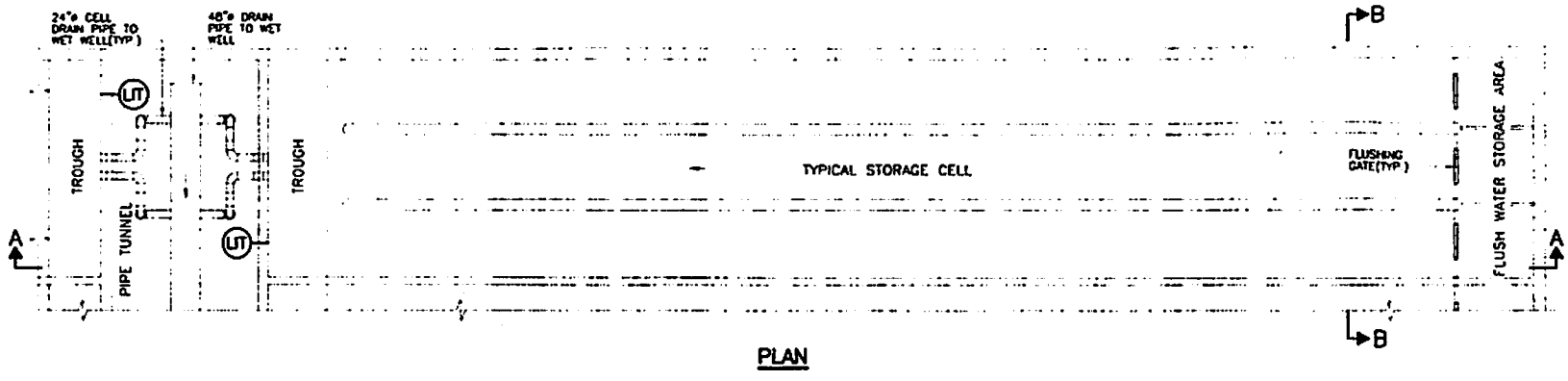
Overflow Calculation:

Overflows occur when all cells are filled and flow passes over the last two tank weirs. When all cells are full and the level sensors are at their (not the last cells) maximum and show no increase the level in the last two cells is measured and the height over the weirs is used to determine the amount over flowing the CSO facility. Overflow is measured by reading the water level over the effluent weir and then the SCADA system performs a calculation of the flow over the effluent weir using the broad crest weir formula:

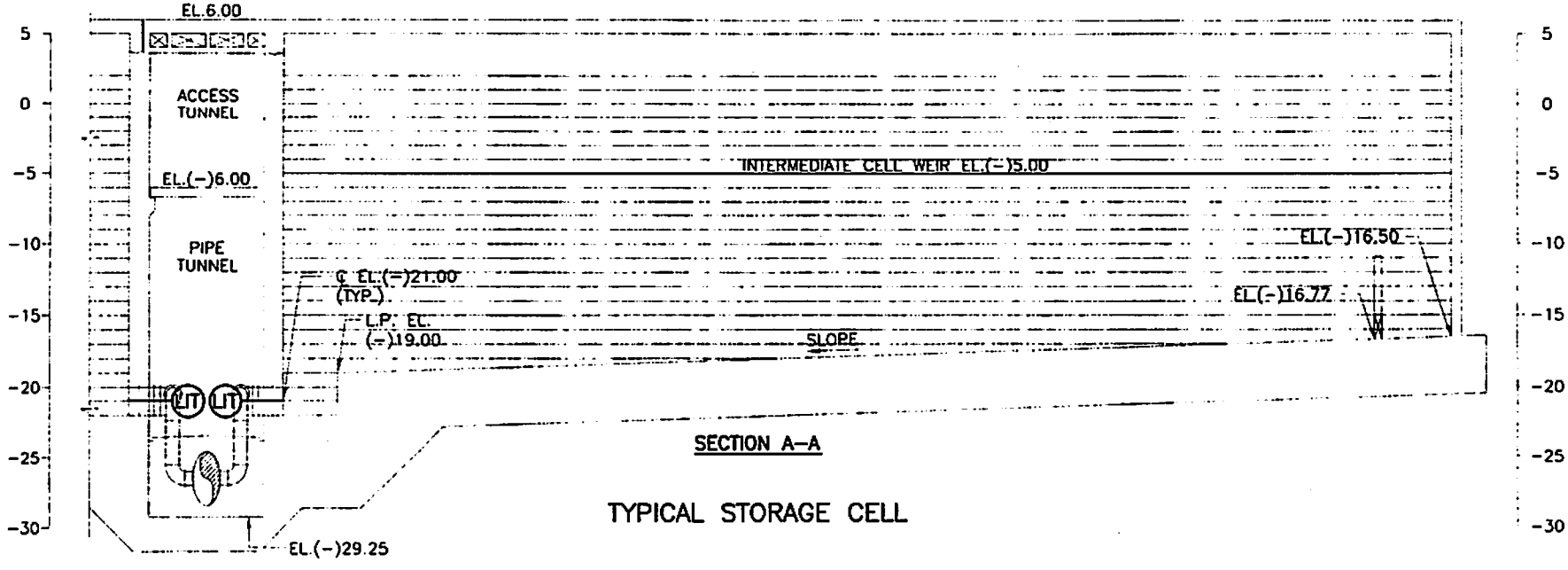
$Q = 464.9 \times (h-23.3)^{1.5}$.

Where:
Q = flow in MGD
H = level in feet (from the transmitters in cells 7 and 15)

The SCADA totalizes the flow rate and reports total overflow volume per event.



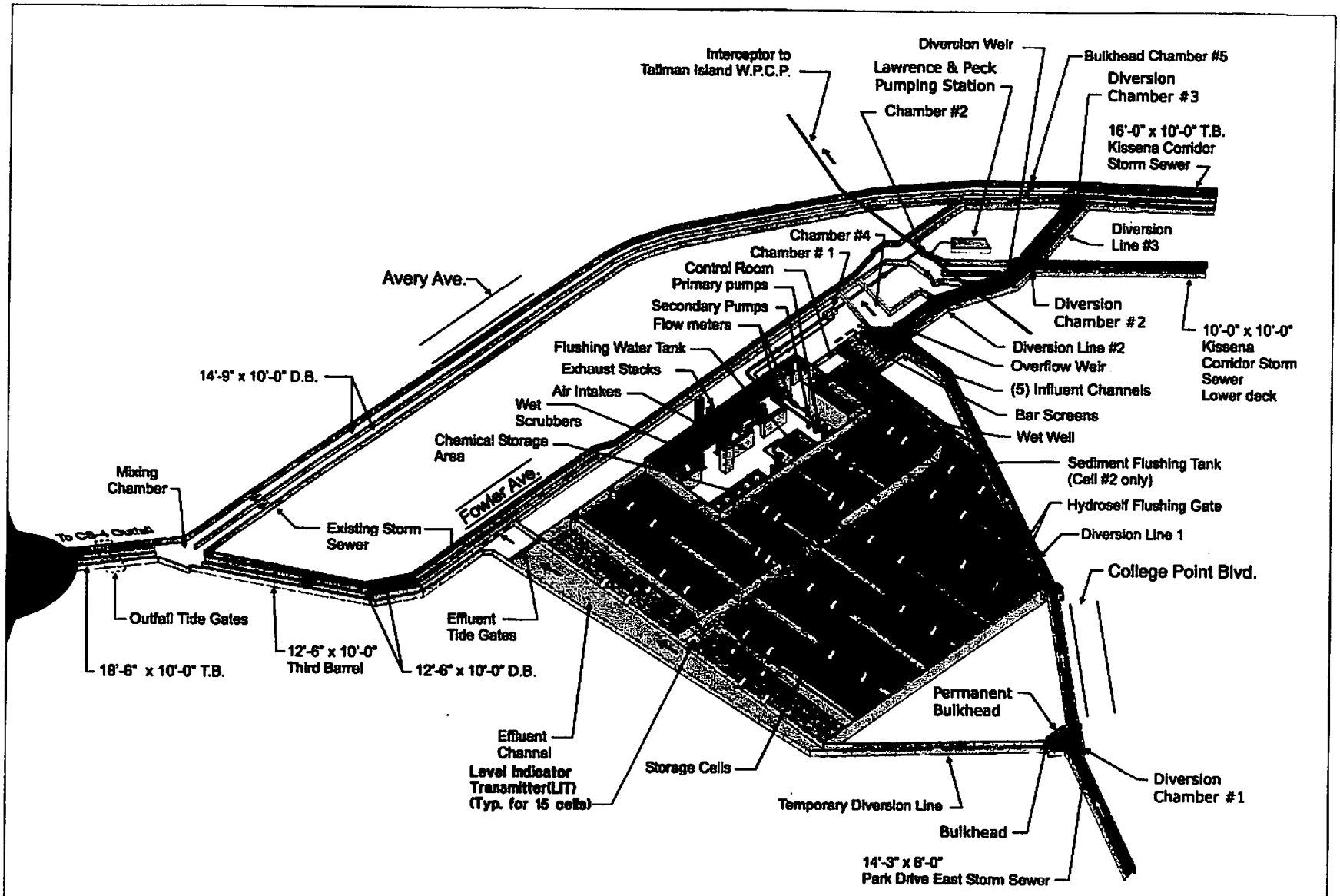
PLAN



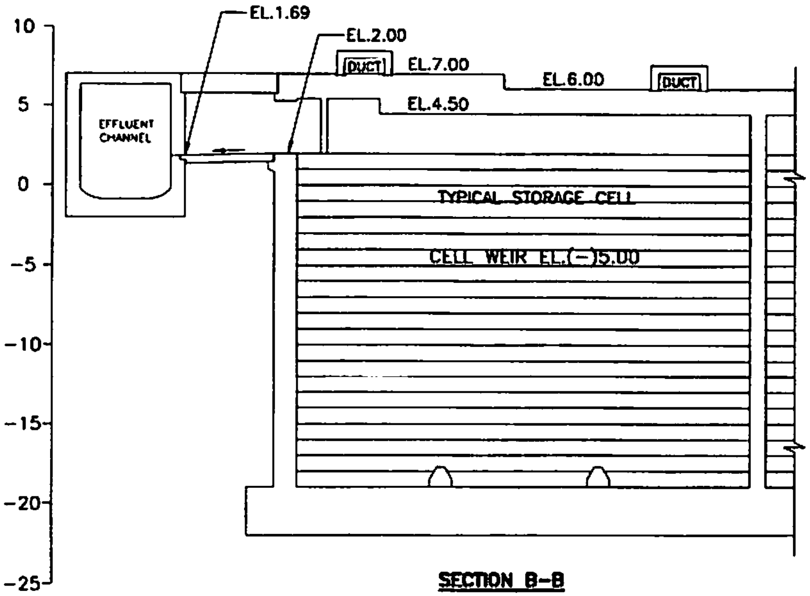
SECTION A–A

TYPICAL STORAGE CELL

FLUSHING BAY CSO RETENTION FACILITY



FLUSHING BAY CSO RETENTION FACILITY



SECTION B-B

FLUSHING BAY CSO RETENTION FACILITY
VOLUMETRIC CALCULATIONS BASED ON ELEVATIONS

	Storage Cell 1	Storage Cell 2	Storage Cell 3	Storage Cell 4	Storage Cell 5	Storage Cell 6	Storage Cell 7	Storage Cell 8	Storage Cell 9	Storage Cell 10	Storage Cell 11	Storage Cell 12	Storage Cell 13	Storage Cell 14	Storage Cell 15	Storage Cell 1 thru 7	Storage Cell 8 thru 15	Influent channels to Cells & bar Screens	CSO In-line Storage
EL. (ft)	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons
2																536,215	776,657	152,689	3,723,651
1																536,215	776,657	152,689	3,325,329
0																536,215	776,657	152,689	2,988,246
-1																536,215	776,657	152,689	2,528,307
-2																536,215	776,657	152,689	1,638,222
-3																536,215	776,657	152,689	1,020,962
-4																536,215	776,657	152,689	472,584
[illegible]																[illegible]	[illegible]		
-5	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542			152,689	13,464
-6	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542			152,689	
-7	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542			152,689	
-8	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542			116,379	
-9	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542				
-10	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542				
-11	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542				
-12	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542				
-13	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542				
-14	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542				
-15	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542				
-16	44,730	47,723	47,723	44,730	111,542	114,534	111,542	23,436	83,776	114,534	111,542	111,542	111,542	114,534	111,542				
-17	42,897	45,889	45,889	42,897	108,477	111,409	111,542	27,132	81,776	111,409	108,477	108,477	108,477	111,409	108,477				
-18	83,963	114,330	116,330	83,963	83,963	174,891	83,963	19,638	23,632	174,891	83,963	83,963	83,963	174,891	83,963				
-19	7,926	13,187	13,187	7,926	9,574	21,794	9,574	4,972	17,915	21,794	9,574	9,574	9,574	21,794	9,574				
-20	1,047	3,037	3,037	1,047	2,344	6,528	2,344	1,045	1,980	6,528	2,344	2,344	2,344	6,528	2,344				
-21	1,047	3,037	30,363	1,047	2,344	6,528	2,344	1,045	1,980	6,528	2,344	2,344	2,344	6,528	2,344				
-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

			Gallons
Storage Cell, Influent Channels to Cell & Bar Screens			29,754,400.00
CSO In-line			15,397,200.00
0.00	0.00	0.00	45,151,600.00

FLUSHING BAY CSO RETENTION FACILITY

New York City Department of
Environmental Protection
www.nyc.gov/dep

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Flushing, NY 11373

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September 1, 2009

By e-mail and regular mail

Robyn Adair, Esq.
Water Compliance Counsel
Division of Environmental Enforcement
New York State Department of Environmental Conservation
625 Broadway, 14th Floor
Albany, NY 12233-5500

Re: Order on Consent (CSO Order)
DEC Case #CO2-20000107-8
Flushing Bay CSO Facility
Proposed Compliance Schedule
Certification of Items 2a (CBS Registration for Odor Control System), 2d (Construction Completion of Odor Control System) and 3a (Repairs to Bar Screens)

Dear Ms. Adair:

Pursuant to the above-mentioned Compliance Schedule for the Flushing Bay CSO Facility, which is included in the modification to the CSO Order referenced above, which is currently pending execution by the New York State Department of Environmental Conservation (DEC) and the New York City Department of Environmental Protection (DEP), the DEP hereby submits

(1) copies of documents demonstrating DEP's timely application for registration of chemical bulk storage tanks in accordance with Compliance Schedule Item 2(a) (the e-mail transmission, letter introducing the application, and the letter requesting the variance are included herein);

(2) a P.E. stamped certification of construction completion of the odor control system in accordance with the approved design for Item 2(d); and

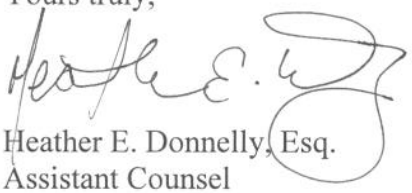
(3) a certification of completion of repairs made to the bar screens since June 2009, as requested by DEC as a follow-up to DEP's June 2009 submittal for Compliance Schedule Item 3(a).

DEP is also required, pursuant to Compliance Schedule Items 2(c) and 3(b), to demonstrate operation of the bar screens and odor control system during the facility's final inspection. At DEC's request,

arrangements have been made to perform the final inspection on September 16 rather than by September 1.

We hope this submittal meets with DEC's satisfaction. If you would like to discuss this matter, please do not hesitate to contact me at 718-595-6610. Thank you.

Yours truly,



Heather E. Donnelly, Esq.
Assistant Counsel

CC:

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New York, New York 10007

DEP: J. Mueller, M. Eckels, R. Tysvaer, K. Mahoney, N. Cholewka, J. Romano, D. Chao, V. Sapienza, M. Osit, M. Borsykowsky, File

Pirnie: J. O'Sullivan

Donnelly, Heather

From: Chan, Takcheun
Sent: Monday, August 31, 2009 5:52 PM
To: 'Karen Kyer'
Cc: Sapienza, Vincent; Quinn, Michael; Hammerman, Diane; Spangel, Arthur; Olewnicki, Joe; Volgende, Jerry; Chen, Li Quan; Buckley, Kevin; Ghiraldi, Thomas; Kalliangas, Mike; Ma, Yuklong; Taiwo, James; Borsykowsky, Michael; Moriarty, Kenneth; Osit, Matthew; Huang, Victor; Mueller, James; Eckels, Marcella; Donnelly, Heather
Subject: Flushing Bay Variance Request
Attachments: FB variance request.pdf

Importance: High

Karen,

Attached to this e-mail is a CBS Variance Request for the Flushing Bay CSO Facility. The original will be sent to your attention via USPS Certified Mail # 7007 0710 0001 6233 7022. If you have any questions, please contact Mr. Albert Gordon at (718) 595-6930 or Ms. Heather Donnelly at (718) 595-6610. Thank you.

Takcheun Chan

Associate Project Manager I
Project Management Section
Bureau of Wastewater Treatment
New York City Department of Environmental Protection
☎ Tel: 718-595-4887 | 🖷 Fax: 718-595-4885 | ✉ e-mail: takchan@dep.nyc.gov

New York City Department of
Environmental Protection
www.nyc.gov/dep

59-17 Junction Boulevard
Flushing, NY 11373

Steven W. Lawitts
Acting Commissioner

Vincent Sapienza, P.E.
Acting Deputy Commissioner
Bureau of WastewaterTreatment

Tel. (718) 595-4906
Fax (718) 595-6950
vsapienza@dep.nyc.gov

August 31, 2009

Ms. Karen Kyer
New York State Department of Environmental Conservation
Spill Prevention and Bulk Storage Section
625 Broadway, 11th Floor
Albany, New York 12233-7020

Re: Request for Variance of the Inspection Requirements of 6 NYCRR Part 598.7 for the Flushing Bay CSO Facility

Dear Ms. Kyer:

Attached please find the chemical bulk storage application for the registration of the five (5) aboveground chemical storage tanks at the Flushing Bay Combined Sewer Overflow Retention Facility.

In settlement of a Notice of Violation issued by the New York State Department of Environmental Conservation (DEC), the New York City Department of Environmental Protection (DEP) and the DEC have agreed to a certain Schedule of Compliance. See Case No. CO2-20090318-30, Appendix B, Schedule of Compliance, attached. Pursuant to the terms of the Schedule, specifically Item 2(a), the DEP hereby requests a variance applicable to the requirements for daily inspections under permit. It was agreed that DEP would apply for this variance because although the tanks would be registered, they will not store any regulated chemicals. This will continue to be the case unless a situation arises, necessitating use of Sodium Hydroxide and Sodium Hypochlorite.

If you have any questions or require additional information, please contact me at (718) 595-6930. Thank you for your cooperation in this matter.

Sincerely,

Albert Gordon, P.E., Chief
Project Management Section
Bureau of Wastewater Treatment
Department of Environmental Protection

MK/mk

New York City Department of
Environmental Protection
www.nyc.gov/dep

59-17 Junction Boulevard
Flushing, NY 11373

Steven W. Lawitts
Acting Commissioner

Vincent Sapienza, P.E.
Acting Deputy Commissioner
Bureau of WastewaterTreatment

Tel. (718) 595-4906
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vsapienza@dep.nyc.gov

Cc: DEC: R. Adair, S. McCormick
BWT: Sapienza, Quinn, Hammerman, Spangel, Olewnicki, Volgende, Chen, Buckley (CFN), Ghiraidi (CFN), Kalliangas, Ma, Taiwo
BEDC: Meuller, Borsykowsky, Moriarty, Osit, Huang
Legal: Eckels, Donnelly

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard
Flushing, New York 11373

Steven W. Lawitts
Acting Commissioner

Vincent Sapienza, P.E.
Acting Deputy Commissioner

Bureau of Wastewater Treatment

Tel. (718) 595-4906
Fax (718) 595-6950
vsapienza@dep.nyc.gov

August 3, 2009

NYSDEC
Spill Prevention & Bulk Storage Section
625 Broadway, 11th Floor
Albany, NY 12233-7020

Attention: Ms. Karen Kyer

RE: Flushing Bay Combined Sewer Overflow (CSO) Retention Facility

Dear Ms. Kyer:

Attached to this letter is a CBS Application regarding an Initial/New Facility request for the Flushing Bay CSO Retention Facility. The following are newly installed tank numbers to be registered: FB-4713-07, FB-4714-07, FB-4213-07, FB-4214-07 and FB-4215-07. A check in the amount of $625 is included.

These tanks have been tested and certified fit for service by the DEP consultant to comply with 6 NYCRR Parts 595-599. A copy of the Spill Prevention Report's (SPR) cover page, table of contents and signature page is included for your review.

Please assign a CBS # and register these tanks. If you have any questions, please call me at (718) 595-6930 or e-mail agordon@dep.nyc.gov.

Sincerely,

Albert Gordon

Albert Gordon, P.E., Chief
Project Management Section
Division of Facilities Planning

TC/tc
Encl

MALCOLM PIRNIE

MEMORANDUM

August 31, 2009

To: Nicholas Cholewka, P.E.
Executive Construction Manager

From: John O'Sullivan, P.E.
Resident Engineer

Subject: WP-169 Flushing Bay C.S.O.
Certification of Odor Control System Construction Completion

The following is to certify completion of construction of all components of the odor control system including scrubbers, fans, pumps, controls, piping etc. at the Flushing Bay CSO facility in accordance with the approved design.

The odor control system was field tested, certified and accepted for beneficial use on February 9, 2009. Startup and operation of the odor control system, using water only, began on March 6, 2009 and has operated as designed since that time.

Very truly yours,

J. O'Sullivan, P.E.
Resident Engineer

STATE OF NEW YORK
JOHN O'SULLIVAN
LICENSED PROFESSIONAL ENGINEER
NO. 063990-1

MALCOLM PIRNIE

MEMORANDUM

August 31, 2009

To: Nicholas Cholewka, P.E.
Executive Construction Manager

From: John O'Sullivan, P.E.
Resident Engineer

Subject: WP-169 Flushing Bay C.S.O.
Certification of Odor Control System Construction Completion

The following is to certify completion of construction of all components of the odor control system including scrubbers, fans, pumps, controls, piping etc. at the Flushing Bay CSO facility in accordance with the approved design.

The odor control system was field tested, certified and accepted for beneficial use on February 9, 2009. Startup and operation of the odor control system, using water only, began on March 6, 2009 and has operated as designed since that time.

Very truly yours,

J. O'Sullivan, P.E.
Resident Engineer

MALCOLM PIRNIE

MEMORANDUM

August 25, 2009

To: Nicholas Cholewka, P.E.
Executive Construction Manager

From: John O'Sullivan, P.E.
Resident Engineer

Subject: WP-169 Flushing Bay C.S.O.
FBCSO BAR SCREEN REPAIRS

Since June 29, 2009, the date of my last letter, the following repairs to the Bar Screens have been completed.

August 6, 2009	Replaced guide rollers and pins on Bar Screen No. 1804.
August 6, 2009	Secured attachment of parking proximity switch of Bar Screen No. 1804.
August 7, 2009	Replaced guide rollers and pins on Bar Screen No. 1803 rake arm assembly.
August 14, 2009	Removed and replaced with new cog wheels and hubs on the rake arm assembly on Bar Screen No. 1802.
August 17, 2009	Replaced guide rollers and pins on Bar Screen No. 1802 rake arm assembly.
August 19, 2009	Replaced pressure plate of brake of Bar Screen No. 1801.
August 19, 2009	Adjusted clearance between rake and plate of Bar Screen No. 1805.
August 20, 2009	Replaced rollers and pins on rake arm assembly of Bar Screen No. 1801.
August 20, 2009	Corrected parking on Bar Screen No. 1804 and checked signals from parking proximity switch.
August 21, 2009	Straighten the north rake arm of Bar Screen No. 1803.

August 24, 2009	Adjusted clearance between rake and plate of Bar Screen No. 1804.
August 25, 2009	Replaced broken sections of the power trak with new on Bar Screen Nos. 1801, 1802, 1803 and 1804.
August 25, 2009	Straighten the south rake arm of Bar Screen No. 1803.
August 25, 2009	Adjusted clearance between rake and plate of Bar Screen No. 1803.

I as the Resident Engineer certify that the above noted repairs were performed and completed on the Bar Screens. All Bar Screens are in service as of this date.

Very truly yours,

John O'Sullivan, P.E.
Resident Engineer

MALCOLM PIRNIE

INDEPENDENT ENVIRONMENTAL
ENGINEERS, SCIENTISTS
AND CONSULTANTS

Malcolm Pirnie, Inc.
104 Corporate Park Drive, Box 751
White Plains, NY 10602
T: 914.694.2100 F: 914.694.9286
www.pirnie.com

MEMORANDUM

June 29, 2009

To: Nicholas Cholewka, P.E.
Executive Construction Manager

From: John O'Sullivan, P.E.
Resident Engineer

Subject: WP-169 Flushing Bay C.S.O.
FBCSO BAR SCREEN REPAIR

The following is a summary of repairs and modifications completed for the bar screens. Minor maintenance is conducted on an as needed basis and is not listed in this report.

June 14, 2008 - Bar Screen No. 1805 was removed from service when the screen was dislocated during a storm event. Bar Screen No. 1805 was repaired and placed back in service by July 24, 2008.

June 26, 2008 - July 15, 2008 - Bar screen rake shelves on Screens 1801, 1802, 1803 and 1804 were removed and replaced with new shelf assemblies.

July 24, 2008 - Bar Screen No. 1803 sustained damage to its rake shelf during a significant storm event. The end teeth were removed and the screen was placed back into service on September 6, 2008.

August 30, 2008 – Bar Screen No. 1804 was removed from service after being damaged during a significant storm event.

March 17 to March 19, 2009 - Siemens Water Technology (formerly US Filter) replaced the bent rakes on Bar Screens 1801, 1803 and 1804. To improve the operation of the bar screens, the torque overload logic was modified. In accordance with the original design, if the rake encountered an obstruction it would reverse its motion which could possible result in damage. The controls were changed to shut down the bar screen when the torque overload is activated. An operator must now inspect the screen before restarting the equipment from the local control panel. These repairs and modifications were certified by the Resident Engineer as complete on March 20, 2009.

March 20 – April 26, 2009 - All five bar screens were operational as designed and with the modified controls.

MALCOLM PIRNIE

April 27, 2009 - Bar Screen No. 1802 suffered damage to the cog wheel sprocket assembly. Replacement parts are on order and repair is projected to be complete by July 30,2009. Bar Screen No. 1803 is out of service at this time.

Bar Screen No. 1804 is operational but requires repair to a roller assembly. Repair of the roller assembly is projected to be complete by July 30,2009.

Summary of Bar Screen Repairs and Control Modifications

I as the Resident Engineer at FBCSO certify that the following repairs and/or modifications were performed and completed on the Bar Screens.

(1) Bar Screen No. 1805
- Replaced Screens.
  Completed 7/24/08

(2) Bar Screens No. 1801, 1802, 1803, 1804
- Replaced rake shelf assemblies.
  Completed 7/15/08

(3) Bar Screens No. 1801, 1803, 1804
- Replaced rake shelf assemblies.
  Completed 3/20/09

(4) Bar Screens No. 1801 - 1805
- Modified controls to stop screens on torque overload as opposed to reversing direction. As modified, bar screen can only be restarted from the local control panel.
  Completed 3/20/09

Very truly yours,

John O'Sullivan, P.E.
Resident Engineer

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION

59-17 Junction Boulevard
Flushing, New York 11373

Steven W. Lawitts
Acting Commissioner

Robin M. Levine
General Counsel

Bureau of Legal Affairs

Tel. (718) 595-6586
Fax (718) 595-6543
rlevine@dep.nyc.gov

May 29, 2009

Ms. Robyn Adair, Esq.
Water Compliance Counsel
Division of Environmental Enforcement
New York State Department of Environmental Conservation
625 Broadway, 14th Floor
Albany, New York 12233-5500

Re: Order on Consent (CSO Order)
DEC Case # CO2-20000107-8
Flushing Bay CSO Retention Facility
Proposed Compliance Schedule, Required Corrective Action #4

Dear Ms. Adair:

Pending execution of a modification to the CSO Order, DEP and DEC have agreed upon a compliance schedule for the Flushing Bay CSO Facility that has been proposed in connection with the Notice of Violation issued to DEP on July 15, 2008. Enclosed is a technical summary discussing the control strategy and telemetry installed at Tallman Island Regulator 9. This is intended to satisfy Required Corrective Action #4 in the aforementioned compliance schedule.

Please contact me at (718) 595-6610 if you have any questions regarding this submittal.

Yours truly,

Heather E. Donnelly
Assistant Counsel

CC:

James DeZolt
Director, Division of Water
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-3500

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

Joe DiMura, P.E.
Compliance Bureau Director
625 Broadway, 4th 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 21st Street
Long Island City, New York 11101

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

Scott Crisafulli, Esq.
Division of Environmental Enforcement
625 Broadway, 14th Floor
Albany, NY 12233-5500

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

DEP: J. Mueller, M. Eckels, R. Tysvaer, K. Mahoney, D. Chao, File

FLUSHING BAY CSO FACILITY

Regulator 9 Control Strategy and Telemetry

Background

The Flushing Bay Combined Sewage Overflow (CSO) Retention Facility was designed to collect a maximum of 43 million gallons of combined sewage during storm events. At the conclusion of the storm event, the combined sewage that has been collected in the storage cells and sewers is pumped back to the Tallman Island Wastewater Pollution Control Plant (WPCP). The Tallman Island WPCP receives flow from three interceptor systems: the Whitestone, Flushing, and College Point interceptors. The majority of the flow comes from the Flushing Interceptor, which includes Regulator 9.

The pump-back rate occurs through control of the four (three to operate and one standby) variable speed primary pumps in the facility. After the storm event, the pump-back is initiated manually by an operator at the treatment plant. The operator reviews the water level in the storage cells, and manually selects the cell(s) to be drained to the wet well of the facility. The operator sets the rate of the pump-back based on monitoring information received at certain points in the interceptor system and the influent flow at the plant. The CSO is then drained into the wet well. On the computer screen the operator selects the command "Start Pump Back".

Depending upon the available flow capacity of the system and the plant, which is monitored by the operator, the pump(s) starts delivering the flow to the interceptor at the determined rate. The pumps will automatically shut down at the set low level control in the wet well. To start the pump(s) again the operator will repeat the above procedure. This pump-back cycle was designed to be initiated from a workstation at either the treatment plant or the retention facility. The pump(s) can also be started manually from the local control panels adjacent to the pumps and a control panel at the facility.

Original Control Strategy Design

During the design of the CSO facility, the hydraulic modeling performed indicated that the capacity of Regulator 9 was a hydraulic limitation to pumping back to the Tallman Island WPCP . To address DEP's concerns about potentially pumping back the collected CSO at a rate that would exceed the sewer system's capacity, the contract documents included a telemetry system to control, limit and monitor pump-back at three points in the system. The CSO pump-back was to start manually after a storm event. The pump-back rate could be set automatically or manually by the operator.

Certain monitored points could be set to automatically control the pump-back rate or manually monitor the interceptor system. These monitor points were originally planned at the following two locations:

Tallman Island WPCP – This is a maximum flow setting based on the plant's hydraulic or process limitations. Flow meters already at the plant supply this information to the computer system. This monitor point is currently set at 80 MGD.

Regulator 9 –Flow to the regulator was originally limited to 65MGD to prevent unwanted overflows during wet weather. Flow meters with instrumentation at the regulator were to be installed in order to send this information to the computer system for automatic control and monitoring if required. However, as discussed below, structural improvements completed under the Omnibus IV Consent Order brought the capacity of Regulator 9 to approximately 90 MGD thereby eliminating the need to automatically control the pump-back at this monitoring point.

Modified Control Strategy

As part of the DEP's work under the Omnibus IV Consent Order, an evaluation of the Tallman Island drainage area was performed. The Department was able to identify a means to improve the capacity of Regulator 9 from 65 MGD. A change order was issued to Contract CS4-4G in order to raise the weir height in the regulator, thereby increasing the capacity of Regulator 9 to approximately 90 MGD. Due to this increase in capacity and field difficulties in obtaining power for the installation of new meters with instrumentation, this control set point was eliminated. However with existing telemetry, described below, the operator can manually monitor the elevation at this monitoring point to prevent any unwanted overflows that could occur during pump-back in manual mode.

Under the modified control strategy, the pump back rate is only limited by the flow at the Tallman Island WPCP and the hydraulic capacity of the interceptor system. With this strategy, the Tallman Island WPCP is protected from receiving excess flow. Additionally, because DEP can control the pump back rate, the incidence of dry weather overflows from Regulator 9 or surcharging at the discharge point can be minimized and are not expected to occur. After the regulator modifications were complete, average monthly flow to the WPCP increased by about 7 MGD.

Regulator 9 Telemetry

In 2001, telemetry was installed in Regulator 9 to monitor the water elevation and alert DEP staff should flow pass over the weir. The battery operated system monitors the water surface level in the sewer with an ultrasonic sensor mounted above the weir. A backup "Wet Switch" is mounted on the weir wall to confirm the accuracy of the ultrasonic sensor. The ultrasonic sensor takes a reading every 15 minutes and stores the reading in the data logger. Every hour the data is sent via a wireless network to an internet website that can be accessed by DEP staff. There is a workstation at the Tallman Island WPCP that provides the current elevation so that the pump back rate can be maximized without causing flow to pass over the weir.

Under an upcoming project, DEP intends to replace the battery powered system with a utility powered system. The first phase of this project involves getting utilities (AC power and Phone line) to this location. This work will be done under the Utilities North Contract REG-024D which was bid on April 8, 2009 and is expected to start construction by the end of 2009. Under Contract REG-027, pursuant to which construction is also expected to begin by the end of 2009, the ultrasonic level sensors will be replaced and PLC's installed. This will provide more frequent updates of the water level in the interceptor.

These improvements will not materially change the monitoring and control capabilities associated with Regulator 9, but will provide updated equipment and eliminate the need for regular replacement of the batteries for the existing telemetry.

Summary

The pump-back system limits flow to prevent the interceptor system from exceeding its capacity. The pump-back is manually initiated by an operator at the Tallman Island Water Pollution Control Plant after a storm. The elevation at Regulator 9 is monitored manually and pump-back will not be initiated if this section of the system is at capacity. The pump-back rate can also be regulated according to the available capacity at the treatment plant.

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION

96-05 Horace Harding Expressway
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James G. Mueller, P.E.
Deputy Commissioner

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

Bureau of Engineering
Design & Construction

JUL 31 2009

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

Re: Order on Consent (CSO Order)
DEC Case #CO2-20000107-8
Certification of Construction Completion for
Meadowmere and Warnerville DWO Abatement
(Meadowmere/Warnerville Pump Station and Force Main)
Milestone VI C.4

Dear Mr. DiMura:

In accordance with Section III-F of the above referenced Consent Order for Combined Sewer Overflow (the Order), this letter is to certify the compliance with a milestone contained in the Order by the New York City Department of Environmental Protection (DEP). Specifically, construction has been completed for Meadowmere/Warnerville Pump Station and Force Main, in accordance with the approved plans and specification and in conformance with Milestone VI C.4 in Appendix A of the Order. As set forth in the attached certification from the construction manager, the pumping station equipment, gravity sanitary sewer collection system and dual 8 inch diameter force mains have been tested and are fully operational. Testing was completed on June 10, 2009. Please note that certain work items not related to the operations of the pump station, including punch list work and miscellaneous EH&S items will be completed beyond the milestone date.

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

cc: James Dezolt, P.E.
Director, Division of Water
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-3500

Robin Adair Esq.
Water Compliance Counsel
New York State Department of Environmental Conservation
Division of Environmental Enforcement
625 Broadway, 14th Floor
Albany, NY 12233-5500

Gary E. Kline, P.E.
Division of Water
New York State Department of Environmental Conservation
625 Broadway 4th 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 21st 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, R. Meshkati, K. Clarke
P. Young (H&S) File

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Bureau of Engineering Design & Construction

SEP 29 2009

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

Re: Order on Consent (CSO Order)
DEC Case #CO2-20000107-8
Appendix A, VIII. Newtown Creek CSO,
F. Throttling Facility, 3. Notice to Proceed to Construction

Dear Mr. DiMura:

In accordance with Section III.F of the above referenced Consent Order for Combined Sewer Overflow (the "Order"), this letter certifies 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 Newtown Creek Throttling Facility, in conformance with milestone VIII.F.3 in Appendix A of the Order. A copy of the order to commence work is attached.

As noted in the final design certification letter, dated December 20, 2007, this work is being accomplished under the Newtown Creek WPCP plant upgrade. It was included in the NC-36 contract documents as a separate allowance item in case DEP elected not to move forward with this work. The DEP proposed eliminating this Kent Avenue Throttling Facility in the June 2007 Waterbody Watershed Facility Plan. A separate milestone modification request submitted by DEP on April 30, 2009, proposed the elimination of the VIII.F.3 Throttling Facility, in conjunction with other modifications that the DEP felt would be more cost effective and improve water quality more effectively. An official determination has not been made regarding DEP's modification request and the DEP has elected to proceed with the Kent Avenue Throttling Facility while continuing discussions with DEC regarding the other elements of the proposed modification request.

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

Mr. Joseph DiMura, P.E.
Order on Consent (CSO Order)
DEC Case #CO2-20000107-8
Appendix A, VIII. Newtown Creek CSO,
F. Throttling Facility, 3. Notice to Proceed to Construction

Xc: James DeZolt
Director, Division of Water
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-3500

Gary E Kline, P.E.
Division of Water
New York State Department of Environmental Conservation
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Robert Elburn, P.E.
Regional Water Engineer
Division of Water, Region 2
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New York State Environmental Facilities Corporation
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William Plache, Esq.
Assistant Corporation Counsel
New York City Law Department
100 Church Street
New York, New York 10007

DEP: V. Sapienza, J. Mueller, M. Borsykowsky, D. Solimando, H. Donnelly, K. Mahoney, D. Chao, File

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard
Flushing, New York 11373

Emily Lloyd
Commissioner
Tel: (718) 595 - 6565
Fax: (718) 595 - 3557
ELloyd@DEP.NYC.GOV

Carol E. Fenves
Agency Chief Contracting Officer
Tel: (718) 595-3225
Fax: (718) 595-3278
CFenves@DEP.NYC.GOV

December 13, 2007

Silverite Construction
520 Old Country Road West
Hicksville, NY 11802

RE: ORDER TO COMMENCE WORK FOR CONTRACT NC-36G

Dear Contractor:

Transmitted herewith is your duly executed contract NC-36G for furnishing all labor and materials necessary and required for the Modification of North Main Building, Newtown Creek WPCP, General Work.

The Contract was:

Awarded to you on	September 27, 2007
Executed on	October 16, 2007
Registered by the Comptroller on	November 23, 2007

The Contract was awarded in the amount of $225,400,000.00 and the registration number is CTC 826 20080016749.

The commence work date is December 17, 2007. You must complete the work within 1461 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 December 17, 2011.

Upon receipt of this order please contact DJ Patel, located at 96-05 Horace Harding Expressway, 4th Floor, (718) 595-6125.

Yours truly,

Debra E. Butlien
Deputy Agency Chief Contracting Officer

DEP

311 Government Information and Services for NYC

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard
Flushing, New York 11373

Emily Lloyd
Commissioner
Tel: (718) 595 - 6565
Fax: (718) 595 - 3557
ELloyd@DEP.NYC.GOV

Carol E. Fenves
AGENCY CHIEF CONTRACTING OFFICER
Tel: (718) 595-3225
Fax: (718) 595-3278
CFenves@DEP.NYC.GOV

December 13, 2007

Five Star Electric Corp.
101-32 101st Street
Ozone Park, NY 11416

RE: ORDER TO COMMENCE WORK FOR CONTRACT NC-36E

Dear Contractor:

Transmitted herewith is your duly executed contract NC-36E for furnishing all labor and materials necessary and required for the Modification of North Main Building, Newtown Creek WPCP, Electrical Work.

The Contract was:

Awarded to you on	August 31, 2007
Executed on	September 17, 2007
Registered by the Comptroller on	December 10, 2007

The Contract was awarded in the amount of $36,500,000.00 and the registration number is CTC 826 20080013579.

The commence work date is December 17, 2007. You must complete the work within 1461 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 December 17, 2011.

Upon receipt of this order please contact DJ Patel, located at 96-05 Horace Harding Expressway, 4th Floor, (718) 595-6125.

Yours truly,

Debra E. Butlien
Deputy Agency Chief Contracting Officer

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard
Flushing, New York 11373

Emily Lloyd
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Carol E. Fenves
AGENCY CHIEF CONTRACTING OFFICER
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CFenves@DEP.NYC.GOV

December 13, 2007

C.D.E. Air Conditioning Co.
321 39th Street
Brooklyn, NY 11232

RE: ORDER TO COMMENCE WORK FOR CONTRACT NC-36H

Dear Contractor:

Transmitted herewith is your duly executed contract **NC-36H** for furnishing all labor and materials necessary and required for the **Modification of North Main Building, Newtown Creek WPCP, HVAC Work.**

The Contract was:

Awarded to you on	Septembe 05, 2007
Executed on	September 17, 2007
Registered by the Comptroller on	December 12, 2007

The Contract was awarded in the amount of **$11,921,454.00** and the registration number is **CTC 826 20080013683.**

The commence work date is **December 17, 2007.** You must complete the work within **1461** 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 **December 17, 2011.**

Upon receipt of this order please contact **DJ Patel**, located at **96-05 Horace Harding Expressway, 4th Floor, (718) 595-6125.**

Yours truly,

Debra E. Butlien
Deputy Agency Chief Contracting Officer

The City of New York

DEPARTMENT OF ENVIRONMENTAL PROTECTION
59-17 Junction Boulevard
Flushing, New York 11373

Emily Lloyd
Commissioner
Tel: (718) 595 - 6565
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Carol E. Fenves
AGENCY CHIEF CONTRACTING OFFICER
Tel: (718) 595-3225
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CFenves@DEP.NYC.GOV

December 13, 2007

Skountzos Plumbing & Heating Corp.
6925 6th Avenue
Brooklyn, NY 11209

RE: ORDER TO COMMENCE WORK FOR CONTRACT NC-36P

Dear Contractor:

Transmitted herewith is your duly executed contract NC-36P for furnishing all labor and materials necessary and required for the Modification of North Main Building, Newtown Creek WPCP, Plumbing Work.

The Contract was:

Awarded to you on	August 31, 2007
Executed on	September 17, 2007
Registered by the Comptroller on	December 11, 2007

The Contract was awarded in the amount of $3,690,000.00 and the registration number is CTC 826 20080013928.

The commence work date is December 17, 2007. You must complete the work within 1461 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 December 17, 2011.

Upon receipt of this order please contact DJ Patel, located at 96-05 Horace Harding Expressway, 4th Floor, (718) 595-6125.

Yours truly,

Debra E. Butlien
Deputy Agency Chief Contracting Officer

The City of New York

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
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jmueller@dep.nyc.gov

Bureau of Engineering Design & Construction

MAY 22 2009

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

RE: Order on Consent (CSO Order)
DEC Case #CO2-20000107-8
Appendix A, X Bronx River CSO, C. Floatables Control, 2. Final Design Completion including CPM analysis

Dear Mr. DiMura:

Thank you for reviewing and commenting on our letter dated December 31, 2008 regarding the Bronx River CSO Floatables Control Final Design Plans and Specifications. Attached for your approval are the responses that addresses comments received from Sue McCormick and Tim Burns via email on January 26, 2009 and Jan 27, 2009 respectively and during subsequent technical discussions. This submittal is intended to resolve all outstanding issues for the Bronx River CSO Floatables Control Final Design Plans Report for DEC to complete its approval process.

DEP looks forward to receiving DEC's final approval of the Bronx River CSO Floatables Control Final Design. DEP is moving forward towards the award of the construction contract, in compliance with the Consent Order Milestones. As always, please do not hesitate to contact me at 718-595-6208 regarding any questions you may have.

Very truly yours,

Roy Tysvaer, P.E., Director
Wastewater Treatment and Water Quality

Enclosure

cc w/enc: G. Kline, P.E., NYSDEC
S. McCormick, P.E., NYSDEC
R. Adair, Esq.
R. Elburn, P.E., NYSDEC
T. Burns, P.E., NYSEFC
K. Mahoney, P.E., NYCDEP
D. Chao, P.E., NYCDEP
M. Eckels, Esq., NYCDEP
H. Donnelly, Esq., NYCDEP
K. Tong, NYCDEP
P. Young, P.E., Hazen and Sawyer

Comment 5 on Design Report:

Section 7: This section evaluates the impacts to the screenings systems at the Hunts Point WPCP with mechanical screens installed for both outfalls HP-004 and HP-007. It does not go into details for impacts related to mechanical screens being installed at HP-007 alone. It does state that modifications need to be made to the Hunts Point WPCP screenings conveyor system for $500,000 to handle the extra floatables that will come to the WPCP from the mechanical screens at HP-007. Those modifications are not included in the plans and specifications. Please explain how the extra floatables will be handled at the WPCP.

RESPONSE: For the Hunts Point WPCP screenings system, the limiting factor of the automated screenings removal is the screenings conveyors. The plant upgrade under the contract HP-STAB has increased the effectiveness of the screening system. Presently, the screenings conveyors has a capacity of 2.78 cy/hr with an estimated extra capacity of 1 cy/hr. If the screenings loading exceeds the conveyor's capacity during an extreme wet weather event, a chute is opened and the screenings are directed into four (4) dumpsters with a capacity of two (2) cubic yards each, located next to the screens. This gives a by-pass storage capacity of 8 cubic yards before the dumpsters need to be emptied. Excess overloading will be manually addressed, which is the typical operating procedure currently handled by the plant.

EFC's Comment 1 on Design Report:

The design report should provide calculations for approach velocity (at average and peak flow) and velocity through the two recommended outfall 007 CSO mechanical screens downstream of the regulator (along with manufacturers information) to assure proper design. Also, identify any flow measurement devices to be install at outfall 007.

RESPONSE: The average velocity through the screens at Regulator 27A is 3.28 fps, the peak velocity is 3.52 fps. The average velocity through the screens at Regulator 27 is 3.28 fps, the peak velocity is 5.45 fps. These values were reviewed by the screen manufacturer and it was confirmed that the screens will work at these flow rates.

We are not installing any flow measurement devices in Outfall HP007 under this contract.

EFC's Comment 2 on Design Report:

Add provisions to the contract for a CWSRF project sign at the construction site (per 2009 IUP Section 1.3), and have this sign fabricated in accordance with the attached schematic and specifications.

RESPONSE: Detailed Specification 01581 of the construction contract requires the contractor to provide (4) project signs, therefore the existing contract already has provisions to provide the CWSFR project sign.

Per your request at the technical meeting:

Preliminary O&M Plan for screens being installed in Regulators CSO 27 and 27A connected to Outfall HP007

Monitoring

Underflow mechanical screens will be installed in Regulators CSO27 and CSO27A upstream of Outfall HP-007. The mechanical screens will be activated from an ultrasonic level sensor. Since the screens are the underflow type, the floatable material contained in the CSO will be trapped under the screen and retained in the flow continuing to the Hunts Point WPCP.

Inspection

A complete operations and maintenance manual will be developed by the screen manufacturer and reviewed during the shop drawing procedure of Contract ER-BR1. This manual will detail the following.

The screen manufacturer recommends inspection of the screens and enclosure every 3 months. However, it is recommended that initially the screens be inspected after every significant rainfall event until a performance history is established. This inspection includes:

- Checking the unit for damage from the impact of large objects sometimes present in the sewage flow.
- Checking for blockage of the screening surface from the deposition of solid material.
- Checking the rakes for cracks, breaks and level of deterioration.

Inspection of the screen can be conducted from ground level at the 2'-3" manhole in Bronx Park Ave and the 36" manhole in the Bronx Zoo.

During the inspection it may be determined that the screens require to be washed down with a pressure washer. When this is required, access to the screens will be through the stairs located in the access way. The screens are able to be cleaned from the overflow channel, without stepping on the screens or entering the sanitary sewer.

Routine Maintenance

Routine maintenance on the screens includes:

- Once a year, the hydraulic fluid and filter need to be changed.
- Once every five years the combs on the screens need to be replaced. The raking mechanism, containing the combs, is fully accessible from the top side of the screen and does not require anyone to enter the sanitary sewer.