Clean Water 2020 Program

CONSENT DECREE QUARTERLY REPORT

July 1, 2015 – September 30, 2015





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Section 1 Introduction

1.1 Summary of Reporting Requirements

On May 21, 2014 the City of Columbia (City) entered into a Consent Decree (CD) with the United States Environmental Protection Agency (EPA), the United States Department of Justice (DOJ) and the South Carolina Department of Health and Environmental Control (SCDHEC). To fulfill the reporting requirements as defined in Section IX.39.a of the CD, the City has prepared this *Quarterly Report* that includes the following information (as excerpted from the CD):

- A description of all projects and activities conducted during the most recently completed calendar quarter to comply with the requirements of this Consent Decree, in Gantt chart or similar format. This description shall include completion percentages of early action capital improvement projects under Paragraph 10, continuing sewer assessments under the CSAP, and the subsequent remedial actions under the IR Report;
- 2. The date, time, location, source, duration, estimated volume, receiving water (if any), cause, and actions taken to repair or otherwise resolve the cause of all SSOs for the most recently completed quarter in a tabulated electronic format;
- 3. The anticipated projects and activities that will be performed in the next quarter to comply with the requirements of this Consent Decree, in Gantt chart or similar format;
- 4. Any additional information that demonstrates that Columbia is implementing the remedial measures required in this Consent Decree; and
- 5. The results of water quality monitoring conducted during the previous Calendar Quarter as part of the SEP described in Appendix I of the Consent Decree.

1.2 Report Organization

This Quarterly Report is organized as follows:

Section 1 – Introduction

This section includes a summary of the reporting requirements and describes the report organization.

Section 2 – Schedule of Projects and Activities

This section addresses the requirements of Sections IX.39.a.(i) and IX.39.a.(iii) of the Consent Decree. The section includes the projects and activities conducted during the most recently completed calendar

quarter to comply with the requirements of the CD as well as the anticipated projects and activities that will be performed in the next quarter to comply with the requirements of the CD. A Gantt chart schedule of these activities is provided and includes completion percentages of continuing sewer assessments under the CSAP and the subsequent remedial actions under the IR Report, as applicable.

Section 3 – Additional Information Demonstrating Implementation of Consent Decree Requirements

This section addresses the requirements of Section IX.39.a.(iv) of the Consent Decree and includes additional information that demonstrates that Columbia is implementing the remedial measures required in the CD. Information supplemental to that which is provided in Section 2 is provided in this section.

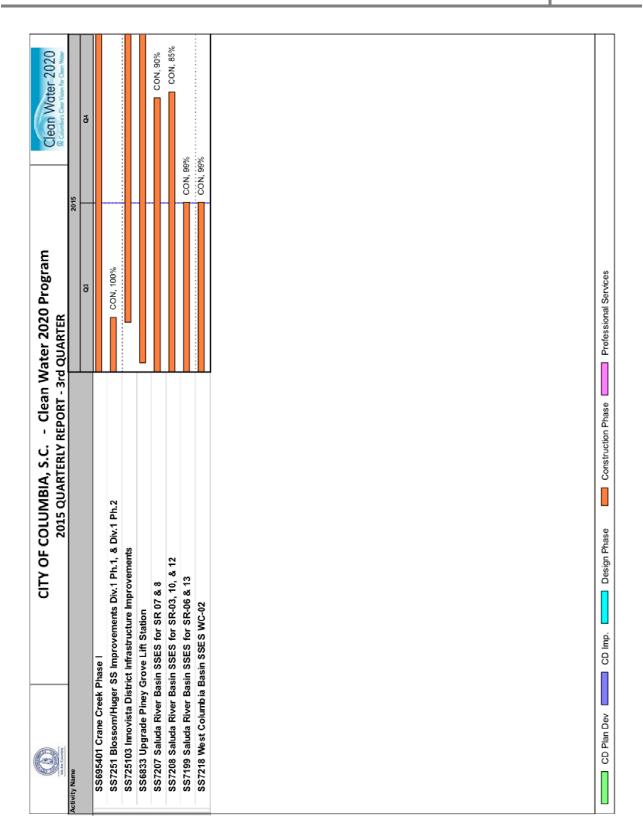
Section 4 – Quarterly SSO Report

This section addresses the requirements of Section IX.39.a.(ii) of the Consent Decree and provides a tabular listing of sanitary sewer overflows (SSOs). The table includes the date, time, location, source, duration, estimated volume, receiving water (if any), cause, and actions taken to repair or otherwise resolve the cause of all SSOs that occurred during the most recently completed calendar quarter.

Section 5 – SEP Water Quality Monitoring Results

This section addresses the requirements of Section IX.39.a.(v) of the Consent Decree and provides the results of water quality monitoring conducted during the previous Calendar Quarter as part of the SEP described in Appendix I of the CD.

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CITY OF COLUMBIA, S.C Clean Water 2020 2015 QUARTERLY REPORT - 3rd QUARTER		WWTP Programs	WWTP Operations Program	WWTP Training PgM	MOM Programs	Contingency and Emergency Response Plan (CERP)	WCTS Training Program	Information Management System Program	Sewer Mapping Program	SS7304 Sewer Mapping Plan Implementation	Gravity Sewer System Operation and Maintenance Program	Financial Analysis Plan	Continuing Sewer Assessment Program (CSAP) for the WCTS	SS7277 Major Sewer Study and Assessment, 36-60 inch Gravity	SS7278 Major Sewer Study and Assessment, 15-30 inch Gravity	Infrastructure Rehabilitation Program (IRP) for the WCTS	R Report for the WCTS	SS7325 Starlite PS Improvements	SS7324 Bendale PS Improvements	SS7323 Food Lion PS Improvements	SS7280 Rocky Branch-01 SSES	SS7279 Smith Branch 02 SSES	SS7172 Rehabilitation/Replacement Harbison #2, Mallard Point and Animal Shelter PS	SS706012 Pump Station Improvements at 6 Sites	SS6966 Annual Rehab on Manholes and lines less than 15"	SS6857 Olympia Subdivision (SSES Study) - Division I	SS676402 30" Forcemain from Mill Creek PS to WMTP	SS7330 Upper Mill Creek Sewer Improvements	SS7331 Upper Kinley Creek Sewer Improvements Ph. 1	SS733702 East Rocky Branch Improvements Ph. 2	SS733701 East Rocky Branch Improvements Ph. 1	SS7289 Rivermont Dr. Pump Station	SS7261 Lake Katherine Sewer Line Capacity Enhancement	SS7258 Greenlawn Dr to Burnside #1 PS (Hampton Forest)	CD Plan Dev CD Imp. Design Phase Construction Phase



Section 3 Additional Information Demonstrating Implementation of Consent Decree Requirements

In accordance with Section IX.39.a.(iv) of the CD, the following section provides additional information that demonstrates that the City is implementing the remedial measures required in this CD.

3.1 WWTP Programs

In accordance with Section V.11 of the CD, the City is developing and implementing specific Wastewater Treatment Plant (WWTP) programs. The Program elements addressed in this section provide information regarding activities involving the Metro WWTP.

3.1.1 Maintenance Management System (MMS)

In accordance with the requirements of the CD, the City was to submit a Maintenance Management System (MMS) to EPA and SCDHEC for review, comment, and approval. The MMS was to be submitted within one year of the date of entry of the CD. The deadline for submittal of the MMS to EPA and SCDHEC was May 21, 2015.

Projects and significant activities anticipated during the next reporting period:

• The City is awaiting EPA and SCDHEC review and approval of the MMS which was submitted by the May 21, 2015 deadline.

3.1.2 WWTP Operations Program

In accordance with the requirements of the CD, the City shall submit a WWTP Operations Program to EPA and SCDHEC for review, comment, and approval. The WWTP Operations Program is to be submitted within 18 months of the date of entry of the CD. The deadline for submittal of the WWTP Operations Program to EPA and SCDHEC is November 21, 2015. On October 6, 2015, the City notified the U.S. Department of Justice, the U.S. Environmental Protection Agency, and the South Carolina Department of Health and Environmental Control of a *force majeure* event. The City experienced unprecedented rainfall which resulted in catastrophic flooding beginning on October 4, 2015. On October 13, 2015, the City submitted a written report of the *force majeure* event and requested an additional 45 days to January 5, 2015 to complete and obtain Council approval for this deliverable.

3.2 MOM Programs

In accordance with Section V.12 of the CD, the City is developing and implementing specific Management, Operations, and Maintenance (MOM) programs. The Program elements addressed in this section provide information regarding activities involving the Metro WWTP as well as the City's Wastewater Collection and Transmission System (WCTS).

3.2.1 Contingency and Emergency Response Plan (CERP)

In accordance with the requirements of the CD, the City shall submit a Contingency and Emergency Response Plan (CERP) to EPA and SCDHEC for review, comment, and approval. The CERP is to be submitted within eighteen months of the date of entry of the CD. The deadline for submittal of the CERP to EPA and SCDHEC is November 21, 2015.

Projects and significant activities completed during the current reporting period:

• The 30 day EPA mandated public comment period for the CERP began on September 11, 2015.

3.2.2 WCTS Training Program

In accordance with the requirements of the CD, the City shall submit a WCTS Training Program to EPA and SCDHEC for review, comment, and approval. The WCTS Training Program is to be submitted within eighteen months of the date of entry of the CD. The deadline for submittal of the WCTS Training Program to EPA and SCDHEC is November 21, 2015. On October 6, 2015, the City notified the U.S. Department of Justice, the U.S. Environmental Protection Agency, and the South Carolina Department of Health and Environmental Control of a force majeure event. The City experienced unprecedented rainfall which resulted in catastrophic flooding beginning on October 4, 2015. On October 13, 2015, the City submitted a written report of the force majeure event and requested an additional 45 days to January 5, 2015 to complete and obtain Council approval for this deliverable.

3.2.3 Information Management System (IMS) Program

In accordance with the requirements of the CD, the City shall submit an Information Management System (IMS) Program to EPA and SCDHEC for review, comment, and approval. The IMS Program is to be submitted within eighteen months of the date of entry of the CD. The deadline for submittal of the IMS Program to EPA and SCDHEC is November 21, 2015. On October 6, 2015, the City notified the U.S. Department of Justice, the U.S. Environmental Protection Agency, and the South Carolina Department of Health and Environmental Control of a force majeure event. The City experienced unprecedented rainfall which resulted in catastrophic flooding beginning on October 4, 2015. On October 13, 2015, the City submitted a written report of the force majeure event and requested an additional 45 days to January 5, 2015 to complete and obtain Council approval for this deliverable.

3.2.4 Sewer Mapping Program

In accordance with the requirements of the CD, the City was to develop and submit a Sewer Mapping Program (SMP) to EPA and SCDHEC within 60 days of the date of entry of the CD.

Projects and significant activities completed during the current reporting period:

- The City continues to complete the electronic mapping of each Sewer Basin in accordance with the approved SMP implementation plan. Progress for each basin is as follows:
 - West Columbia Basin 5% complete
 - Smith Branch Basin 5% complete
 - Saluda River Basin 10% complete
 - Rocky Branch Basin 5% complete
 - Mill Creek Basin 5% complete
 - o Gills Creek Basin 5% complete
 - Crane Creek Basin 10% complete
 - Broad River Basin 5% complete

3.2.5 Transmission System Operations and Maintenance Program (TSOMP)

In accordance with the requirements of the CD, the City was to submit a Transmission System Operations and Maintenance Program (TSOMP) to EPA and SCDHEC for review, comment, and approval. The TSOMP was to be submitted within one year of the date of entry of the CD. The deadline for submittal of the TSOMP to EPA and SCDHEC was May 21, 2015.

Projects and significant activities anticipated during the next reporting period:

• The City is awaiting EPA and SCDHEC review and approval of the TSOMP which was submitted by the May 21, 2015 deadline.

3.2.6 Gravity Sewer System Operation and Maintenance Program (GSOMP)

In accordance with the requirements of the CD, the City shall submit a Gravity Sewer System and Maintenance Program (GSOMP) to EPA and SCDHEC for review, comment, and approval. The GSOMP is to be submitted within eighteen months of the date of entry of the CD. The deadline for submittal of the GSOMP to EPA and SCDHEC is November 21, 2015.

Projects and significant activities completed during the current reporting period:

• The 30 day EPA mandated public comment period for the GSOMP began on September 11, 2015.

3.2.7 Financial Analysis Program

In accordance with the requirements of the CD, the City shall submit a Financial Analysis Program to EPA and SCDHEC for review, comment, and approval. The Financial Analysis Program is to be submitted within eighteen months of the date of entry of the CD. The deadline for submittal of the Financial Analysis Program to EPA and SCDHEC is November 21, 2015. On October 6, 2015, the City notified the U.S. Department of Justice, the U.S. Environmental Protection Agency, and the South Carolina

Department of Health and Environmental Control of a force majeure event. The City experienced unprecedented rainfall which resulted in catastrophic flooding beginning on October 4, 2015. On October 13, 2015, the City submitted a written report of the force majeure event and requested an additional 45 days to January 5, 2015 to complete and obtain Council approval for this deliverable.

3.3 Satellite Sewer System Agreements (SSSA)

In accordance with Section V.13 of the CD, the City was to submit to EPA and SCDHEC for review, comment, and approval a proposed form of Satellite Sewer System Agreements (SSSA) for new or the renewal of existing agreements that cover the collection, conveyance and treatment of sewage by the City from satellite sewer systems. The SSSA was to be submitted within one year of the date of entry of the CD. The deadline for submittal of the SSSA to EPA and SCDHEC was May 21, 2015.

Projects and significant activities anticipated during the next reporting period:

• The City is awaiting EPA and SCDHEC review and approval of the SSSA which was submitted by the May 21, 2015 deadline.

3.4 Continuing Sewer Assessment Program (CSAP) for the WCTS

In accordance with Section V.14 of the CD, the City was to submit to EPA and SCDHEC for review, comment, and approval a Continuing Sewer Assessment Program (CSAP) that provides for an analysis of Columbia's WCTS infrastructure. The CSAP was to be submitted within six months after the date of EPA and SCDHEC approval of the Sewer Mapping Program. By letter dated December 9, 2014, EPA approved the Sewer Mapping Program. Therefore, the deadline for submittal of the CSAP to EPA and SCDHEC was June 9, 2015.

Projects and significant activities anticipated during the next reporting period:

• The City is awaiting EPA and SCDHEC review and approval of the CSAP which was submitted by the June 9, 2015 deadline.

Although the EPA has not yet approved the CSAP, the City is proceeding with sewer assessments under the CSAP. The assessments on the major components of the WCTS currently in progress are as follows:

- SS7277 Major Sewer Study and Assessment, 36-60 inch Gravity 50% Complete (decrease in completion % from previous report due to delays in consultant submittals).
- SS7278 Major Sewer Study and Assessment, 15-30 inch Gravity 20% Complete (decrease in completion % from previous report due to delays in consultant submittals).

3.5 Infrastructure Rehabilitation Report (IRR) for the WCTS

In accordance with Section V.16 of the CD, the City shall submit an Infrastructure Rehabilitation Report (IRR) summarizing the results of the CSAP of the major components of the WCTS and a description of proposed rehabilitation projects. The IRR is to be submitted within six months after the City has assessed the major components of the WCTS once pursuant to the CSAP. As rehabilitation projects are identified through the assessments described in Section 3.4 and in the normal course of operations and maintenance, the City is proceeding with design and construction of those projects. Completion percentages of projects currently in progress are as follows:

- SS7325 Starlite PS Improvements Design 0% Complete
- SS7324 Bendale PS Improvements Design 0% Complete
- SS7323 Food Lion PS Improvements Design 0% Complete
- SS7280 Rocky Branch-01 SSES and Rehabilitation Design 55% Complete
- SS7279 Smith Branch-02 SSES and Rehabilitation Design 45% Complete
- SS7172 Rehabilitation/Replacement Harbison #2, Mallard Point and Animal Shelter PS Design 99% Complete
- SS706012 Pump Station Improvements at 6 Sites Design 90% Complete
- SS6966 Annual Rehab on Manholes and Lines less than 15" Construction 95% Complete
- SS6857 Olympia Subdivision Sewer System Evaluation Survey (SSES) and Rehabilitation Design Design 50% Complete
- SS676402 30-inch Forcemain from Mill Creek PS to WWTP Design 100% Complete
- SS7330 Upper Mill Creek Sewer Improvements Design 0% Complete
- SS7331 Upper Kinley Creek Sewer Improvements Ph. 1 Design 0% Complete
- SS733702 East Rocky Branch Improvements Ph. 2 Design 0% Complete
- SS733701 East Rocky Branch Improvements Ph. 1 Design 0% Complete
- SS7289 Rivermont Drive Pump Station Design 58% Complete
- SS7261 Lake Katherine Sewer Line Capacity Enhancement Design 80% Complete
- SS7258 Greenlawn Dr. to Burnside #1 PS (Hampton Forest) Design 90% Complete
- SS695401 Crane Creek Phase I Construction 50% Complete
- SS7251 Blossom/Huger SS Improvements, Phase 1 & 2 Construction 100% Complete
- SS725103 Innovista District Infrastructure Improvements Construction 25% Complete
- SS6833 Upgrade Piney Gove Lift Station Construction 25% Complete
- SS7207 Saluda River Basin SSES and Rehabilitation for SR07 & 8 Construction 90% Complete
- SS7208 Saluda River Basin SSES and Rehabilitation for SR-03, 10, & 12 Construction 85% Complete
- SS7199 Saluda River Basin SSES and Rehabilitation for SR-06 & 13 Construction 95% Complete
- SS7218 West Columbia Basin SSES and Rehabilitation for WC-02 Construction 95% Complete

Section 4 Quarterly SSO Report

In accordance with Section IX.39.a.(ii) of the CD, the following table lists all SSOs that occurred during the reporting period in a tabular format along with information on the date, time, location, source, duration, estimated volume, receiving water, cause, and actions taken to resolve the SSO.

						City of Colur			
					C	Quarterly SS 3rd Quarte	-		
SSO Date	SSO Time	Location	Source	Date of Corrective Action	Time of Corrective Action	Estimated Volume (gallons)	Receiving Water (if any)	Cause	Actions Taken
7/8/2015	11:21	600 Greenlawn Dr, Columbia, Sc 29203	Manhole	7/9/2015	N/A	1,646	Unnamed Creek; Trib To Reeder Point Branch	Debris	Did Not See Actually Overflowing. Washed And Televised Mainline 250 Ft Manhole To Manhole.
7/9/2015	15:02	2211 Corning Rd, Columbia, Sc 29205	Cleanout	ТВ	D	12		Roots	Washed Service Line 20 Ft To Resume Normal Flow. Recovered 50 Gallons By Vacuuming. CCTV Service Line, Roots Found At Clean Out. Replace Clean Out.
7/12/2015	13:10	820 Aaron Dr, Columbia, Sc 29203	Manhole	7/12/2015	14:30	80		Grease	Removed Stoppage To Resume Normal Flow. Washed Mainline 300 Feet To Remove Stoppage.
7/14/2015	09:52	244 Larkspur Rd, Irmo, Sc 29212	Cleanout	тв	D	110		Collapsed Line	Removed Stoppage To Resume To Normal Flow. Drop Joint Repair To Be Made.
7/18/2015	19:20	4645 Pine Grove Ct, Columbia, Sc 29206	Manhole	N/	A	12,000	Lake Kathereen	Wet Weather	Wet Weather, Observation Only. CIP Engineering Project In Design.
7/28/2015	11:28	6671 Saint Andrews Rd, Irmo, Sc 29212	Other	7/28/2015	17:30	1	Unknown Creek	Collapsed Line	Washed And Televised Mainline Downstream 161 Feet. Repaired Mainline.
8/6/2015	12:30	2212 Manse St, Columbia, Sc 29203	Manhole	8/6/2015	13:50	400		Roots	Removed Stoppage To Resume Normal Flow. Washed Mainline 200 Feet.
8/6/2015	18:17	4645 Pine Grove Ct, Columbia, Sc 29206	Manhole	ТВ	D	4,800	Lake Katherine/Gills	Wet Weather	Wet Weather, Observation Only. CIP Engineering Project In Design.
8/6/2015	19:23	1806 Blossom St, Columbia, Sc 29201	Manhole	ТВ	D	8,750	Rocky Branch	Wet Weather	Wet Weather, Observation Only. CIP Engineering Project In Design.
8/6/2015	20:27	1548 Kathwood Dr, Columbia, Sc 29206	Manhole	ТВ	D	4,413	Kathwood Lake	Wet Weather	Wet Weather, Observation Only. Engineering In Design Phase Of Line Replacement.
8/6/2015	20:43	1908 Belmont Dr, Columbia, Sc 29201	Manhole	ТВ	D	Unknown	Pen Branch	Wet Weather	Wet Weather, Observation Only. CIP Engineering Project In Design.
8/23/2015	15:30	7450 Garners Ferry Rd, Columbia, Sc 29209	Manhole	TB	D	1	Storm Drain To Reeder Point Branch	Collapsed Line	Washed Mainline 250 Ft To Resume Normal Flow. Emergency Repair Planned.
8/27/2015	09:30	1200 Simmon Tree Ln, Columbia, Sc 29201	Manhole	TB	D	Unknown	Congaree River	Treatment Plant	Rerouted Internal Power Supply And Restored Power To IPS/PTF Facilities. Replace Failed Electrical Switch (23Kv Re-Closer).
8/29/2015	15:20	318 Finsbury Rd, Columbia, Sc 29212	Manhole	8/31/2015	11:30	800	Trib To Koon Branch	Roots	Washed M/L 150 Ft To Resume Normal Flow. CCTV M/L In The Rear 228 Ft. M/L Was Full Of Sand, Rock, Roots And Other Debris Which Caused The SSO. Roots Were Cut With The Terminator Nozzle.
9/16/2015	12:00	601 Mockernut Ln, Columbia, Sc 29209	Manhole	TB	D	300		Roots	Washed Mainline 320 Feet To Remove Stoppage And To Resume Normal Flow. Mainline Repair.
9/19/2015	09:35	3828 Shaw St, Columbia, Sc 29203	Manhole	9/19/2015	11:00	850	Unknown Trib To Smith Branch	Grease	Removed Stoppage To Resume Normal Flow. Washed Mainline 350 Feet To Remove Stoppage.
9/19/2015	13:00	417 Bedford Dr, Columbia, Sc 29203	Manhole	9/19/2015	14:00	1	Unknown Trib To Crane Creek	Grease	Removed Stoppage To Resume Normal Flow. Washed Mainline 150 Feet To Remove Stoppage.
9/21/2015	21:45	1806 Blossom St, Columbia, Sc 29201	Manhole	ТВ	D	2,500	Rocky Branch	Wet Weather	Wet Weather, Observation Only. CIP Engineering Project In Design.
9/21/2015	22:25	4645 Pine Grove Ct, Columbia, Sc 29206	Manhole	тв	D	9,800	Lake Katherine/Gills	Wet Weather	Wet Weather, Observation Only. CIP Engineering Project In Design.
9/22/2015	07:45	3616 Edmond Dr, Columbia, Sc 29205	Manhole	ТВ	D	Unknown	Gills Creek	Wet Weather	Wet Weather, Observation Only. Televised Mainline 58 Ft No Problems Were Found. Will Install Clean Out And Backflow Preventor To Keep The House From Flooding.
9/22/2015	15:00	1605 Roslyn Dr, Columbia, Sc 29206	Manhole	TB	D	Unknown		Wet Weather	Wet Weather, Observation Only. This Line Segment Connects To The Line Segment For 1721 W Buchanan Rd. Cip Engineering Project Is In Design Phase.

Table 1 - SSO Report, 3rd Quarter 2015

						City of Colur Quarterly SS 3rd Quarte	O Listing		
SSO Date	SSO Time	Location	Source	Date of Corrective Action	Time of Corrective Action	Estimated Volume (gallons)	Receiving Water (if any)	Cause	Actions Taken
9/24/2015	13:08	1806 Blossom St, Columbia, Sc 29201	Manhole	тв	A	29,451	Rocky Branch	Wet Weather	Wet Weather, Observation Only. CIP Engineering Project In Design Phase.
9/24/2015	13:37	4645 Pine Grove Ct, Columbia, Sc 29206	Manhole	ТВ	D	36,000	Gills Creek	Wet Weather	Wet Weather, Observation Only. Cip Engineering Project In Design.
9/24/2015	13:50	1101 Harden St, Columbia, Sc 29205	Manhole	ТВ	D	4,900	Rocky Branch	Wet Weather	Wet Weather, Observation Only.
9/24/2015	13:52	714 Santee Ave, Columbia, Sc 29205	Manhole	ТВ	D	4,688	Rocky Branch	Wet Weather	Wet Weather, Observation Only. CIP Engineering Project In Design Phase.
9/22/2015	14:00	3616 Edmond Dr, Columbia, Sc 29205	Manhole	N/	A	4,500	Gills Creek	Wet Weather	Wet Weather, Observation Only.
9/24/2015	14:30	3123 Harrison Rd, Columbia, Sc 29204	Manhole	N/	A	2,250		Wet Weather	Wet Weather, Observation Only.
9/24/2015	14:45	1721 W Buchanan Dr, Columbia, Sc 29206	Manhole	N/	A	3,825	Penn Branch	Wet Weather	Wet Weather, Observation Only.
9/24/2015	15:16	5081 Brickyard Rd, Columbia, Sc 29203	Manhole	9/24/2015	17:25	18,000	Crane Creek	Wet Weather	Contractor Was in Contact With City Personnel Concerning The Wetwell Levels At The North Columbia Pump Station And Crane Creek Temporary Bypass Pumping Station. At 15:48, Contractor Restarted The Pump At The Crane Creek Temporary Bypass Pumping Station Due To High Wetwell Levels. This Was Communicated With CityPersonnel At That Time. Contractor Continued To Pump At Maximum Capacity. At 17:25, The Overflow At The Critical Manhole At 5081 Brickyard Rd Stopped. Lime Applied 9/30/15.
9/24/2015	17:02	1409 Ivy Ln, Columbia, Sc 29204	Manhole	N/	A	Unknown	Gills Creek	Wet Weather	Wet Weather, Observation Only. CCTV To Further Investigate.
9/25/2015	16:27	1025 Huger St, Columbia, Sc 29201	Line Segment	9/29/2015	08:00	3,550	Congaree River	Grease	Removed Stoppage To Resume Normal Flow. CCTV Mainline 400 Ft, Washed Mainline And Vac To Remove Grease From Line.

Section 5 SEP Water Quality Monitoring Results

In accordance with Section IX.39.a.(v) of the CD, the following section provides a summary of the results of water quality monitoring conducted during the previous calendar quarter as part of the Supplemental Environmental Project (SEP) described in Appendix I of the CD.

5.1 Sampling Conducted and Results

As a part of the SEP requirements established in Section VIII and Appendix I of the CD, the City is to conduct water quality monitoring at three locations to assist in evaluation of the environmental benefits of the SEP in improving water quality in Smith Branch and Gill's Creek. The City is to implement a program for ambient monitoring of dissolved oxygen (DO), total suspended solids (TSS), temperature, and E. coli at the following monitoring sites:

- Gill's Creek at Garner's Ferry Road
- Smith Branch at North Main Street
- Gill's Creek at Bluff Road

In accordance with the requirements of the CD, the City was required to submit a Quality Assurance Project Plan (QAPP) to SCDHEC within 60 days of the date of entry of the CD. Upon approval of the QAPP by SCDHEC the City will begin monitoring within 30 days. The City will monitor quarterly for the first three years under the CD and monthly (or every other month at the Gills Creek at Bluff Road site) from years four through six under the CD.

The City originally submitted the QAPP to SCDHEC on July 18, 2014 in advance of the deliverable deadline. The City subsequently received comments from SCDHEC and resubmitted the QAPP to SCDHEC on January 13, 2015. The City is currently working with SCDHEC to finalize the QAPP. Upon approval of the QAPP by SCDHEC, the City will begin monitoring within 30 days in accordance with the requirements of the CD.