

October 30, 2018

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

Karl Fingerhood Environmental Enforcement Section U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611 Brad Ammons
Environmental Engineer
Clean Water Enforcement Branch
Municipal and Industrial Enforcement
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303

Diane Schober
Office of Pollution Control
Environmental Compliance & Enforcement Div.
P.O. Box 2261
Jackson, MS 39225-2261

Re: City of Jackson, Mississippi, EPA Consent Decree

Quarterly Report No. 22

Dear Sirs:

On behalf of the City of Jackson, please find enclosed Quarterly Report No. 22 for your review.

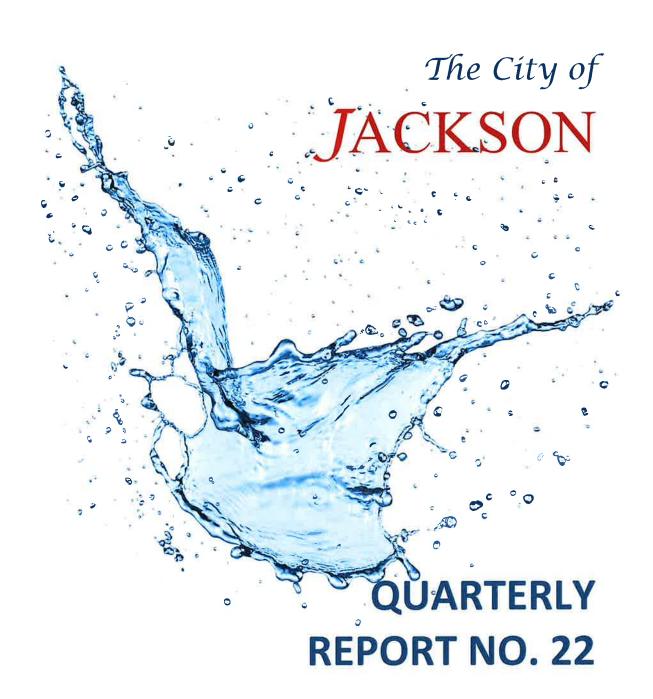
Sincerely,

Jennifer Jorge, Ph.D.

Assistant Project Manager

Enclosure

cc: Honorable Chokwe Antar Lumumba, Mayor, City of Jackson Sharon D Gipson, City Attorney, City of Jackson Robert Miller, Director, Public Works Department, City of Jackson Terry Williamson, Legal Counsel, City of Jackson Public Depository, Eudora Welty Public Library



JULY 2018 THROUGH SEPTEMBER 2018

Department of Public Works Consent Decree Program

City of Jackson Wastewater Infrastructure Redevelopment Program

Quarterly Report No. 22 July 2018 through September 2018

October 30, 2018

Prepared for:

City of Jackson

Department of Public Works

P.O. Box 17

Jackson, MS 39205-0017

Prepared by:

Burns & McDonnell 308 E. Pearl St., Suite 104 Jackson, MS 39201

City of Jackson, Mississippi Quarterly Report No. 22 July 2018 through September 2018

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.



Chokwe Antar Lumumba
Mayor

Date

Robert K. Miller, Director
Department of Public Works

Date

Quarterly Report No. 22 July 2018 through September 2018

Contents

1.0 In	troduction	
1.1	Consent Decree Overview	1-1
1.2	Authority to Promulgate	1-1
2.0 Su	mmary of SSOs and Prohibited Bypasses	2-1
	illilial y 01 3303 and 1 Tollibited Dypasses	
2.1	Callection Contam CCO	
2.1	Collection System SSOs	2-1
2.2	Collection System SSOs Pump Station SSOs	2-1
		2-1 2-7

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.

One of the ongoing requirements of the EPA Consent Decree is to submit periodic reports to demonstrate continuing compliance. The specific reporting requirements can be found in Section IX \P 57 of the Consent Decree. A copy of the Consent Decree, as well as previous reports, can be found on the City of Jackson website under the "Wastewater Consent Decree Public Documents" link in the Document Library.

1.2 Authority to Promulgate

Burns & McDonnell Engineering Company, Inc. was retained to assist the City in addressing the requirements of the Consent Decree under a Program Management contract. 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.

The listing and graphical summaries of the SSOs and prohibited bypasses for July 2018 – September 2018 are presented in Section 2 of this report.

2.0 Summary of SSOs and Prohibited Bypasses

SSOs are divided into three elements of the wastewater system: the collection system, pump stations, and West Bank Interceptor. 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 2018. Each day of a multiple day event is considered as a separate SSO, in accordance with the Consent Decree.

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

Grease Excessive flow Solids Collapsed Pipe Excessive flow Other

Some SSO events had multiple causes. In these instances, each cause was assigned a fractional value, adding up to one (1) 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.

Twenty-two (22) events occurred at seventeen (17) locations on private property reported this period. The cause of these events were determined to be problems on the private laterals and the crews notified owners. These events have been reported to MDEQ.

Four (4) events occurred on private property reported this period. All events were caused by problems in the City's sewer system and are included in this report.

There were eleven (11) events for which the duration was not determined because stop time was missing from the assessment report or the cause, such as collapsed pipe, has not been resolved. Once the cause has been resolved, the total durations can be determined and reported. Volumes reported for these events are determined from periodic follow up inspections until the cause has been resolved. There was an undetermined volume reported at Perry/Prosperity Streets. A bypass pump was set up 9/11/2017 and the repair was completed 6/27/2018. The report for this event was received after Quarterly Report 21 was complete. The repair at the Greenwood Dr. location was completed on 7/25/2018

The cause was reported as "Other" for seven (7) events. A leaking rear tank seal on the vacuum truck caused the event at Ridgewood/Roswell Dr. and was detected immediately. A fallen tree at the manhole caused the event at E. Woodcrest St. The event at Columbus St. caused by private contractor damage to sewer main. These issues will continue to be addressed in training sessions with the field crews and management.

Table 1

City of Jackson, Mississippi
Quarterly Report No. 22 – July 2018 through September 2018
Collection System SSOs

Reported Cause	Collapsed Pipe	Collapsed Pipe	Other	Collapsed Pipe	Collapsed Pipe	Grease	Collapsed Pipe/ Grease	Collapsed Pipe	Other	Collapsed Pipe	Grease	Collapsed Pipe	Grease	Solids	Grease / Solids	Other	Grease / Solids
Rainfall, Inches	00:00	00'0	0.73	0.28	0.12	0.00	0.00	2.22	0.02	0.15	00'0	0:00	0.00	0.00	0.00	0.00	0.00
Receiving Water	Том п	Hardy	Cany	ΝΑ	Eubanks	Town	Eastover	Belhaven	Purple	Lynch	Town	Three Mile	Big Creek	Hanging Moss	Eastover	Lynch	₹ Z
Reached Waters of the State	Yes	Yes	Yes	O V	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	S
Estimated Volume, Gallons	Undetermined	38,400	4,450	25	10	280	200	8,420	300	25	13,360	4,320	3,940	3,840	40	50	200
Estimated Duration, Hours	Repair Complete. Bypass Pump Removed	1,326.75	Ongoing / Unresolved	N.	Ongoing / Unresolved	0.80	5.00	71.75	23.00	Z.	26.55	24.52	22.37	23.73	23.57	Ongoing / Uhresolved	Ongoing / Unresolved
Source	Ground Surface (defective pipe underground)	Manhole	Manhole	Ground Surface (defective pipe underground)	Ground Surface (defective pipe underground)	Manhole	Manhole	Ground Surface (defective pipe underground)	Manhole	Other	Cleanout	Ground Surface (defective pipe underground)	Cleanout	Manhole	Manhole	Other	Ground Surface (defective pipe underground)
Location	Perry St / Prosperity St	2920 Greenwood Ave	172 EWoodcrest Dr	1945 Petit Bois	814 Avondale St	3190 W Northside Dr	1413 Northside Dr	1110 Jefferson St	Mule Jail Rd	323 Valley St	1915 Corley Ave	1852 Sharrock Dr	4332 Will O Run Dr	2573 Lake Circle	2573 Lake Circle	329 Columbus	George St / Jefferson St
Time Began	9:51 AM	8:00 AM	3:29 PM	9:42 AM	9:00 AM	12:50 PM	11:30 AM	3:40 PM	11:30 AM	4:00 PM	11:07 AM	2:09 PM	INd 22:5	9:51 PM	9:51 AM	9:07 AM	7:25 PM
Date Began	9/19/2017	5/31/2018	6/22/2018	7/6/2018	7/6/2018	7/11/2018	7/12/2018	7/16/2018	7/17/2018	7/18/2018	7/18/2018	7/19/2018	7/19/2018	7/23/2018	7/23/2018	7/24/2018	7/25/2018

Table 1 cont.
City of Jackson, Mississippi
Quarterly Report No. 22 – July 2018 through September 2018
Collection System SSOs

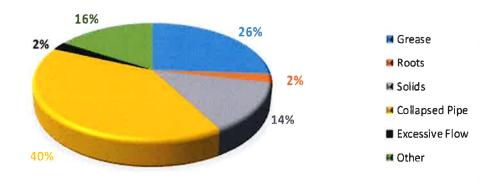
Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waters of the State	Receiving Water	Rainfall, Inches	Reported Cause
7/28/2018	7:22 AM	930 Belhaven St	Ground Surface (defective pipe underground)	2.88	3,480	Yes	Belhaven	0.67	Collapsed Pipe/ Grease
7/31/2018	11:00 AM	584 N Canton Club Cir	Ground Surface (defective pipe underground)	0.75	5	ON.	NA	0.51	Collapsed Pipe
7/31/2018	2:00 PM	3411 Forest HII Dr	Ground Surface (defective pipe underground)	Ongoing / Unresolved	100	Yes	Trahon	1.10	Collapsed Pipe
7/24/2018	9:07 AM	329 Columbus St	Other	313.30	2,925.00	Yes	Lynch	00.00	Other
8/2/2018	9:55 AM	304 Cedar Lane	Manhole	27.33	11,180.00	Yes	Hardy	0.41	Grease
8/4/2018	9:55 AM	4560 Methodist Farm Rd	Geanout	5.37	75.00	o _N	Town	0.00	Grease
8/6/2018	6:11 PM	2222 E Northside Dr	Other	359.32	150,080.00	Yes	Hanging Moss	0.00	Other
8/6/2018	10:25 AM	329 Columbus St	Manhole	0.42	75.00	2	¥	00'0	Solids
8/7/2018	3:45 PM	4004 Medgar Evers BNd	Manhole	Ongoing / Uhresolved	2,500.00	Yes	Томп	0.00	Collapsed Pipe
8/9/2018	4:40 PM	950 Buckley Dr	Ground Surface (defective pipe underground)	0.33	A.	N _O	NA	0.00	Collapsed Pipe
8/14/2018	3:45 PM	3411 Forest Hill Rd	Ground Surface (defective pipe underground)	Ongoing / Unresolved	1,800.00	2	\$	0.00	Collapsed Pipe / Solids
8/15/2018	10:00 AM	1130 Glen Brin St	Manhole	3.42	20.00	o _N	¥	0.00	Grease / Solids
8/16/2018	9:31 AM	816 Hickory Dr	Ground Surface (defective pipe underground)	127.20	235.00	2	۸۶	0.00	Collapsed Pipe
8/21/2018	9:00 AM	814 Avondale St	Ground Surface (defective pipe underground)	Ongoing / Unresolved	N.	NO	NA	0.00	Collapsed Rpe
8/21/2018	5:58 PM	2046 Willow Way	Ground Surface (defective pipe underground)	17.72	5,240.00	Yes	Three Wile	0.00	Collapsed Pipe / Grease

Table 1 cont.
City of Jackson, Mississippi
Quarterly Report No. 22 – July 2018 through September 2018
Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waters of the State	Receiving Water	Rainfall, Inches	Reported Cause
8/22/2018	10:16 AM	1812 Weadow brok Rd	Ground Surface (defective pipe underground)	Ongoing / Unresolved	26,140.00	Yes	Eastover	0.00	Collapsed Pipe
8/27/2018	11:54 AM	2711 St Charles St	Cleanout	0.77	NR.	9	Ą	00.00	Grease / Solids
8/31/2018	3:00 PM	Ridgew ood Rd / Rosw ell Dr	Other	N R	20.00	Yes	Eastover	0.24	Other
9/11/2018	10:40 AM	317 Queen Alexandria Lane	Wanhole	1.25	100	No	NA	0.00	Grease / Solids
9/11/2018	3:05 PM	2118 East Dr	Ground Surface (defective pipe underground)	15.33	200	9	ΨV	0.35	Collapsed Pipe
9/18/2018	8:57 AM	1301 Hair St	Ground Surface (defective pipe underground)	6.60	3,290	Yes	Lynch	0.00	Grease
9/25/2018	4:05 PM	787 E Northside Dr	Manhole	21.20	4,780	Yes	Eubanks	0.05	Grease
9/26/2018	10:00 AM	147 Brnw ood Pl	Manhole	2.25	150	Yes	Big Creek	1.87	Roots
9/26/2018	2:15 PM	3638 Cavalier Drive	Manhole	NR.	1,000	Yes	Eubanks	1.65	Excessive Flow
9/28/2018	10:00 AM	1052 Cooper Road	Ground Surface (defective pipe underground)	2.00	200	Yes	Cany	0.00	Other
9/29/2018	11:11 AM	5055 Old Canton Rd	Manhole	0.32	220	Yes	Hanging Moss	00.00	Solids
9/29/2018	10:00 AM	4570 Old Canton Rd	Ground Surface (defective pipe underground)	1.00	75	Yes	Eastover	0.00	Collapsed Pipe / Grease

Figure 1: Collection System SSOs by Cause 8,00 20 0.00 0.00 0.00 Monthly Rainfall, inches 15 10 5 0 Jul-18 Aug-18 Sep-18 Jul-18 Sep-18 Aug-18 Excessive Flow 0.00 0.00 1.00 3.00 1.00 Other 3.00 Collapsed Pipe 10.00 6.00 1.50 2.50 1.50 Solid's 2.00 0.00 1.00 0.00 Roots 3.50 3.00 Grease 5.00 Rainfall 6.40 6.74

Figure 2: Percentage of Collection System SSOs by Cause



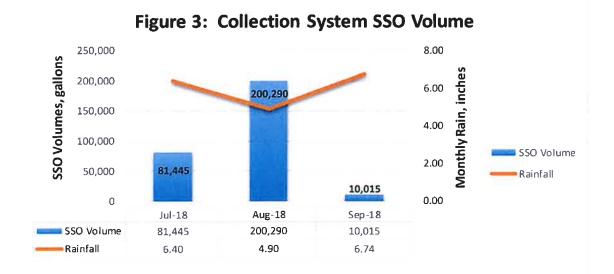


Figure 4: Collection System SSO Duration

1,800 1,600

1,400

1,200 1,000

> 800 600

> 400 200

> > 0

1,551.7

6.40

SSO Duration

Rainfall

SSO Duration, hours

8.00

4.00

4.00

2.00

Jul-18

Aug-18

Sep-18

855.2

4.90

50.0

6.74

2.2 Pump Station SSOs

Table 2 lists pump station SSOs for July through September 2018

Figure 5 shows pump station SSO events by month by reported cause, as listed in Table 2, as well as monthly rainfall.

Figure 6 shows percentage of SSOs by cause for the quarter.

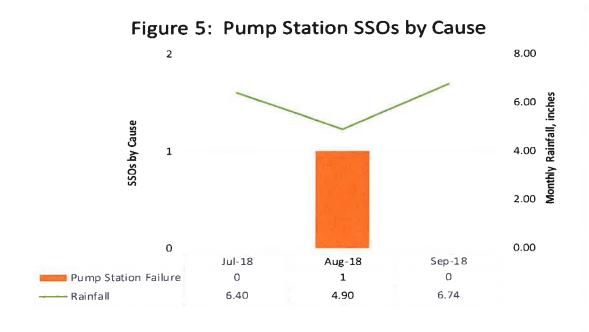
Figure 7 shows total volume of pump station SSOs for each month, as well as monthly rainfall.

Figure 8 shows total duration of pump station SSOs for each month, as well as rainfall.

A tripped main breaker on 8/21/2018 caused the pump station SSO at 1914 Hwy 80 west. The duration could not be calculated because there was no beginning time reported. The end time was reported to be 8/21/2018 at 12:00 a.m.

Table 2
City of Jackson, Mississippi
Quarterly Report No. 22 – July 2018 through September 2018
Pump Station SSOs

		60	lber 201	D - Septem	S REPORTE	NO PUMP STATION SSOS REPORTED - September 2018	NO PUN	8	
0.01 Main Breaker Tripped	0.01	Lynch	Yes	100	Unknown	Pump Station	Unknow n 1914 Hwy 80 West (LS-87)		8/21/2018
			, 2018	RTED - July	SSOS REPC	NO PUMP STATION SSOS REPORTED - July 2018	NO		
II, Reported Cause	Rainfall, Inches	Reached Receiving Water Waterway	Reached Waterway	Estimated Volume, Gallons	Estimated Duration, Hours	Source	Location	Time Began	Date Began



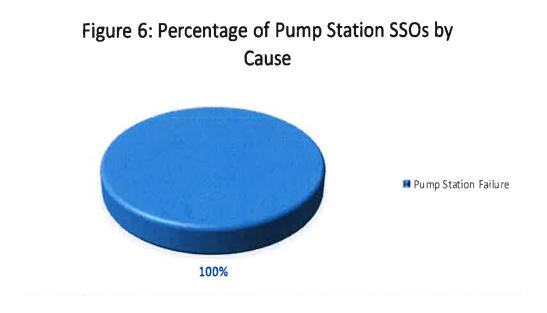
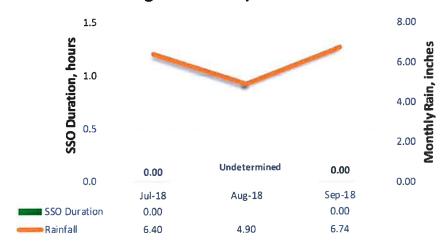


Figure 7: Pump Station SSO Volume



Figure 8: Pump Station SSO Duration



2.3 West Bank Interceptor SSOs

There were no SSO events reported on the West Bank Interceptor this Quarter.

2.4 Prohibited Bypasses

Table 3 lists prohibited bypasses at the wastewater treatment plant for the year. Unlike SSOs, each event is considered as one bypass from the day it begins to the day it ends.

This quarterly report does not include a graphical representation of the number of bypasses for each cause, since most bypasses at the Savanna Street WWTP are caused by excessive flow or specific causes explained above. Future reports will include this graphical representation as appropriate

There were no prohibited bypasses reported this Quarter.

Table 3
City of Jackson, Mississippi
Quarterly Report No. 22 – July 2018 through September 2018
Prohibited Bypasses

Reported Cause			
Rainfall, Inches	82	018	2018
Receiving y Water	NO PROHIBITED BYPASSES REPORTED - July 2018	NO PROHIBITED BYPASSES REPORTED - August 2018	September
Reached	REPORTE	REPORTED	PORTED -
Estimated Volume, Million Gallons	3YPASSES	YPASSES	ASSES RE
Estimated Duration, Days	HIBITED 6	HBITED BY	SITED BYP
Source	NO PRC	NO PROF	NO PROHIBITED BYPASSES REPORTED - September 2018
Location			
Time Began			
Date Began			