BUFFALO
SEWER AUTHORITY

SPDES Permit No. NY0028410

Long Term Control Plan Semi-Annual Status Report
Reporting Period: *January through June 2014*

Amended Administrative Order
CWA-02-2014-3033
(Amends CWA-02-2012-3024)

SEPTEMBER 2014

BUFFALO SEWER AUTHORITY

Long Term Control Plan Semi-Annual Status Report
Reporting Period: ***January through June 2014***

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A. Monthly Monitoring Reports and Other CSO/Bypass Related Reports Submitted to NYSDEC (USEPA copy only)
B. CSO 060 GI Demonstration Project PCM Results Update

1. INTRODUCTION

The Buffalo Sewer Authority (Authority) received approval of its Long Term Control Plan (LTCP) from the United States Environmental Protection Agency (USEPA) and New York State Department of Environmental Conservation (NYSDEC) on March 18, 2014. The Authority was issued an Administrative Order, as amended on April 16, 2014 (herein after referred to as the Amended AO or AO), by the USEPA. The Amended AO establishes a schedule for implementation of the Authority's LTCP, approved by the USEPA and NYSDEC.

The Amended AO in part requires that the Authority submit written Semi-Annual Status Reports to the USEPA and NYSDEC by September 1st for current year January 1– June 30 reporting period, and March 1st for the previous calendar year July 1 – December 31 reporting period. The AO requires that the following be provided in each Semi-Annual Status Report:

- The project milestones, deadlines and other terms that the Authority is required to meet since the date of the last Semi-Annual Status Report, whether and to what extent the Authority has met those requirements, and the reason for any anticipated delays and/or noncompliance.
- A general description of the work completed during the reporting period and the applicability of the work to meet indicated design criteria, as well as the projection of work to be performed during the next reporting period and any anticipated delays for the upcoming work. Any changes in key personnel must also be noted.
- Enclosure of public meeting (if held) materials including: advertisements, handouts, formal meeting notes, and a summary of the meeting.
- Copies (to USEPA only) of all monthly monitoring reports or other reports pertaining to CSOs and bypasses that BSA submitted to the NYSDEC during the reporting period.

This report covers January through June 2014, which serves as Semi-Annual Report No. 1.

2. REQUIREMENTS DUE IN REPORTING PERIOD

The following table summarizes the deadlines and other terms of the Amended AO that the BSA has been required to meet for this reporting period. This Semi-Annual Status Report is the first such report since the Amended AO was issued and subsequently acknowledged by the BSA on April 30, 2014. The table also provides whether and to what extent the Authority has met those requirements, and the reason for any anticipated delays and/or noncompliance.

Requirement	Description	Deadline	Compliance Status
Revised LTCP	Submit a revised LTCP based on Agency comments on the Draft LTCP (April 2012)	January 10, 2014	BSA submitted the Revised LTCP to the Agencies on January 10, 2014. The Agencies approved the Revised LTCP on March 18, 2014.
Amended Administrative Order Acknowledgement	Acknowledge receipt of Amended Administrative Order via signature	April 30, 2014	BSA acknowledged receipt of the Amended AO via electronic communication on April 30, 2014.
Semi-Annual Status Reports	Submit Semi-Annual Status reports no later than March 1st (reporting period July 1 through December 31 of previous year) and September 1st (January 1 through June 30 of current year)	March 1st September 1st	This report serves as the September 1, 2014 Semi-Annual Status Report submittal.

Prior to this reporting period, the BSA also met the following deadlines:

- Submittal of work plans for the revised No Feasible Alternative (NFA) analysis report and Green Infrastructure (GI) Master Plan to the Agencies on March 1, 2013.
- Submittal of the revised NFA and the GI Master Plan to the Agencies on August 2, 2013.

3. WORK COMPLETED IN CURRENT REPORTING PERIOD AND PROJECTION OF WORK TO BE PERFORMED NEXT REPORTING PERIOD

The following table presents a general description of the work completed on LTCP projects during the reporting period (January 1 through June 30, 2014) and the work projected to performed during the next reporting period (July 1 through December 31, 2014). The January 2014 LTCP provided an update on the status of the revised Foundation Projects through December 2013 (see Table 11-11 LTCP).

Ongoing/Pending Projects and Activities

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
Phase I Projects				
CSO 060 GI Project	---	---	Prior to 1/1/2014	Complete. Post construction monitoring results for January 1, 2014- June 30, 2014 are provided in Attachment B.
Bird/Lang RTC Projects	Construction Start	3/17/2014	2/24/2014	Complete
	Completion Date	9/2/2014		Projected to be Completed During Next Reporting Period; Delay in completion anticipated; See 4. IMPLEMENTATION ISSUES
	Operations/ Optimization (RTC)	9/3/2014 – 9/3/15		Projected to be Started During Next Reporting Period ; Operations/optimization to commence following construction completion; See 4. IMPLEMENTATION ISSUES

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
Foundation Projects				
Foundation 1 - Smith Street Storage	Engineering Start	3/18/2014	Prior to 1/1/2014	Complete
	Engineering Completion	3/18/2015		
	Notice to Proceed	3/18/2015		
	Substantial Completion	3/18/2017		
Foundation 2 - SPP Optimization (20 projects): Project consists of multiple smaller projects that will overlap in engineering and construction. Specific engineering completion and construction dates for each project site will be determined as they are developed. In any case, all work associated with these blocks of projects will be completed within the overall timeframe shown. **SEE DETAILS FOLLOWING FOR SPECIFIC PROJECTS**	Engineering Start	3/1/2014	Prior to 1/1/2014	Complete
	Engineering Completion	3/18/2015		
	Notice to Proceed	3/1/2014	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
SPP 180 Optimization (W. Delavan Ave. & Delaware Ave.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete
SPP 331 Optimization (W. Delavan Ave. & Elmwood Ave.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---		
	Notice to Proceed	---		
	Substantial Completion	3/18/2017		
SPP 36 Optimization (Church St.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	1/20/2014	Complete
	Notice to Proceed	---	5/30/2014	Complete
	Substantial Completion	3/18/2017		Projected to be Completed During Next Reporting Period
SPP 75 Optimization (Smith St. and Perry St.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---		
	Notice to Proceed	---		
	Substantial Completion	3/18/2017		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
SPP 217 Optimization (Emslie St. & E. Eagle St.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---		
	Notice to Proceed	---		
	Substantial Completion	3/18/2017		
SPP 318 Optimization (Clinton St. & Fillmore Ave.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---		
	Notice to Proceed	---		
	Substantial Completion	3/18/2017		
SPP 97A Optimization (Prenatt St. & Orlando St.)	Engineering Start	---	3/1/2014	Complete
	Engineering Completion	---		
	Notice to Proceed	---		
	Substantial Completion	3/18/2017		
SPP 122 Optimization (S. Legion Dr. & Meriden St.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
SPP 163 Optimization (Northland Ave. & Fillmore Ave.)	Engineering Start	---	3/1/2014	Complete
	Engineering Completion	---		Projected to be Completed During Next Reporting Period
	Notice to Proceed	---		
	Substantial Completion	3/18/2017		
SPP 165 Optimization (E. Delavan Ave. & Fillmore Ave.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete
SPP 165A Optimization (Kensington Ave. & Fillmore Ave.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	4/4/2014	Complete
	Notice to Proceed	---	7/25/2014	Complete
	Substantial Completion	3/18/2017		Projected to be Completed During Next Reporting Period
SPP 178 Optimization (Northland Ave. & Masten Ave.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
SPP 335B Optimization (Hager St. and Florida St.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete
SPP 336A Optimization (Humboldt Pkwy.)	Engineering Start	---	1/1/2014	Complete
	Engineering Completion	---		
	Notice to Proceed	---		
	Substantial Completion	3/18/2017		
SPP 341A Optimization (Genesee St. & Kearns Ave.)	Engineering Start	---	1/1/2014	Complete
	Engineering Completion	---		
	Notice to Proceed	---		
	Substantial Completion	3/18/2017		
SPP 342B Optimization (Sprenger Ave. at Schiller Park)	Engineering Start:	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
SPP 1 Optimization (Cornelius Creek)	Engineering Start:	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	3/27/2014	Complete
	Notice to Proceed	---	6/16/2014	Complete
	Substantial Completion	3/18/2017		Projected to be Completed During Next Reporting Period
SPP 183 Optimization (Bradley St. and Dewitt St.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete
SPP 283 Optimization (Sheridan Terrace at the Swan Trunk)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete
SPP 211 Optimization (S. Ogden St. & Clinton St.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2017	Prior to 1/1/2014	Complete

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
Foundation 3 - Remaining RTC (14 sites)	Engineering Start	3/18/2016		
	Notice to Proceed	3/18/2017		
	Engineering Completion	3/18/2023		
	Substantial Completion	3/18/2024		
Foundation 4 - Hamburg Drain Optimizations	Engineering Start	3/18/2015	Prior to 1/1/2014	Complete
	Engineering Completion	3/18/2017		
	Notice to Proceed	3/18/2016		
	Substantial Completion	3/18/2018		
Foundation 4 - Hamburg Drain Storage	Engineering Start	3/18/2028		
	Engineering Completion	3/18/2030		
	Notice to Proceed	3/18/2030		
	Substantial Completion	3/18/2032		
	Engineering Completion	3/18/2016		
	Substantial Completion	3/18/2018		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
Green Infrastructure Projects				
Green 1 - Pilot Projects – 267-acres of GI control (GI projects will consist of multiple smaller projects including building demolitions that will overlap in engineering and construction during a given GI phase. For each phase, the BSA will achieve the start of construction for at least 50 percent of the required acreage by the mid-point of each phase.) **SEE DETAILS FOLLOWING FOR SPECIFIC PROJECTS**	Engineering Start	3/1/2014	Prior to 1/1/2014	Complete
	Engineering Completion	3/18/2016		
	Substantial Completion	3/18/2018		
Demolitions and Vacant Lot Management – 2001-2013 *210 acres of impervious area applied towards Phase I GI target acreage*	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2018		
CSO 053 Pilot Project s and 2014-2018 Demolitions *31 acres of impervious acres control to be applied towards Phase I GI target acreage*	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---		
	Substantial Completion	3/18/2018		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
PUSH Blue Projects (rain gardens, porous pavement, green roofs) *1.0 acre of impervious area to be applied towards Phase I GI target acreage*	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---		
	Substantial Completion	3/18/2018		
Carlton Street Porous Asphalt (Project outside of areas targeted for impervious surface control; therefore, no acreage applied towards Phase I GI target acreage goal.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2018		Projected to be Completed During Next Reporting Period
Fillmore Avenue Porous Parking Lots and Green Lots 0.4 acre of impervious area to be applied towards Phase I GI target acreage	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2018		Projected to be Completed During Next Reporting Period
Ohio Street 2.1 acres of impervious area to be applied towards Phase I GI target acreage	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/2018		
Kenmore Avenue 4.1 acres of impervious area to be applied towards Phase I GI target acreage	Engineering Start	---	4/30/2014	Complete
	Engineering Completion	---		Projected to be Completed During Next Reporting Period
	Substantial Completion	3/18/2018		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
Kensington Avenue 2.5 acres of impervious area to be applied towards Phase I GI target acreage	Engineering Start	---		Genesee Gateway Project to be substituted for this project; See 4. IMPLEMENTATION ISSUES
	Engineering Completion	---		
	Substantial Completion	3/18/2018		
Genesee Gateway Project (Replacing Kensington Avenue) 2.5 acres of impervious area to be applied towards Phase I GI target acreage	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---		
	Substantial Completion	3/18/2018		
Allen Street 2.5 acres of impervious area to be applied towards Phase I GI target acreage	Engineering Start	---		Projected to be Completed During Next Reporting Period
	Engineering Completion	---		
	Substantial Completion	3/18/2018		
Niagara Street 14.3 acres of impervious area to be applied towards Phase I GI target acreage This is a four phase project	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---		
	Substantial Completion	3/18/2018		
Green 2 – 410 acres of GI Control	Engineering Start:	3/18/2019		
	Engineering Completion:	03/18/2023		
	Substantial Completion:	03/18/2024		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
Green 3 – 375 acres of GI Control	Engineering Start:	3/18/2023		
	Engineering Completion:	03/18/2028		
	Substantial Completion:	03/18/2029		
Green 4 – 263 acres of GI Control	Engineering Start:	3/18/2028		
	Engineering Completion:	03/18/2033		
	Substantial Completion:	03/18/2034		
WWTP				
WWTP Improvements Project-Alternative C2 (two consecutive projects)	Engineering Start	3/18/2015		
	Engineering Completion	3/18/2019		
	Notice to Proceed	3/18/2017		
	Substantial Completion	3/18/2022		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
Gray Projects				
CSOs 014/15 – Erie Basin In-line storage and optimization projects SEE DETAILS FOLLOWING FOR SPECIFIC PROJECTS	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	3/18/14	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/15		
SPP 206 a/b (Village Ct. and Fourth St.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	5/30/2014	Complete
	Substantial Completion	3/18/15		
SPP 35 – 50,000 gallon in-line storage system (W. Genesee St. and S. Elmwood Ave.)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	Prior to 1/1/2014	Complete
	Substantial Completion	3/18/15	5/31/2014	Complete

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
SPP 36 (Church Street)	Engineering Start	---	Prior to 1/1/2014	Complete
	Engineering Completion	---	Prior to 1/1/2014	Complete
	Notice to Proceed	---	5/30/2014	Complete
	Substantial Completion	3/18/15		Projected to be Completed During Next Reporting Period
CSO 013 – Satellite storage, conveyance, FM & PS	Engineering Start	3/18/2019		
	Engineering Completion	3/18/2020		
	Notice to Proceed	3/18/2020		
	Substantial Completion	3/18/2022		
North Relief – Interceptor	Engineering Start	3/18/2019		
	Engineering Completion	3/18/2022		
	Notice to Proceed	3/18/2022		
	Substantial Completion	3/18/2026		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
CSOs 010, 008/010, 061, 004 – Underflow capacity upsizing	Engineering Start	3/18/2021		
	Engineering Completion	3/18/2023		
	Notice to Proceed	3/18/2023		
	Substantial Completion	3/18/2024		
SPP 337 (CSO 053) – Satellite storage, conveyance, FM & PS	Engineering Start	3/18/2023		
	Engineering Completion	3/18/2025		
	Notice to Proceed	3/18/2025		
	Substantial Completion	3/18/2027		
SPP 336 a+b (CSO 053) – Satellite storage, conveyance, FM & PS	Engineering Start	3/18/2024		
	Engineering Completion	3/18/2026		
	Notice to Proceed	3/18/2026		
	Substantial Completion	3/18/2029		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
SPP 170B (CSO 053) – Satellite storage, conveyance and FM (Jefferson Ave. & Florida St.)	Engineering Start	3/18/2025		
	Engineering Completion	3/18/2027		
	Notice to Proceed	3/18/2027		
	Substantial Completion	3/18/2030		
CSO 055 – Satellite storage, conveyance, FM & PS (Cornelius Creek)	Engineering Start:	3/18/2027		
	Engineering Completion:	3/18/2030		
	Notice to Proceed:	3/18/2030		
	Substantial Completion:	3/18/2034		
CSOs 028/044/047 - Satellite storage, conveyance, FM & PS (storage at Tops from CSO 47 west)	Engineering Start:	3/18/2028		
	Engineering Completion:	3/18/2031		
	Notice to Proceed:	3/18/2031		
	Substantial Completion:	3/18/2034		

Project Name	Project Milestone	AO Project Deadline	Actual Completion Dates	Project Status
CSO 052 – Satellite storage, conveyance, FM & PS (S. Ogden St.)	Engineering Start:	3/18/2030		
	Engineering Completion:	3/18/2032		
	Notice to Proceed:	3/18/2032		
	Substantial Completion:	3/18/2034		
CSO 064 – Satellite storage, conveyance, FM & PS (Ohio Drain)	Engineering Start:	3/18/2030		
	Engineering Completion:	3/18/2032		
	Notice to Proceed:	3/18/2032		
	Substantial Completion:	3/18/2034		

4. IMPLEMENTATION ISSUES

On the Bird and Lang RTC Projects there were construction delays aggregating several weeks due to inclement weather, easement acquisition, submittal and fabrication delays for the actuators and stems, and a delayed radio path study. Construction is expected to be substantially completed within the next reporting period and within the contracted 270 days after Notice to Proceed (Substantial Completion is expected by November 21, 2014). Operations and optimization of the RTC Projects shall commence immediately following substantial completion of the construction. It should be noted that the delay in completing this project will not cause delays on any future projects including other RTC Projects.

The Kensington Avenue Green Infrastructure Project has been eliminated due to the construction schedule for the streetscape improvements along Kensington Avenue. Another project, the Genesee Gateway Project, will be used instead to achieve the stormwater retention goals. The Genesee Gateway project Engineering began in March of 2014.

5. CHANGES IN KEY PERSONNEL

There were no changes in key personnel during the reporting period.

6. PUBLIC MEETINGS

The BSA has scheduled a Stakeholder Panel meeting for August 7, 2014 to present the work completed since the submittal of the April 2012 Draft LTCP. Information about this Stakeholder Panel will be included in the next semi-annual report.

7. MODEL MODIFICATIONS

The BSA began planning for hydraulic model conversion to begin in the next reporting period. This will consist of converting the existing XP-SWMM model into PC-SWMM. Additionally, as projects progress and new field survey data is collected (e.g., weir elevations), the model will be updated with the new information and documented in the Semi-Annual Status Reports.

8. CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

David P. Comerford, General Manager

8/25/14
Date