

## **Quarterly Report No. 11**

# January 1, 2016 – March 31, 2016

Prepared for

# United States Environmental Protection Agency and Tennessee Department of Environment and Conservation

City of Chattanooga Waste Resources Division Consent Decree Program Case No. 1:12-cv-00245

Prepared by

City of Chattanooga
Waste Resources Division

Submitted by



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Chattanooga, Tennessee

April 28, 2016

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## **Acronyms and Abbreviations**

Ave Avenue

CD Consent Decree

CFR Code of Federal Regulations

CSO Combined Sewer Overflow

CSS Combined Sewer System

Dr Drive

EPA Environmental Protection Agency

Gal Gallons

Hrs Hours

Hwy Highway

Ln Lane

MBWWTP Moccasin Bend Waste Water Treatment Plant

MG Million Gallons

MH Manhole

N/A Not Applicable

No. Number

NPDES National Pollutant Discharge Elimination System

PS Pump Station

Rd Road

SSO Sanitary Sewer Overflow

St Street

TDEC Tennessee Department of Environment and Conservation

Trl Trail

UNK Unknown

WCTS Wastewater Collection and Transmission System

WWTP Wastewater Treatment Plant

#### 1.0 Introduction

#### 1.1 Purpose

The City of Chattanooga entered into a consent decree with the United States and the State of Tennessee in the case styled *United States of America et. al. v. City of Chattanooga, No. 1:12-cv-00245* ("CD"), which became effective on April 24, 2013. Pursuant to Section IX, paragraph 38 of the CD, Chattanooga is required to submit reports on a quarterly basis to the Environmental Protection Agency ("EPA") and Tennessee Department of Environment and Conservation ("TDEC"). Chattanooga has prepared Quarterly Report No.11 to satisfy the reporting requirements of the CD.

#### 1.2 Requirements

As detailed in Section IX, paragraph 38 of the CD, Chattanooga is required to report the date, time, location, source, estimated duration and volume, and receiving water of the following events:

- 1. Sanitary sewer overflow ("SSO") events occurring during the reporting period;
- Combined sewer overflow ("CSO") outfall discharges occurring during the reporting period;
- 3. Bypasses at the Moccasin Bend Wastewater Treatment Plant ("WWTP") occurring during the reporting period.

This information is provided in tabular form in Sections 2.0 – 4.0 of this report.

#### 2.0 SSO Events

For the reporting period of January 1, 2016 through March 31, 2016, Chattanooga experienced the SSOs listed in Table 2-1. An SSO event is defined in paragraph 8.(nn) of the CD as "any discharge of wastewater to waters of the United States or State from Chattanooga's Sewer System through a point source not permitted in any National Pollutant Discharge Elimination System ("NPDES") permit, as well as any overflow, spill, or release of wastewater to public or private property from the Sewer System that may not have reached waters of the United States or the State, including all building backups."

Table 2-1 Quarterly SSO Report

	January 1, 2016 – March 31, 2016										
Start Date	Start Time	Location	Source	MH ID#	Estimated Duration (hrs)	Estimated Volume (gal)	SSO Destination	Cause			
07-Jan-16	2:30 PM	1000 Woodfinch Trl	Manhole	S158N003	UNK²	150,000	South Chickamauga Creek	Wet Weather			
08-Jan-16	9:45 AM	3663 Northrop St	Manhole	S118F077	1.17	12,000	Land*	Blockage - Roots			
08-Jan-16	10:30 AM	2701 Chestnut St	Other	N/A	0.08	60	Land*	Construction/Maintenance Related			
13-Jan-16	4:00 PM	1404 Marijon Dr	Manhole	S158B010	23.00	300	Land*	Blockage - Roots			
14-Jan-16	9:45 AM	3663 Northrop St	Manhole	S118F077	1.25	25	Land*	Blockage - Roots			
21-Jan-16	9:42 AM	1804 Memorial Dr	Force Main	N/A	0.20	600	Ditch	Defect(s)			
22-Jan-16	10:45 AM	1022 Shallowford Rd	Manhole	S147G104	25.23	75,700	South Chickamauga Creek	Wet Weather			
22-Jan-16	11:35 AM	406 Brown Rd	Manhole	S158P005	70.30	949,050	South Chickamauga Creek	Wet Weather			
22-Jan-16	12:46 PM	914 Sterling Ave	Manhole	S136H107	25.15	150,900	Tennessee River	Wet Weather			
22-Jan-16	1:08 PM	1033 Lupton Dr	Manhole	S118K035	67.25	1,614,000	Tennessee River	Wet Weather			
22-Jan-16	1:18 PM	2109 Lynnbrook	Manhole	S156G048	24.40	46,308	Dobbs Branch	Wet Weather			
22-Jan-16	1:18 PM	1900 E 25th St Place	Manhole	S156J057	22.47	7,044	Storm Drain	Wet Weather			
22-Jan-16	1:27 PM	2013 S Kelly St	Manhole	S156G022	22.32	5,632	Dobbs Branch	Wet Weather			
22-Jan-16	1:28 PM	3728 Wilcox Blvd	Manhole	S147B301	22.20	670	Storm Drain	Wet Weather			
22-Jan-16	2:40 PM	7600 Davidson Rd	Manhole	S170C021	22.00	197,900	Mackey Branch	Wet Weather			
27-Jan-16	5:48 PM	122 Rowland Gap Rd	Main Line	UNK²	0.83	937,000	Tennessee River	Power Failure from Power Source			
29-Jan-16	11:08 AM	Riverside Dr	Manhole	S136P041	UNK²	600,000	Tennessee River	Wet Weather			
29-Jan-16	3:30 PM	Superspun Ave	Main Line	N/A	0.50	6,150	Tennessee River	Construction/Maintenance Related			
01-Feb-16	12:05 PM	1223 Franklin Dr	Manhole	S158G020	5.42	1,000	Land*	Blockage - Roots			
03-Feb-16	6:40 AM	1610 Elm St	Manhole	S118E057	25.83	194,250	Tennessee River	Wet Weather			

Table 2-1 Quarterly SSO Report

	January 1, 2016 – March 31, 2016									
Start Date	Start Time	Location	Source	MH ID#	Estimated Duration (hrs)	Estimated Volume (gal)	SSO Destination	Cause		
03-Feb-16	7:40 AM	122 Rowland Gap Rd	Main Line	UNK²	9.50	871,000	Tennessee River	Wet Weather		
03-Feb-16	8:45 AM	900 E 38th St	Manhole	S167D605	6.25	26,750	Chattanooga Creek	Wet Weather		
03-Feb-16	8:56 AM	2401 Vine St	Manhole	S146K061	5.97	1,284	Storm Drain	Wet Weather		
03-Feb-16	8:58 AM	900 Sterling Ave	Manhole	S136H107	28.45	45,520	Tennessee River	Wet Weather		
03-Feb-16	9:00 AM	6722 Hickory Creek Rd	Manhole	S138M019	23.50	138,501	Storm Drain	Wet Weather		
03-Feb-16	9:00 AM	3752 Wilcox Blvd	Manhole	S147B103	24.55	10,700	Storm Drain	Wet Weather		
03-Feb-16	9:05 AM	1022 Shallowford Rd	Manhole	S147G104	47.42	4,742	South Chickamauga Creek	Wet Weather		
03-Feb-16	9:11 AM	1033 Lupton Dr	Manhole	S118K006	52.75	157,750	Tennessee River	Wet Weather		
03-Feb-16	9:13 AM	2708 Haywood Ave	Manhole	S127A007	6.27	8,861	Storm Drain	Wet Weather		
03-Feb-16	9:20 AM	4509 Kemp Dr	Manhole	S147O089	23.68	11,775	Storm Drain	Wet Weather		
03-Feb-16	9:22 AM	3900 Birmingham Dr	Manhole	S118D125	23.55	2,355	Tennessee River	Wet Weather		
03-Feb-16	9:36 AM	5300 Old Mission Rd	Manhole	S157K056	23.27	23,267	Storm Drain	Wet Weather		
03-Feb-16	9:46 AM	5466 Longview Dr	Manhole	S100K027	22.98	56,550	North Chickamauga Creek	Wet Weather		
03-Feb-16	9:54 AM	3605 Montavista Dr	Manhole	S157H050	23.32	13,795	Ditch	Wet Weather		
03-Feb-16	10:00 AM	3816 Fagan St	Manhole	S167D046	23.33	70,000	Chattanooga Creek	Wet Weather		
03-Feb-16	10:13 AM	600 Lupton Dr	Manhole	S118G055	4.77	724	Storm Drain	Wet Weather		
03-Feb-16	10:23 AM	1207 Radmoor Ln	Manhole	S158K091	69.82	698	South Chickamauga Creek	Wet Weather		
03-Feb-16	10:27 AM	1900 E 25th St Place	Manhole	S156J057	21.85	7,648	Storm Drain	Wet Weather		

Table 2-1 Quarterly SSO Report

January 1, 2016 – March 31, 2016									
Start Date	Start Time	Location	Source	MH ID#	Estimated Duration (hrs)	Estimated Volume (gal)	SSO Destination	Cause	
03-Feb-16	10:32 AM	2013 S Kelley St	Manhole	S156G022	21.97	3,295	Dobbs Branch	Wet Weather	
03-Feb-16	10:42 AM	1900 E 23rd St	Manhole	S156G049	21.80	8,720	Dobbs Branch	Wet Weather	
03-Feb-16	10:42 AM	2109 Lynnbrook	Manhole	S156G048	21.80	5,450	Dobbs Branch	Wet Weather	
03-Feb-16	10:42 AM	E 23rd St & S Hawthorne St	Manhole	S156G052	21.80	1,090	Dobbs Branch	Wet Weather	
03-Feb-16	10:50 AM	1308 Hanover St	Manhole	S136A140	1.75	525	Storm Drain	Wet Weather	
03-Feb-16	11:53 AM	4500 Gann Store Rd	Manhole	S111P017	20.93	5,233	Tennessee River	Wet Weather	
03-Feb-16	2:20 PM	4677 Adams Rd	Manhole	S110G020	18.58	223,000	North Chickamauga Creek	Wet Weather	
03-Feb-16	3:00 PM	1404 Marijon Dr	Manhole	S158B010	45.00	5,040	Ditch	Wet Weather	
03-Feb-16	8:00 PM	122 Rowland Gap Rd	Main Line	UNK²	27.25	7,420,000	Tennessee River	Wet Weather	
05-Feb-16	9:25 AM	3935 Camellia Dr	Manhole	S137E009	3.58	358	Storm Drain	Blockage - Grease	
11-Feb-16	12:00 PM	175 Baylor School Rd	Manhole	S126H001	UNK²	4,500	Tennessee River	Wet Weather	
11-Feb-16	2:25 PM	1511 Riverview Rd	Manhole	S136H111	UNK²	1,000	Tennessee River	Wet Weather	
12-Feb-16	3:09 PM	8602 Petty Rd	Manhole	S159K002	1.85	800	Storm Drain	Wet Weather	
22-Feb-16	3:00 PM	N Kelley St & E 5th St	Main Line	UNK²	48.00	8,000	Citico Creek	Break	
23-Feb-16	9:28 AM	1207 Radmoor Ln	Manhole	S158K090	96.93	8,077	South Chickamauga Creek	Wet Weather	
23-Feb-16	10:05 AM	End of N Concord Rd	Manhole	S158N042	96.17	16,000	South Chickamauga Creek	Wet Weather	
23-Feb-16	11:00 AM	7606 Davidson Rd	Manhole	S170C022	95.83	60,632	Mackey Branch	Wet Weather	
23-Feb-16	1:15 PM	1 Frawley Rd	Manhole	S158O001	92.75	46,375	South Chickamauga Creek	Wet Weather	

Table 2-1 Quarterly SSO Report

	January 1, 2016 – March 31, 2016									
Start Date	Start Time	Location	Source	MH ID#	Estimated Duration (hrs)	Estimated Volume (gal)	SSO Destination	Cause		
24-Feb-16	12:32 AM	122 Rowland Gap Rd	Main Line	UNK²	29.55	9,704,000	Tennessee River	Wet Weather		
24-Feb-16	12:40 AM	1610 Elm St	Manhole	S118E057	33.17	298,500	Tennessee River	Wet Weather		
24-Feb-16	3:50 AM	4677 Adams Rd	Manhole	S110G020	30.17	362,000	North Chickamauga Creek	Wet Weather		
24-Feb-16	7:55 AM	900 E. 38th St	Manhole	S167D605	4.58	6,875	Chattanooga Creek	Wet Weather		
24-Feb-16	8:14 AM	1900 E 23rd St	Manhole	S156G049	25.18	5,037	Dobbs Branch	Wet Weather		
24-Feb-16	8:14 AM	2109 Lynnbrook Ave	Manhole	S156G048	25.18	4,533	Dobbs Branch	Wet Weather		
24-Feb-16	8:14 AM	E 23rd St & S Hawthorne St	Manhole	S156G052	25.18	3,022	Dobbs Branch	Wet Weather		
24-Feb-16	8:20 AM	1022 Shallowford Rd	Manhole	S147G104	49.15	3,932	South Chickamauga Creek	Wet Weather		
24-Feb-16	8:22 AM	2013 S Kelley St	Manhole	S156G022	25.05	3,450	Dobbs Branch	Wet Weather		
24-Feb-16	8:25 AM	3752 Wilcox Blvd	Manhole	S147B103	25.25	3,788	Storm Drain	Wet Weather		
24-Feb-16	8:26 AM	1900 E 25th St Place	Manhole	S156J057	6.63	3,582	Storm Drain	Wet Weather		
24-Feb-16	8:49 AM	3605 Monte Vista Dr	Manhole	S157H050	5.82	3,809	Ditch	Wet Weather		
24-Feb-16	8:50 AM	5300 Old Mission Rd	Manhole	S157K056	24.92	12,990	Storm Drain	Wet Weather		
24-Feb-16	10:04 AM	4610 Kemp Dr	Manhole	S157C065	23.67	20,117	Storm Drain	Wet Weather		
24-Feb-16	10:15 AM	706 Lupton Dr	Service Line	UNK²	25.75	900	Tennessee River	Wet Weather		
24-Feb-16	10:25 AM	900 Terrace Ave	Manhole	S136A130	24.20	26,092	Tennessee River	Wet Weather		
24-Feb-16	10:59 AM	1100 Lupton Dr	Manhole	S118K006	50.70	38,025	Tennessee River	Wet Weather		
24-Feb-16	11:28 AM	Birmingham Dr and Bainbridge St	Manhole	S118D128	22.90	11,450	Tennessee River	Wet Weather		
24-Feb-16	1:26 PM	2627 Hixson Pike	Manhole	S127A005	21.05	6,315	Storm Drain	Wet Weather		

2.0 - SSO Events Quarterly Report 11

Table 2-1 **Quarterly SSO Report** 

	January 1, 2016 – March 31, 2016									
Start Date	Start Time	Location	Source	MH ID#	Estimated Duration (hrs)	Estimated Volume (gal)	SSO Destination	Cause		
24-Feb-16	2:08 PM	5466 Longview Dr	Wet Well	S100K027	19.82	36,180	North Chickamauga Creek	Wet Weather		
24-Feb-16	2:38 PM	1590 Marsh Ln (Hixson #1 PS)	Manhole	S100O066	47.37	11,842	North Chickamauga Creek	Wet Weather		
25-Feb-16	10:30 AM	6695 Hickory Brook Dr	Manhole	S138M082	0.97	600	Storm Drain	Wet Weather		
25-Feb-16	10:30 AM	1006 N Moore Ln	Manhole	S157D200	UNK²	22,800	South Chickamauga Creek	Wet Weather		
26-Feb-16	9:00 AM	406 Brown Rd	Manhole	S158P005	0.33	110	South Chickamauga Creek	Wet Weather		
26-Feb-16	9:00 AM	1000 Woodfinch trl	Manhole	S170C066	4.00	1,440	South Chickamauga Creek	Wet Weather		
29-Feb-16	10:40 AM	3812 Provence St	Manhole	S157H604	0.00	484	South Chickamauga Creek	Wet Weather		
07-Mar-16	1:00 PM	1100 Lupton Dr	Manhole	S118L002	UNK²	782	Tennessee River	Wet Weather		
18-Mar-16	4:15 PM	1919 Old Wauhatchie Pike	Manhole	S155J014	2.25	263	Chattanooga Creek	Blockage - Trash/Debris		
31-Mar-16	1:05 PM	Battery Place and Mabel St	Manhole	S135M054	2.17	1,280	Tennessee River	Defect(s)		

Manholes are not numbered.

This information was not available at time of reporting.

Did not reach waters of the United States.

## 3.0 Moccasin Bend WWTP Bypasses

The CD sets forth the same definition for bypass as the EPA's regulations at 40 C.F.R. § 122.41(m), which defines a bypass as the intentional diversion of waste streams from any portion of a treatment facility. The City's current NPDES permit defines a bypass as the intentional diversion of wastewater away from any portion of a treatment facility other than through peak excess flow treatment facilities or permitted outfalls in accordance with both the long-term control plan and the nine minimum technology-based effluent controls for combined sewer systems. The City reports bypasses and wet weather discharges separately on the monthly Discharge Monitoring Reports, as a discharge from the City's permitted wet weather discharge is not a bypass under the City's current NPDES permit. Based on the foregoing, the WWTP experienced no bypasses during the reporting period of January 1, 2016 through March 31, 2016.

### 4.0 CSO Outfall Discharges

For the reporting period of January 1, 2016 through March 31, 2016 Chattanooga experienced CSO discharges from CSO outfall treatment facilities as listed in Table 4-1. Paragraph 8.(h) of the CD defines a CSO as "any discharge from the CSS from any outfall currently identified, or identified in the future, as a permitted combined sewer overflow outfall in any Chattanooga NPDES permit from which CSOs are discharged to waters of the United States or the State." The CSS is defined as the portion of Chattanooga's wastewater collection and transmission system ("WCTS") designed to convey municipal sewage (domestic, commercial and industrial wastewaters) and storm water runoff through a single-pipe system to Chattanooga's WWTP or CSO outfalls. Chattanooga operates eight (8) permitted CSO outfall treatment facilities, eight (8) of which discharged overflows from the CSS during the reporting period.

Quarterly Report 11 CSO Outfall Discharges

Table 4-1
Quarterly CSO Outfall Discharge Report

	January 1, 2016 – March 31, 2016									
Start Date	Start Time	Location/Nearest Stream	Duration (hrs)	Volume (MG)	Receiving Water	Cause				
22-Jan-16	1:44 AM	Tremont CSO (005)	0.61	0.022527	Tennessee River	Rain Event				
22-Jan-16	2:42 AM	19th St CSO (008)	1.6	0.135053	Tennessee River	Rain Event				
22-Jan-16	4:23 AM	ML King CSO (007)	18.05	2.760159	Tennessee River	Rain Event				
22-Jan-16	6:11 AM	Carter St CSO (009)	10.36	7.643215	Tennessee River	Rain Event				
22-Jan-16	9:29 AM	Central CSO (002)	9.76	2.736291	Tennessee River	Rain Event				
26-Jan-16	12:38 PM	Carter St CSO (009)	9.11	7.235992	Tennessee River	Rain Event				
26-Jan-16	2:10 PM	Tremont CSO (005)	0.6	0.023566	Tennessee River	Rain Event				
26-Jan-16	3:23 PM	Central CSO (002)	5.05	0.439799	Tennessee River	Rain Event				
02-Feb-16	11:12 PM	Tremont CSO (005)	12.64	3.307965	Tennessee River	Rain Event				
02-Feb-16	11:35 PM	ML King CSO (007)	18.28	0.549352	Tennessee River	Rain Event				
02-Feb-16	11:36 PM	19th St CSO (008)	8.58	2.763534	Tennessee River	Rain Event				
03-Feb-16	12:40 AM	Central CSO (002)	4.43	11.584967	Tennessee River	Rain Event				
03-Feb-16	12:50 AM	Ross's Landing CSO (006)	7.15	11.355081	Tennessee River	Rain Event				
03-Feb-16	1:37 AM	Citico CSO (004)	20.68	15.923350	Tennessee River	Rain Event				
03-Feb-16	3:35 AM	Williams St CSO (003)	8.15	11.890450	Tennessee River	Rain Event				
15-Feb-16	8:22 PM	Tremont CSO (005)	3.45	0.455600	Tennessee River	Rain Event				
15-Feb-16	8:36 PM	Carter St CSO (009)	2.52	3.742749	Tennessee River	Rain Event				
15-Feb-16	8:47 PM	19th St CSO (008)	2.32	0.470328	Tennessee River	Rain Event				
15-Feb-16	9:19 PM	ML King CSO (007)	7.27	1.415710	Tennessee River	Rain Event				
23-Feb-16	2:04 AM	19th St CSO (008)	0.17	0.021663	Tennessee River	Rain Event				
23-Feb-16	5:15 PM	19th St CSO (008)	7.7	1.480751	Tennessee River	Rain Event				
23-Feb-16	6:23 PM	Tremont CSO (005)	19.85	2.471200	Tennessee River	Rain Event				
23-Feb-16	8:37 PM	Central CSO (002)	4.23	5.338533	Tennessee River	Rain Event				
23-Feb-16	9:31 PM	ML King CSO (007)	13.95	4.686106	Tennessee River	Rain Event				
23-Feb-16	9:37 PM	Carter St CSO (009)	7.37	10.067441	Tennessee River	Rain Event				
23-Feb-16	11:05 PM	Williams St CSO (003)	7.43	9.557882	Tennessee River	Rain Event				

Quarterly Report 11 CSO Outfall Discharges

Table 4-1
Quarterly CSO Outfall Discharge Report

January 1, 2016 – March 31, 2016										
Start Date	Start Time	Location/Nearest Stream	Duration (hrs)	Volume (MG)	Receiving Water	Cause				
24-Feb-16	12:47 AM	Ross's Landing CSO (006)	4.12	4.054431	Tennessee River	Rain Event				
31-Mar-16	1:30 PM	Tremont CSO (005)	0.98	0.096609	Tennessee River	Rain Event				
31-Mar-16	1:33 PM	Carter St CSO (009)	0.43	0.545856	Tennessee River	Rain Event				
31-Mar-16	1:53 PM	19th St CSO (008)	0.9	0.036119	Tennessee River	Rain Event				