



**Brad Ammons** 

200 South President Street Post Office Box 17 Jackson, Mississippi 39205-0017

Tony Yarber

Mayor of the City of Jackson

October 30, 2014

Chief, Environmental Enforcement Section Environment and National Resources Division U. S. Department of Justice Box 7611 Ben Franklin Station Washington, DC 20044-7611 Re: DOJ No. 90-5-1-1-09841

Environmental Engineer Clean Water Enforcement Branch Municipal & Industrial Enforcement Section U. S. EPA Region 4 61 Forsyth St., S. W. Atlanta, GA 30303

Karl Fingerhood Environmental Enforcement Section U. S. Department of Justice Box 7611 Ben Franklin Station Washington, DC 20044-7611

RE: Cit

City of Jackson, EPA Consent Decree

6th Quarterly Report, July 2014 - September 2014

#### Dear Gentlemen:

Attached, please find Quarterly Report Number 6 for the period of July 2014 through September 2014. The report was developed and submitted by the City in accordance with the EPA Consent Decree dated March 1, 12013. In the May 31, 2013 letter, you agreed to change the date for the first Quarterly Report to July 31.

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 gathered and evaluated the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering such 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.

Sincerely,

Tony T. Yarber, Mayor

City of Jackson Mississippi

cc:

Les Herrington, P.E., Mississippi Department of Environmental Quality Gus McCoy, Chief Administrative Officer, City of Jackson Monica Joiner, City Attorney, City of Jackson

Kishia L. Powell, Director of Public Works, City of Jackson

Charles Williams, PhD., P.E., Acting Engineering Manager, City of Jackson

Mary Carter, Deputy Director of Public Works, City of Jackson

Terry Williamson, Legal Counsel, City of Jackson Public Depository, Eudora Welty Public Library

# City of Jackson Wastewater Infrastructure Redevelopment Program

# Quarterly Report No. 6 July 2014 through September 2014

October 30, 2014

# Prepared for:

City of Jackson Department of Public Works P.O. Box 17 Jackson, MS 39205-0017

# Prepared by:

WEI/AJA LLC 143A LeFleurs Square Jackson, MS 39211

# City of Jackson, Mississippi Quarterly Report No. 6 July 2014 through September 2014

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 such 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.



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Tony '	T. Yarber		
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Date	10.0	10.19	

Kishia L. Powell Director Department of Public Works

10.28.14

Date

# Quarterly Report No. 6 July 2014 through September 2014

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#### 1.0 Introduction

#### 1.1 Consent Decree Overview

On March 1, 2013, the U.S. District Court for the Southern District of Mississippi entered a Consent Decree (CD) agreed to by the City of Jackson, Mississippi (City), U.S. Environmental Protection Agency (EPA), and the Mississippi Department of Environmental Quality (MDEQ.) regarding the City's wastewater collection and treatment system. Over a 17½ year timeline, the Consent Decree requires the City to:

- Develop, submit, finalize, and implement plans for the continued improvement of the Wastewater Collection and Transportation System (WCTS) and Wastewater Treatment Plants (WWTPs);
- Eliminate Sanitary Sewer Overflows (SSOs), effluent limit violations (including any violations of the new effluent limits for nutrients), and reporting violations, and
- Minimize Prohibited Bypasses.

One of the ongoing requirements of the EPA Consent Decree is to submit periodic reports to demonstrate continuing compliance. The specific reporting requirements of the CD are described below.

# 1.2 Authority to Promulgate

The City of Jackson Public Works Department (JPWD) established the Wastewater Infrastructure Redevelopment Program in 2004. The Waggoner Engineering/AJA Management and Technical Services joint venture company, WEI/AJA LLC, was retained to assist the City in addressing the requirements of the Consent Decree under the existing Program Management contract for the Wastewater Infrastructure Redevelopment Program. Accordingly, the Program Management team compiled this Quarterly Report from information provided by the City and its contractors to fulfill the requirements of Section IX ¶ 57 (a) set forth in the CD.

# 1.3 Consent Decree Requirements for Quarterly Report

As stated in the Consent Decree Section IX  $\P$  57 (a), the Quarterly Report shall be submitted beginning thirty (30) Days after the first full three (3)-month period following the Date of Entry of this Consent Decree, and thirty (30) Days after each subsequent three (3)-month period until termination of the Consent Decree and shall contain the following, at a minimum:

Quarterly Reports. Beginning thirty (30) Days after the first full three (3) month period following the Date of Entry of this Consent Decree, and thirty (30) Days after each subsequent three (3)-month period thereafter until termination of the Consent Decree, the City shall submit to EPA for review and approval a Quarterly Report that shall include the following:

- (i) the date, time, location, source, estimated duration, estimated volume, receiving water (if any), and cause of all SSOs occurring in the applicable three (3)-month period in a tabulated electronic format; and
- (ii) the date, time, estimated duration, estimated volume, and cause of all Prohibited Bypasses occurring in the applicable three (3)-month period in a tabulated electronic format.

The listing and graphical summaries of the SSOs and prohibited bypasses for July - September 2014 are presented in Section 2 of this report.

### 1.4 Other Requirements for Quarterly Report

EPA approved the CMOM Training Program, subject to comments, on April 25, 2014. One comment requested that the City include in its quarterly reports its efforts to fill the Training Coordinator position.

A status update for filling the Training Coordinator position is included in Section 3 of this report.

### 2.0 Summary of SSOs and Prohibited Bypasses

SSOs are divided into three elements of the wastewater system: the collection system, West Bank Interceptor, and pump stations. Prohibited bypasses at the Savanna Street Wastewater Treatment Facility (SSWWTF), in periods when they occur, are listed separately.

## 2.1 Collection System SSOs

**Table 1** lists SSOs in the collection system for July through September 2014. Each day of a multiple day event is considered as a separate SSO, in accordance with penalties in the CD.

**Figure 1** shows SSO events by month as a result of the following reported causes:

- Grease
- Roots
- Solids
- Collapsed Pipe
- Pump Station Failure
- Excessive Flow
- Undersized Line
- Other

Some SSO events had multiple causes. In these instances, each cause was assigned a fractional value, adding up to a total of one cause for each event.

**Figure 2** shows percentages of collection system SSOs for the quarter by cause. **Figure 3** shows total volume of SSOs for each month. Volumes are plotted on a logarithmic scale because of the large monthly variations. **Figure 4** shows total duration of SSOs for each month.

Monthly rainfall is plotted in each graph. It should be noted that there does not appear to be a correlation between rainfall and the number, volume, or duration of SSOs.

#### Table 1 City of Jackson, Mississippi Quarterly Report No.6 -July 2014 throughSeptember 2014 Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
			Ground Surface				
7/3/2014	8:45 AM	5135 REDDOCH DR	(defective pipe	7.75	50	Hanging Moss	Collapsed Pipe.
, ,			underground)			0 0	, ,
7/3/2014	11:46 AM	4332 WILL O RUN DR	Cleanout	1.23	3,356	Big Creek	Grease.
7/3/2014	4:00 PM	2301 FOREST GLEN DR	Cleanout	0.75	300	Eubanks	Grease.
			Ground Surface				
7/8/2014	6:40 PM	362 RIDGEWAY ST	(defective pipe	1.33	900	Town	Collapsed Pipe.
			underground)				
7/15/2014	7:46 AM	4332 WILL O RUN DR	Cleanout	3.65	30	Big Creek	
			Ground Surface				
7/17/2014	10:10 AM	3223 RICKAY DR	(defective pipe	1.70	2,280	Cany	Grease. Collapsed Pipe.
			underground)				
7/18/2014	9:12 AM	4704 HANGING MOSS CIR	Manhole	1.80	20	Hanging Moss	Excessive Flow.
7/20/2014	6:32 AM	2416 CULLEY WOOD DR	Manhole	3.33	3,300	Hanging Moss	Grease. Roots.
7/21/2014	8:58 AM	6125 BROWN ST	Cleanout	4.67	2,280	Hanging Moss	Grease.
7/22/2014	11:37 AM	4704 HANGING MOSS ROAD	Manhole	1.08	4,450	Hanging Moss	Grease. Roots.
7/22/2014	1:02 PM	4842 N STATE ST	Constructed Bypass	2.12	1,180	Eubanks	Grease. Roots.
7/23/2014	10:04 AM	262 QUEEN ANNE LANE	Manhole	1.35	35	Lynch	Grease. Solids.
7/23/2014	11:52 AM	3624 VALLEY ROAD	Cleanout	3.47	100	Cany	Grease. Solids.
7/25/2014	2:10 PM	NORMAN ST US HWY 80	Manhole	3.17	5,540	Lynch	Grease.
7/26/2014	5:05 PM	4705 HANGING MOSS ROAD	Manhole	1.08	3,380	Hanging Moss	Grease. Roots.
7/28/2014	4:30 PM	572 DRYDEN AVE	Ground Surface (defective pipe underground)	1.25	150	Lynch	Collapsed Pipe.
7/31/2014	10:36 AM	3775 MEADOW LANE	Manhole	4.80	3,380	Cany	Grease.
8/5/2014	8:24 AM	3900 PAMPAS CIR	Manhole	7.20	Undetermined	Cany	Grease.
8/5/2014	1:56 PM	2419 MCDOWELL ROAD	Constructed Bypass	0.90	10	Cany	Other.
8/8/2014	1:12 PM	NORMAN ST US HWY 80	Ground Surface (defective pipe underground)	4.53	4,430	Bakers	Grease. Collapsed Pipe.
8/14/2014	6:58 PM	3629 B VALLEY DR	Storm Drain	1.03	80	Cany	Solids.
8/19/2014	1:15 PM	4707 HANGING MOSS ROAD	Manhole	1.58	15	Hanging Moss	Grease. Solids.
8/21/2014	10:15 AM	1003 N. VALLEY FALLS RD	Manhole	3.66	125	Cany	Grease. Solids.
8/21/2014	11:35 AM	705 BELHAVEN ST	Manhole	0.83	3,360	Belhaven	Grease.
8/21/2014	10:15 AM	1003 N. VALLEY FALLS RD	Manhole	3.66	125	Cany	Grease. Solids.
8/25/2014	8:18 AM	787 E NORTHSIDE DR	Manhole	5.37	350	Eubanks	Grease. Solids.
8/27/2014	10:06 AM	4704 HANGING MOSS ROAD	Manhole	1.40	75	Hanging Moss	Grease. Solids.
8/28/2014	8:45 AM	1253 EASTOVER DR	Manhole	2.92	1,180	Eubanks	Grease. Roots.
8/29/2014	8:10 AM	167 BRIARWOOD DR	Manhole	1.50	150	Hanging Moss	Grease. Solids.
9/1/2014	8:30 AM	CULLEY DR 155 S FRONTAGE RD	Manhole	2.25	4,430	Hanging Moss	Collapsed Pipe.
9/2/2014	8:30 AM	4704 HANGING MOSS ROAD	Manhole	5.50	150	Hanging Moss	Grease. Roots. Solids.

Table 1 City of Jackson, Mississippi Quarterly Report No.6 -July 2014 throughSeptember 2014 Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
9/2/2014	8:00 PM	1080 COOPER ROAD	Other	1.00	55	Cany	Excessive Flow.
9/5/2014	7:00 PM	5866 KINDER DR	Ground Surface (defective pipe underground)	16.58	1,200	Purple	Collapsed Pipe.
9/6/2014	12:00 PM	141 QUEEN ANNE LANE	Cleanout	1.92	1,500	Lynch	Collapsed Pipe.
9/8/2014	7:00 AM	5866 KINDER DR	Cleanout	5.00	2,200	Purple	Collapsed Pipe.
9/8/2014	7:49 AM	660 HEATHER LANE	Manhole	2.60	250	Hanging Moss	Solids.
9/8/2014	10:02 AM	1112 PECAN BLVD	Ground Surface (defective pipe underground)	3.47	300	Lynch	Solids. Collapsed Pipe.
9/10/2014	5:00 PM	724 RAYMOND ROAD	Manhole	3.00	1,180	Three Mile	Collapsed Pipe.
9/15/2014	8:22 AM	1253 EASTOVER DR	Manhole	2.72	500	Eubanks	Grease. Solids.
9/16/2014	9:23 AM	3811 TROY AVE	Ground Surface (defective pipe underground)	1.95	200	Town	Solids.
9/19/2014	9:38 AM	1405 E NORTHSIDE DR	Manhole	4.05	3,300	Eastover	Grease.
9/22/2014	10:10 AM	346 Fredrica St	Manhole	1.60	2,280	Lynch	Grease.

Figure 1: Collection System SSOs by Cause

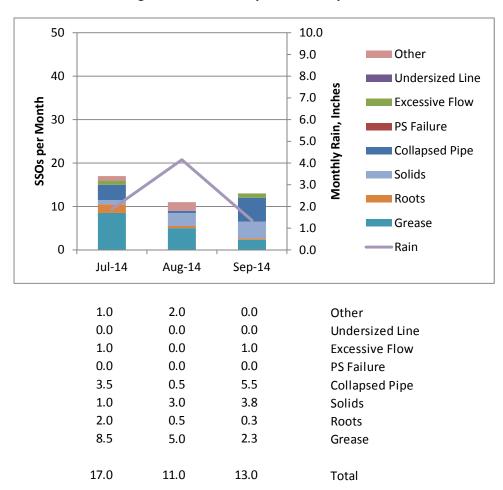


Figure 2: Percentage of Collection System SSOs by Cause

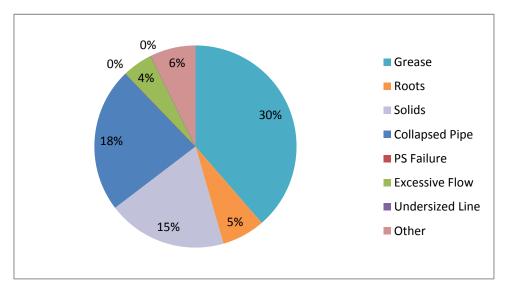


Figure 3: Collection System SSO Volume

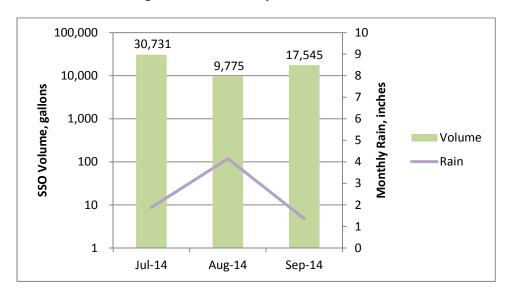
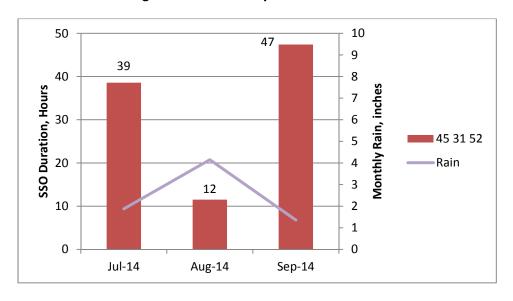


Figure 4: Collection System SSO Duration



## 2.2 West Bank Interceptor SSOs

No SSOs were recorded in the West Bank Interceptor (WBI) for the quarter July 2014-September 2014.

## 2.3 Pump Station SSOs

**Table 2** lists pump station SSOs for the quarter. Only one SSO was reported.

**Figure 5** shows pump station SSO events by month by reported cause, as listed above, as well as monthly rainfall. The cause "Power Company (Power Failure)" was included in the category of "pump station failure."

**Figure 6** shows percentage of SSOs by cause for the quarter. **Figure 7** logarithmically plots total volume of pump station SSOs for each month, along with monthly rainfall. **Figure 8** shows total duration of pump station SSOs for each month.

# Table 3 City of Jackson, Mississippi Quarterly Report No. 6 - July 2014 through September 2014 Pump Station SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
8/22/2014	3:30 AM	2130 HICKORY DR	Pump Station	2.50	50	Cany	Power Company (Power Failure).

Figure 5: Pump Station SSOs by Cause

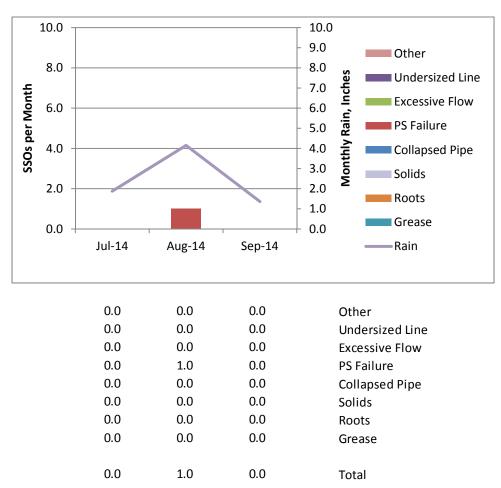


Figure 6: Percentage of PS SSOs by Cause

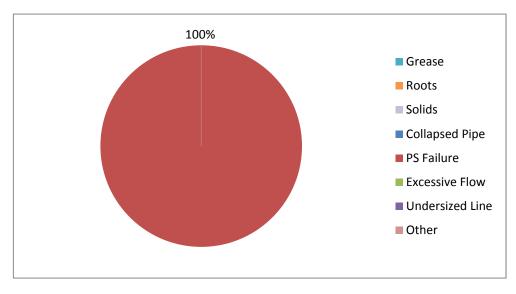
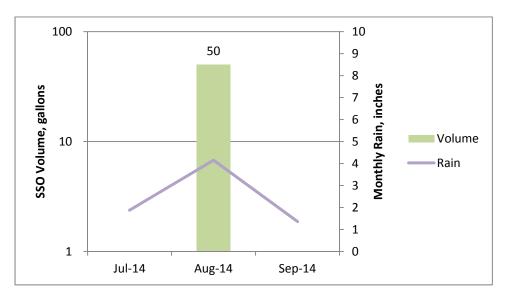
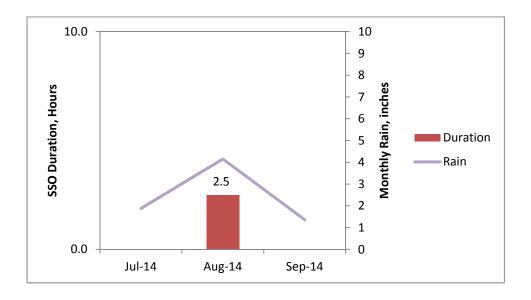


Figure 7: Pump Station SSO Volume



**Figure 8: Pump Station SSO Duration** 



# 2.4 Prohibited Bypasses

No prohibited bypasses were reported in the quarter July 2014-September 2014.

# 3.0 Training Coordinator

# 3.1 Progress Update

The Public Works Department is in the process of creating a Training Coordinator position to implement the CMOM Training Program. A description of qualifications and duties for the Training Coordinator position has been drafted. Public Works management is reviewing the description.

# 3.2 Next steps

- The description of qualifications and duties will be reviewed by the Department of Personnel Management, which will recommend a salary range.
- The Department of Personnel Management will approve the position.
- The City Council will approve the position.
- The City's Civil Service Commission will approve the position.
- The Department of Personnel Management will advertise the position.