

**SANITARY SEWER COLLECTION SYSTEM
QUARTERLY PROGRESS REPORT
3RD QUARTER – 2013
ONEIDA COUNTY SEWER DISTRICT**

NYSDEC Consent Order R620060823-67



Prepared for

Oneida County Department of Water Quality
& Water Pollution Control

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October 30, 2013



Cazenovia, NY



Syracuse, NY



Utica, NY

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TABLE OF CONTENTS

1.0 Introduction	1
1.1 Historical Background	1
1.2 Consent Order	1
2.0 Engineering Investigations and Evaluations	2
2.1 Collection System	2
2.1.1 Manhole Inspections	2
2.1.2 Sanitary Sewer Televising	2
2.1.3 Dye Testing	2
2.2 Water Pollution Control Plant	2
2.3 Sauquoit Creek Pump Station/Force Main	2
3.0 Management Programs	3
3.1 Computerized Management and Maintenance System	3
3.2 Flow Monitoring Program	3
3.3 Private Property I/I Reduction Program	3
3.4 Capacity, Management, Operations and Maintenance Program	3
4.0 Schedule/Milestone Dates	5
4.1 Approved Schedule	5
4.2 Milestones	5
5.0 Sewer Rehabilitation	6
5.1 Contract 2 – Sanitary Sewer Manhole Rehabilitation – Phase 2	6
5.2 Contract 3 – Sanitary Sewer Mainline Rehabilitation – Phase 1	6
5.3 Contract 4 – Sewer Separation – Clinton/Henderson Street, NY Mills	6
5.4 Contract 5 – Sewer Spot Repairs – Phase 1	6
5.5 Contract 6 - Sanitary Sewer Mainline Rehabilitation – Phase 2	6
6.0 Assessment of Rehabilitation Effectiveness	7
7.0 Completed Capital Projects/Facility Upgrades	8
8.0 I/I Offset Projects/New Flows	9
9.0 Key Personnel Changes	10
9.1 County Staff	10
9.2 Satellite Community Staff	10
9.3 Consultant Team Staff	10
10.0 Administrative Items	11
10.1 Work Authorizations	11
10.2 Funding Applications	11
10.2.1 WPCP Upgrade and Expansion, Solids Handling Upgrades-Preliminary Design	11
10.2.3 DASNY-Economic Development Assistance Program	11

1.0 INTRODUCTION

1.1 HISTORICAL BACKGROUND

The Oneida County Sewer District (District) was formed in 1965 through an act by the former Oneida County Board of Supervisors. It is administered by Oneida County through the Oneida County Department of Water Quality and Water Pollution Control (WQ&WPC) which is responsible for the operation of the District's facilities and personnel. District facilities include 45 miles of interceptor sewers, the Sauquoit Creek and the Barnes Avenue Pumping Station, and the Water Pollution Control Plant. The District services 15 municipalities, nine of which are within the Sauquoit Creek Pumping Station (SCPS) Basin. These municipalities own and operate their own collection systems.

1.2 CONSENT ORDER

The New York State Department of Environmental Conservation (NYSDEC) and Oneida County (County) entered into a Consent Order (No. R620060823-67) due to sanitary sewer overflows (SSO) at the SCPS. In addition to the required mitigation of those SSOs, the Consent Order, with an effective date of December 12, 2011, requires the submission of Quarterly Progress Reports. The intent of this Quarterly Progress Report is to summarize the work that has been undertaken by the County between July 1, 2013 and September 30, 2013 (3rd quarter of 2013) in support of the Consent Order compliance requirements.

2.0 ENGINEERING INVESTIGATIONS AND EVALUATIONS

During the 3rd quarter of 2013, the County completed the following tasks related to engineering investigations and evaluations.

2.1 COLLECTION SYSTEM

2.1.1 Manhole Inspections

There were no manhole inspections completed during the 3rd quarter of 2013.

2.1.2 Sanitary Sewer Televising

There are approximately 216 miles of sanitary sewer within the SCPS basin (30 miles of District interceptor sewer plus 186 miles of municipal sewer). The County has contracted with a firm (National Water Main Cleaning Co.) to perform closed circuit televising (CCTV) of these sanitary sewers. Televising data was collected electronically in the field using the nationally standardized Pipe Assessment and Certification Program (PACP) and incorporated into the County's data management software.

During the 3rd quarter of 2013, no new televising of municipal sewers was completed, although some re-televising was done to improve data quality. The focus of the CCTV project during the 3rd quarter was on data cleanup and delivery and QA/QC of previously completed televising. Including interceptor sewers, approximately 170 cumulative miles of sewer have been televised through the end of the 1st quarter 2013.

2.1.3 Dye Testing

There was no dye testing performed during the 3rd quarter of 2013.

2.2 WATER POLLUTION CONTROL PLANT

During the 3rd quarter of 2013, the Consultant Team continued its preliminary design on the solids handling upgrades that were recommended in a report titled "Water Pollution Control Plant and Sauquoit Creek Pump Station Evaluation", and the addendum to that report that were approved by NYSDEC during the 4th quarter of 2012. In addition, 2 progress meetings were held with the County, WPCP operations staff, and Consultant Team members to discuss preliminary design elements as they relate to plant operations, and to provide a status update on the project.

2.3 SAUQUOIT CREEK PUMP STATION/FORCE MAIN

During the 3rd quarter of 2013, the Consultant Team continued preliminary design on the pump station and force main upgrades that were recommended in a report titled "Water Pollution Control Plant and Sauquoit Creek Pump Station Evaluation", and the addendum to that report that were approved by NYSDEC during the 4th quarter of 2012.

Specifically, aerial photogrammetry control points were surveyed, ground survey was completed at critical locations, and base mapping compilation was completed. Wetland delineation field work was performed along the forcemain route. The delineation report preparation is underway. Preliminary design of the pump station upgrades, including a new screening facility and generator progressed through the 3rd quarter. The forcemain route was assessed for geotechnical boring locations and a preliminary plan and draft Joint Application for Permit was prepared in anticipation of a geotechnical program that is anticipated to occur during the 4th Quarter of 2013. Progress meetings were held in conjunction with the solids handling preliminary design meetings with the County, SCPS operations staff, and Consultant Team members to discuss preliminary design elements of the pump station upgrades and new forcemain and to provide a status update on the project.

3.0 MANAGEMENT PROGRAMS

3.1 COMPUTERIZED MANAGEMENT AND MAINTENANCE SYSTEM

The County purchased a Computerized Management and Maintenance System (CMMS) software system (Lucity – formerly GBA Master Series) in 2009. This software is used to manage the sewer system data (mapping, inspections, etc.) obtained to date by the County. At the same time that the software was acquired, the County invested in computer hardware upgrades to support the CMMS system. The County’s GIS Coordinator manages the system.

During the 3rd quarter of 2013, the County continued to utilize the CMMS for tracking and documenting sewer rehabilitation work, and uploading and managing new PACP data provided by the County’s CCTV contractor.

3.2 FLOW MONITORING PROGRAM

The County continues to work closely with DASNY to secure the \$950,000 EDAP funding allocation that will support the extensive flow monitoring program proposed by the County and approved by NYSDEC on August 24, 2012. The process for acquiring this funding is very tedious but is progressing through the various review processes within the State government in Albany. In the absence of the EDAP funding, the County made the decision in September 2013 to proceed with the finalization of bidding documents for the procurement of the flow monitoring equipment using various sources of interim borrowing within the Oneida County Sewer District operating budget.

3.3 PRIVATE PROPERTY I/I REDUCTION PROGRAM

The document titled “Preliminary Planning Document – Private Property Inflow and Infiltration Reduction Program” was submitted to NYSDEC on June 29, 2012 as required by Schedule A - Section B.2 of the Consent Order.. The County, working through the Steering Committee, created a working group of appropriate PPII-oriented community representatives to map out a phased implementation plan. During the 3rd quarter of 2013, progress continued to be made on the development and implementation of the program. The County met with the Working Group and Consultant Team members on September 4 to continue to discuss the details regarding the implementation of a PPII program. Questions raised by the Working Group members at the September 4th meeting mostly revolved around the legality of the municipal enforcement of a private property inspection program, and surcharges resulting from those inspections. Additionally, the Working Group expressed their desire to launch the voluntary portion of the program, focusing on voluntary disconnection of downspouts from the sanitary sewer.

As a result of the issues discussed above, the County and Consultant Team met for a series of internal meetings to discuss the following:

- The timing of the launch of the voluntary program and educational materials
- Legal basis for municipal officials to perform private property inspections, and assess surcharges based on the results of those inspections
- The need to facilitate a meeting with the Chief Elected Officials and PPH Working Group members in order to discuss the program, and the roles and responsibilities of the County and the Municipalities as they relate to development and implementation of a PPH Program

3.4 CAPACITY, MANAGEMENT, OPERATIONS AND MAINTENANCE PROGRAM

The document titled “Preliminary Planning Document – Proposed CMOM Framework – Sauquoit Creek Pumping Station Basin Communities” was submitted to NYSDEC on June 29, 2012 as required by Schedule A – Section B.3 of the Consent Order. The County, working through the Steering Committee, created a working group of appropriate CMOM-oriented community representatives to map out a phased implementation plan. The County continued to make progress toward program development and implementation during the 3rd Quarter of 2013. The County met on July 25 and September 5 with the Working Group and Consultant Team members to further

advance efforts made toward the development of design and construction standards and an initial set of standard operating guidelines specific to sanitary sewer system operation and maintenance. Also discussed at the September 5th meeting was the need for standardized plan review procedures as they apply to sanitary sewer extensions and lateral connections.

During the 3rd Quarter, the previously discussed Design and Construction Standards and Standard Operating Guidelines were finalized, based on input from the Working Group members.

4.0 SCHEDULE/MILESTONE DATES

4.1 APPROVED SCHEDULE

The following table represents the approved schedule as defined by the Consent Order (note that there were no changes to this schedule during the 3rd quarter of 2013):

Description	Consent Order, Schedule "A" Date
<u>Engineering Investigations, and Evaluations</u>	
Dye Testing and Storm Sewer Report	June 30, 2012
Manhole Evaluation Report – Phase II	June 30, 2012
SCPS Evaluation Report	August 31, 2012
WPCP Evaluation Report	August 31, 2012
Treatment System Supplement (Report)	60 days after approval of WPCP Evaluation Report
Sewer CCTV Inspection Report – Phase II	April 30, 2013
Sewer CCTV Inspection Report – Phase III	April 30, 2014
Collection System Supplement (Report)	May 31, 2014
<u>Management Programs</u>	
Flow Monitoring Program	March 31, 2012
Private Property I/I Reduction Program	June 30, 2012
CMOM Program	June 30, 2012
PPII Reduction Program Implementation	May 31, 2013
CMOM Implementation	May 31, 2013
Asset Management Plan	December 31, 2021
<u>Remedial Measures</u>	
Semi-Permanent Alternative-Construction	December 31, 2016
SSO Mitigation-Consent Order Compliance	December 31, 2021
<u>Reporting</u>	
Annual Work Plan	January 31, annually
Quarterly Progress Report	Quarterly

4.2 MILESTONES

During the 3rd quarter of 2013, the following milestone dates were met:

- No specific milestones defined/required for the 3rd Quarter of 2013.

5.0 SEWER REHABILITATION

Design and construction for initial projects is being financed under CWSRF Project No. C6-6070-08-00. Projects are tracked by contract number. The following is a status update of the current sewer rehabilitation contracts.

5.1 CONTRACT 2 – SANITARY SEWER MANHOLE REHABILITATION – PHASE 2

Contract 2 rehabilitated approximately 1,278 sanitary sewer manholes. As of September 30, 2013 punch list items were complete and only project closeout items remain.

5.2 CONTRACT 3 – SANITARY SEWER MAINLINE REHABILITATION – PHASE 1

Contract 3 rehabilitated approximately 13 miles of sanitary sewers. As of September 30, 2013 only project closeout items remain to be completed.

5.3 CONTRACT 4 – SEWER SEPARATION – CLINTON/HENDERSON STREET, NY MILLS

Contract 4 resulted in the removal of approximately 264,000 gallons per day (measured) of wet weather flow from the sanitary sewer system at a final contract cost of \$162,938. As of the end of the 3rd quarter of 2013, only project closeout items remain.

5.4 CONTRACT 5 – SEWER SPOT REPAIRS – PHASE 1

Bids for this project were received on July 11, 2013 and a contract was awarded on July 26, 2013 to Central Paving in the amount of \$432,390. After a protracted negotiation and review between NYSEFC and the Contractor, the MWBE Utilization Plan was finally approved by NYSEFC on September 16, 2013. A contract was then presented to the Contractor for execution. A preconstruction meeting was held October 16, 2013. Work will generally include storm sewer and sanitary sewer repairs for the purpose of removing inflow (both direct and indirect) sources from the sanitary sewer system in locations determined from the results of prior dye testing. This includes repairs at approximately 15 separate locations all within the Villages of Yorkville, Whitesboro, New York Mills, and New Hartford. Work will also include the replacement of four sanitary sewer manholes and the lining of four pipe segments utilizing an ultra-violet light cured in place pipe (UV-CIPP) process. Work is anticipated to be performed during the 4th quarter of 2013.

5.5 CONTRACT 6 - SANITARY SEWER MAINLINE REHABILITATION – PHASE 2

Bids for Contract 6 were received on August 22, 2013. Green Mountain Pipeline Services was the low bidder at \$1,319,640. This work includes approximately 15 miles of sewer rehabilitation using cured in place pipe (CIPP) lining, open cut repairs, sewer joint grouting, CIPP short liners, and lateral grouting.

In addition to work referenced above, the Green Mountain Pipeline Services bid also included comprehensive sewer rehabilitation in flow basin NHD-22 at an estimated cost of \$248,152 which the Town of New Hartford has agreed to contract and pay for.

Similarly, Green Mountain Pipeline Services bid included 3,500 feet of 18-inch and 24-inch CIPP lining for the City of Utica in order to structurally rehabilitate a sanitary sewer under Genesee Street at an estimated cost of \$498,733. Utica will contract directly with the Contractor for this work.

6.0 ASSESSMENT OF REHABILITATION EFFECTIVENESS

During the 3rd quarter of 2013, there was no physical measurement mechanism (flow monitoring) in place to measure the effectiveness of sewer rehabilitation. See Section 3.2, above for a discussion of the status of flow monitoring. However, visual observations of the construction activities associated with Construction Contracts 2 and 3 note obvious removals of I/I sources. Based on the completed work, and using estimated values of I/I removals provided in the Offset Plan and the approved engineering reports for the respective projects for Contracts 2, 3, and 4, the reductions in I/I are estimated to be:

Contract 2 – Sanitary Sewer Manhole Rehabilitation Phase 2	5,411,910 gpd
Contract 3 – Sanitary Sewer Mainline Rehabilitation Phase 1	1,503,360 gpd
Contract 4 – Sewer Separation – Clinton/Henderson St (NY Mills)	264,000 gpd

7.0 COMPLETED CAPITAL PROJECTS/FACILITY UPGRADES

During the 3rd quarter of 2013, sewer rehabilitation capital projects Contract 2, 3, and 4 were completed.

8.0 I/I OFFSET PROJECTS/NEW FLOWS

During the 3rd quarter of 2013, the following additions and subtractions to the I/I Offset Credit Bank were recorded by the County. All amounts are reported in gallons per day (gpd), after the application of the 5:1 offset ratio.

Community	Starting Balance	Credits Added	Credits Used	Ending Balance	
Town of New Hartford	15,150	0	6 Dogwood Lane	320	12,830
			57 Overland Drive	320	
			51 Overland Drive	320	
			51 Cherrywood Blvd.	320	
			21 Glendale Ave. (316.000.2.34)	320	
			Lot #21 Jack's Way	240	
			Lot #43 Gracie's Place	240	
Lot #2 Gabriella Terrace	240				
Town of Paris	1,927	0	0	1,927	
Town of Whitestown	5,037	0	0	5,037	
Village of Clayville	0	0	0	0	
Village of New Hartford	17,434	0	0	17,434	
Village of New York Mills	62,166	0	0	62,166	
Village of Oriskany	1,243	0	0	1,243	
Village of Whitesboro	16,345	0	0	16,345	
Village of Yorkville	316	0	0	316	
Totals	119,618	0	2,320	117,298	

9.0 KEY PERSONNEL CHANGES

Key personnel changes, as they relate to the SSO Mitigation/Consent Order compliance project, is interpreted to be those staff members, whose addition to or deletion from the project would be viewed by the County to either add resources, or be a detriment to progress. Project staff includes County, satellite community, and consultant team personnel. The following is a summary of changes.

9.1 COUNTY STAFF

During the 3rd quarter of 2013, there were no changes of key personnel to report.

9.2 SATELLITE COMMUNITY STAFF

During the 3rd quarter of 2013, there were no changes of key personnel to report.

9.3 CONSULTANT TEAM STAFF

During the 3rd quarter of 2013, there were no changes of key personnel to report.

10.0 ADMINISTRATIVE ITEMS

10.1 WORK AUTHORIZATIONS

During the 3rd quarter of 2013, the following Work Orders were submitted to the County for review and were subsequently approved:

- WO 32 – Computerized Emissions Monitoring System Support Services (procurement of a new CEMS system for the WPCP incineration system)

10.2 FUNDING APPLICATIONS

The following is a status summary of current funding activities:

10.2.1 WPCP Upgrade and Expansion, Solids Handling Upgrades-Preliminary Design (CWSRF No. C6-6070-08-06)-\$35 Million

Oneida County is continuing to work closely with NYSEFC to advance to closing on Short-Term financing. Closing is anticipated during the 4th Quarter of 2013.

10.2.3 DASNY-Economic Development Assistance Program

Oneida County continues to work with DASNY on the release of the \$950,000 grant for the acquisition and installation of District-wide flow metering equipment. The application has been forwarded by DASNY to the NYS Senate Budget Committee for review and approval. Upon the Committee's concurrence, the application will then be forwarded to the NYS Budget Office for final review and approval. DASNY anticipates that the earliest that funds will be available is late 1st Quarter/early 2nd Quarter 2014.