



January 30, 2020

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

Brad Ammons
Environmental Engineer
Clean Water Enforcement Branch
Municipal and Industrial Enforcement
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303

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

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. 27

Dear Lady and Sirs:

On behalf of the City of Jackson, please find enclosed the Jackson Consent Decree Quarterly Report # 27. Should you have any questions, please contact me.

Sincerely,

A handwritten signature in blue ink that reads "David Hauser".

David Hauser, P.E.
Program Manager

Enclosure

cc: Honorable Chokwe Antar Lumumba, Mayor, City of Jackson
Timothy C. Howard, City Attorney, City of Jackson
Robert Miller, Director of Public Works, City of Jackson
Terry Williamson, Legal Counsel, City of Jackson
Public Depository, Eudora Welty Public Library



The City of
JACKSON

**QUARTERLY
REPORT NO. 27**

OCTOBER 2019 THROUGH DECEMBER 2019

Department of Public Works
Consent Decree Program

City of Jackson
Wastewater Infrastructure Redevelopment
Program

Quarterly Report No. 27
October 2019 through December 2019

January 30, 2020

Prepared for:

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

Prepared by:

Burns & McDonnell
9400 Ward Parkway
Kansas City, MO 64114

City of Jackson, Mississippi

Quarterly Report No. 27

October 2019 through December 2019

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

748

Date

1/29/2020

Robert K. Miller, Director
Department of Public Works

Date

1/27/2020

Quarterly Report No. 27

October 2019 through December 2019

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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.

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 ¶ 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, <http://www.jacksonms.gov/>, under the Public Works Department "Waste Water Consent Decree" link in the Document Library. The website can also be accessed directly at <http://www.cojcd.org/>.

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 October 2019 – December 2019 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: 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 in Section 2.4 of this report.

2.1 Collection System SSOs

Table 1 lists SSOs in the collection system for October 2019 through December 2019. Each day of a multiple day event is considered 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 Roots Solids Collapsed Pipe PS Failure 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.

Figure 4 shows total duration of SSOs for each month.

Five (5) events occurred at five (5) locations on private property reported this period. The cause of these events was determined to be problems on the private laterals and the crews notified owners. These events have been reported to MDEQ.

Eleven (11) events occurred at cleanouts on private property this period. All events were caused by problems in the City's sewer system and are included in this report.

There were twenty-two (22) events for which the duration was not determined because the cause, such as collapsed pipe, has not been resolved or no SSO was ongoing but there was evidence of a previous overflow. "Previous SSO Follow up" is an SSO for which the cause, i.e. collapsed pipe, excessive flow, etc., was not resolved at the time of the first report and a crew was following up to see if an SSO was occurring until a repair could be made. 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 were three (3) for which the cause has remained undetermined and will be further investigated.

Table 1
City of Jackson, Mississippi
Quarterly Report No. 27 – October 2019 through December 2019
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
7/27/2019	1:45 PM	5755 Gladewood Dr	Manhole	2.08	100	No	NA	0.00	Grease / Solids
9/16/2019	2:09 PM	1852 Shamrock Dr	Cleanout	0.97	30	No	NA	0.00	Excessive Flow
9/18/2019	6:03 PM	Forest Ave / Watkins Dr	Manhole	1.37	50	Yes	Eubanks	0.00	Solids
10/1/2019	2:05 PM	219 Livingston St	Manhole	Ongoing Unresolved	100	No	NA	0.00	Collapsed Pipe / Grease / Solids
10/1/2019	8:24 AM	219 Livingston St	Ground Surface (defective pipe underground)	26.17	150	Yes	Town	0.00	Collapsed Pipe
10/1/2019	2:35 PM	325 McIyere Ave	Ground Surface (defective pipe underground)	Ongoing Unresolved	2,325	No	NA	0.00	Collapsed Pipe / Grease / Solids
10/4/2019	8:50 AM	Forest Ave / Watkins Dr	Manhole	1.92	100	No	NA	0.51	Grease / Solids
10/6/2019	9:03 AM	Brown St / Grant St	Manhole	1.62	50	Yes	Hanging Moss	0.00	Grease
10/7/2019	3:17 PM	3920 Ilano Dr	Manhole	2:33	30	No	NA	0.00	Grease
10/7/2019	5:38 PM	3280 Forest Hill Dr	Manhole	1.20	60	No	NA	0.00	Grease
10/7/2019	4:46 PM	Forest Ave / Watkins Dr	Manhole	95.07	Not Reported	Yes	Eubanks	0.04	Grease / Solids
10/9/2019	4:40 PM	1119 Mclean St	Manhole	1:38	20	Yes	Lynch	0.00	Grease / Solids
10/9/2019	9:20 AM	1338 N State St	Manhole	1.78	150	Yes	Town	0.00	Grease
10/10/2019	10:05 AM	2907 Kingswood Ave	Ground Surface (defective pipe underground)	Ongoing Unresolved	2,200	No	NA	0.00	Grease / Solids
10/10/2019	5:26 PM	Forest Ave / Watkins Dr	Manhole	1.13	80	Yes	Eubanks	0.00	Grease / Solids
10/10/2019	1:40 PM	McIyere Ave	Manhole	1:33	100	No	NA	0.00	Grease / Solids
10/11/2019	8:30 AM	108 Yerger St	Ground Surface (defective pipe underground)	Ongoing Unresolved	2,100	Yes	Town	0.64	Grease / Solids
10/15/2019	10:03 AM	Raymond Rd / Scanlon Dr	Manhole	889.78	Not Reported	Yes	Hardy	3.96	Grease / Solids

Table 1 cont.
City of Jackson, Mississippi
Quarterly Report No. 27 – October 2019 through December 2019
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
10/16/2019	4:27 PM	4264 Richmond Cir	Manhole	1.98	30	Yes	Town	0.02	Grease
10/16/2019	12:50 PM	N Lamar Lane / Millsaps Ave	Manhole	0.33	75	No	NA	0.05	Excessive Flow
10/19/2019	2:00 PM	1119 Mclean St	Manhole	3.00	50	No	NA	0.00	Grease / Solids
10/19/2019	11:15 AM	Combs St / Gunda St	Manhole	0.50	75	No	NA	0.00	Grease / Solids
10/19/2019	8:30 AM	170 Elmwood Pl	Manhole	Ongoing Unresolved	1,300	No	NA	0.00	Undetermined
10/22/2019	8:34 PM	4090 Pinehill Dr	Manhole	1.73	480	Yes	Ebanks	0.00	Grease
10/22/2019	9:40 AM	1046 Greyhound Ave	Cleanout	2.42	50	No	NA	0.00	Grease / Solids
10/22/2019	3:25 PM	844 Lawrence Road	Manhole	0.75	75	No	NA	0.00	Grease / Solids
10/27/2019	12:45 PM	2545 Prosperity St	Manhole	2.83	50	Yes	Town	0.00	Grease
10/27/2019	5:14 PM	302 Livingston St	Manhole	1.68	50	Yes	Town	0.00	Grease
10/27/2019	3:35 PM	302 Livingston St	Manhole	1.65	50	Yes	Town	0.00	Grease
10/23/2019	12:13 PM	3787 Meadow Lane	Manhole	792.03	Not Reported	Yes	Cany	0.00	Grease / Solids
10/29/2019	11:10 AM	50 Northtown Dr	Ground Surface (defective pipe underground)	0.58	100	No	NA	0.04	Grease / Roots / Solids
10/29/2019	12:35 PM	4273 155 N Frontage Road	Manhole	Ongoing Unresolved	3,300	No	NA	0.00	Grease / Solids
10/29/2019	6:00 PM	5220 Sycamore Dr	Manhole	Ongoing Unresolved	3,300	No	NA	0.03	Grease / Roots / Solids
10/29/2019	12:35 PM	1252 Druid Hill Dr	Manhole	Ongoing Unresolved	300	No	NA	0.00	Grease / Solids
10/29/2019	3:00 PM	3930 Skyview Dr	Manhole	Ongoing Unresolved	100	No	NA	0.14	Grease / Solids
10/30/2019	4:10 PM	239 Livingston St	Manhole	Previous SSO	3,200	No	NA	4.16	Undetermined

Table 1 cont.
City of Jackson, Mississippi
Quarterly Report No. 27 – October 2019 through December 2019
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
10/30/2019	1:30 PM	4090 Phehill Dr	Manhole	Ongoing Unresolved	200	No	NA	4.16	Collapsed Pipe / Grease / Solids
10/31/2019	12:45 PM	246 Manship St	Manhole	0.83	75	No	NA	0.71	Grease / Solids
10/31/2019	11:30 AM	167 Briarwood Dr	Manhole	1.00	75	No	NA	0.75	Grease / Solids
11/1/2019	12:20 PM	6434 Abraham Lincoln Dr	Manhole	1.67	100	No	NA	0.00	Grease / Solids
11/1/2019	4:50 PM	McTyere St / Mill St	Manhole	Ongoing Unresolved	Not Reported	Yes	Town	0.00	Undetermined
11/2/2019	9:00 AM	619 Forest Ave	Manhole	5.00	150	Yes	Hanging Moss	0.00	Roots
11/4/2019	3:31 PM	1834 St Charles Ave	Manhole	1123.23	200	Yes	Lynch	0.00	Grease / Safety Cones
11/6/2019	11:00 AM	878 Lawrence Rd	Manhole	1.83	100	No	NA	0.00	Grease / Solids
11/6/2019	11:00 AM	841 Lawrence Rd	Manhole	1.83	100	No	NA	0.00	Grease / Solids
11/6/2019	4:00 PM	WWoodrow Wilson / Prosperity St	Manhole	Ongoing Unresolved	2,500	No	NA	0.00	Collapsed Pipe / Grease / Solids
11/7/2019	12:30 PM	324 Rollingwood Dr	Manhole	1.75	100	No	NA	0.09	Roots
11/7/2019	6:07 PM	510 Briarcliff Cir	Ground Surface (defective pipe underground)	979.13	Not Reported	Yes	Cany	0.04	Grease / Roots / Solids
11/14/2019	9:30 AM	705 Gardner St	Cleanout	1.92	100	No	NA	0.03	Grease / Solids
11/14/2019	11:40 AM	4051 N West St	Manhole	1.17	100	No	NA	0.03	Grease / Solids
11/14/2019	1:10 PM	218 Yerger St	Ground Surface (defective pipe underground)	Ongoing Unresolved	1,700	No	NA	0.02	Grease / Solids
11/16/2019	12:50 PM	347 Magnolia Rd	Ground Surface (defective pipe underground)	2.17	100	No	NA	0.00	Grease / Solids
11/17/2019	4:24 PM	787 E Northside Dr	Manhole	47.60	Not Reported	Yes	Eubanks	0.00	Grease / Solids
11/18/2019	2:40 PM	811 Forest Ave	Manhole	0.92	100	No	NA	0.00	Grease / Solids

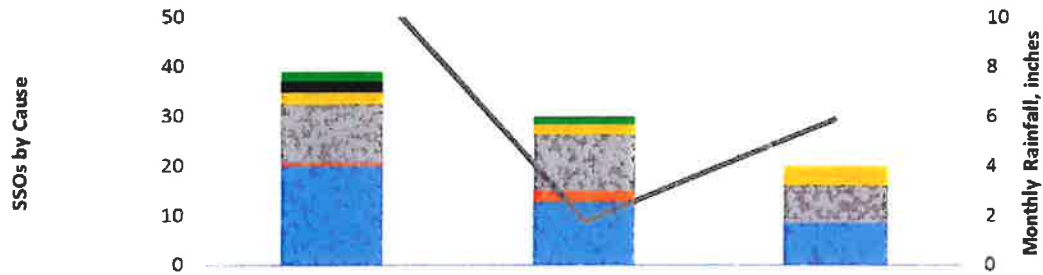
Table 1 cont.
City of Jackson, Mississippi
Quarterly Report No. 27 – October 2019 through December 2019
Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waters of the State	Receiving Water	Rainfall, Inches	Reported Cause
11/18/2019	4:00 PM	Manhattan Rd / E Northside Dr	Manhole	1.25	100	No	NA	0.00	Grease / Solids
11/18/2019	5:20 PM	631 Cedarhurst Dr	Manhole	0.50	75	No	NA	0.00	Grease / Solids
11/18/2019	5:20 PM	639 Cedarhurst Dr	Manhole	0.50	75	No	NA	0.00	Grease / Solids
11/18/2019	6:25 PM	509 Wellington Rd	Cleanout	0.92	75	No	NA	0.00	Grease / Solids
11/18/2019	8:40 PM	1252 Druid Dr	Manhole	2.42	100	No	NA	0.00	Collapsed Pipe / Grease / Solids
11/19/2019	10:45 AM	3969 Warner Ave	Manhole	8.17	100	No	NA	0.00	Grease / Solids
11/20/2019	5:50 PM	629 Fondren Pl	Manhole	1.58	75	No	NA	0.00	Grease / Solids
11/22/2019	11:15 AM	288 Mikell St	Manhole	1.17	100	No	NA	0.38	Grease / Solids
11/22/2019	2:05 PM	646 Chelsea Dr	Manhole	1.92	100	No	NA	0.38	Grease / Solids
11/22/2019	4:10 PM	1529 Florence Ave	Manhole	Ongoing Unresolved	675	No	NA	0.26	Grease / Solids
11/22/2019	6:05 PM	149 Woodland Cr	Manhole	Ongoing Unresolved	900	No	NA	0.30	Grease / Solids
11/23/2019	9:00 AM	2907 Kingswood Ave	Cleanout	Ongoing Unresolved	800	No	NA	0.23	Collapsed Pipe
11/23/2019	10:45 AM	246 Manship St	Manhole	1.33	100	No	NA	0.24	Grease / Solids
11/23/2019	2:00 PM	Raymond Rd / Scanlon Dr	Manhole	2.00	25	Yes	Hardy	0.18	Collapsed Pipe / Grease
11/25/2019	1:00 PM	Timber Crossing Rd	Manhole	3.50	200	Yes	Cany	0.00	Grease / Solids
12/2/2019	7:00 AM	1529 Florence Ave	Manhole	7.00	75	Yes	Lynch	0.00	Collapsed Pipe / Grease
12/4/2019	11:30 AM	Alumni Dr (UMMC)	Ground Surface (defective pipe underground)	1.97	Not Reported	Yes	Belhaven	0.00	Collapsed Pipe

Table 1 cont.
City of Jackson, Mississippi
Quarterly Report No. 27 – October 2019 through December 2019
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
12/5/2019	9:30 AM	Brown St	Manhole	1.58	100	No	NA	0.00	Grease / Solids
12/6/2019	2:17 PM	629 Fondren Pl	Manhole	20.55	200	Yes	Town	0.00	Grease / Solids
12/9/2019	11:15 AM	Alumni Dr (UNMC)	Ground Surface (defective pipe underground)	1.17	Not Reported	Yes	Belhaven	0.00	Collapsed Pipe
12/10/2019	10:20 AM	Fine Island Dr / Fine Bay Dr	Manhole	Ongoing Unresolved	Not Reported	No	NA	0.84	Grease / Solids
12/12/2019	2:30 PM	3870 Warner Ave	Cleanout	0.83	100	No	NA	0.00	Grease / Solids
12/13/2019	10:30 AM	101 Poole St	Ground Surface (defective pipe underground)	Ongoing Unresolved	1,900	No	NA	0.01	Collapsed Pipe / Grease / Solids
12/14/2019	10:00 AM	250 Brae Burn Dr	Cleanout	Ongoing Unresolved	1,800	No	NA	0.00	Grease / Solids
12/14/2019	12:45 PM	806 Monroe St	Manhole	0.25	100	No	NA	0.00	Grease / Solids
12/14/2019	12:30 PM	4261 N Frontage Road	Manhole	Ongoing Unresolved	1,800	No	NA	0.00	Collapsed Pipe / Grease / Solids
12/14/2019	9:20 AM	167 Brianwood Dr	Manhole	0.50	100	No	NA	0.00	Grease / Solids
12/14/2019	11:18 AM	841 Lawrence Rd	Cleanout	0.95	100	No	NA	0.00	Grease / Solids
12/14/2019	1:15 PM	1164 Raymond Rd	Manhole	0.25	100	No	NA	0.00	Grease / Solids
12/17/2019	2:10 PM	1915 Mobile Ave	Cleanout	1.50	75	No	NA	0.03	Grease / Solids
12/18/2019	9:50 AM	314 Queen Margaret Lane	Cleanout	Ongoing Unresolved	1,050	No	NA	0.00	Collapsed Pipe / Grease / Solids
12/19/2019	4:20 PM	246 Manship St	Manhole	1.67	100	No	NA	0.00	Grease / Solids
12/24/2019	10:30 AM	1745 Riverwood Dr	Manhole	Ongoing Unresolved	800	No	NA	0.00	Grease / Solids
12/25/2019	10:55 AM	4213 Oakmont Dr	Manhole	0.58	75	No	NA	0.00	Grease / Solids
12/31/2019	2:10 PM	505 Stillwood Dr	Under House	Ongoing Unresolved	100	No	NA	0.00	Collapsed Pipe / Grease / Solids

Figure 1: Collection System SSOs by Cause



	Oct-19	Nov-19	Dec-19
Other	2.00	1.5	0.0
Excessive Flow	2.00	0	0.00
Collapsed Pipe	2.33	2.17	3.83
Solids	12.00	11.50	7.83
Roots	0.67	2.33	0.00
Grease	20.00	12.50	8.33
Rainfall	13.06	1.73	5.84

Figure 2: Percentage of Collection System SSOs by Cause

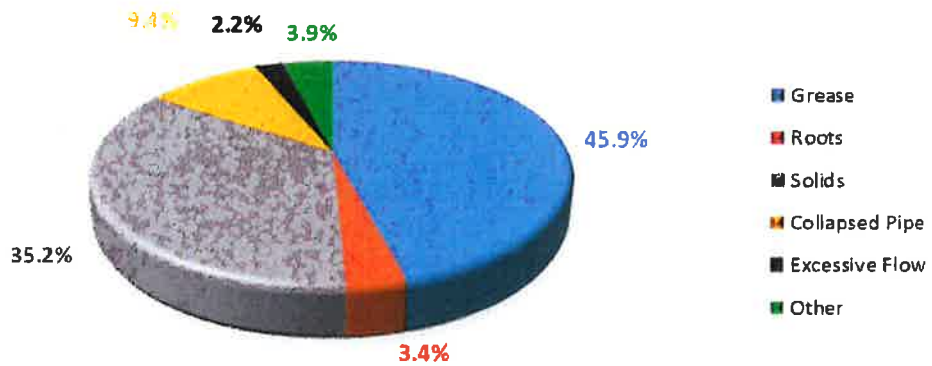


Figure 3: Collection System SSO Volume

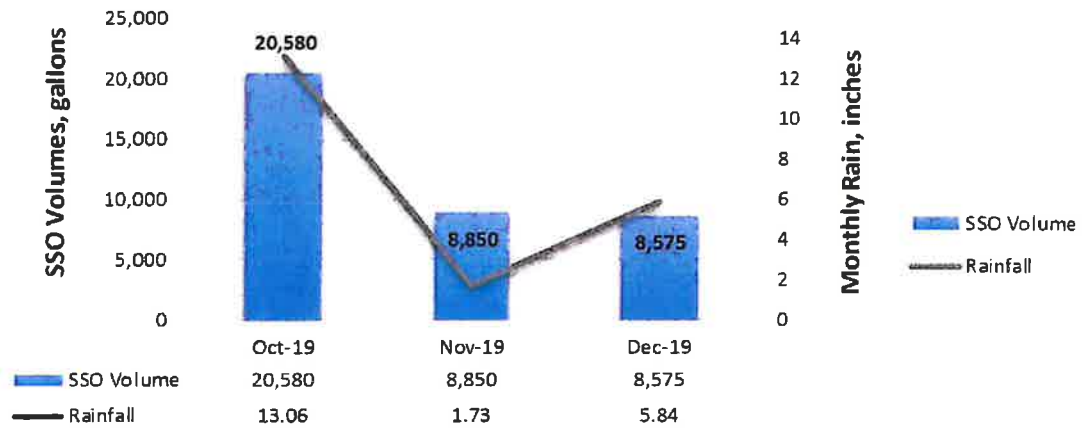
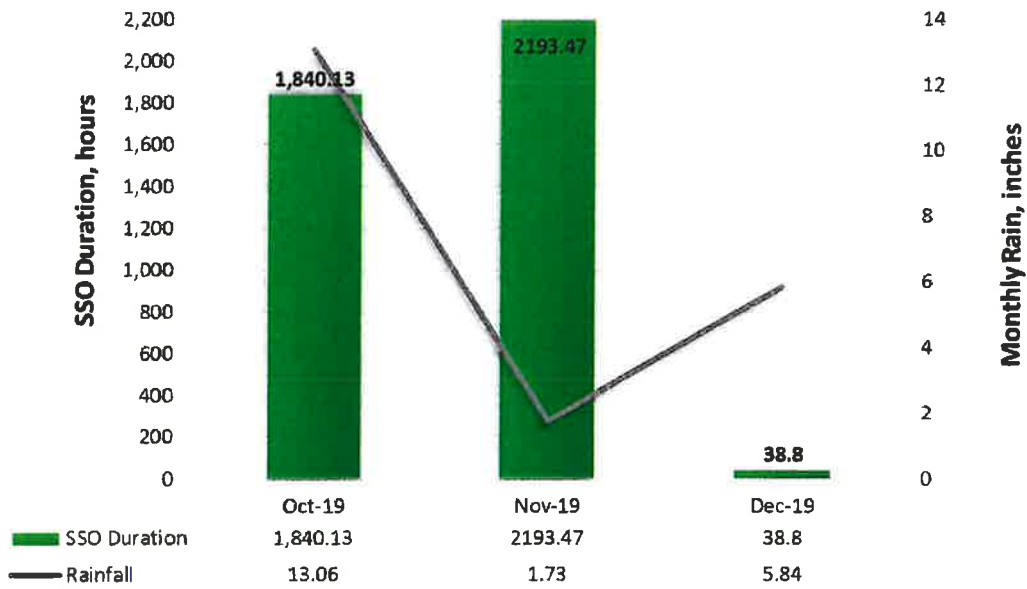


Figure 4: Collection System SSO Duration



2.2 Pump Station SSOs

Table 2 lists pump station SSOs from October 2019 through December 2019.

Figures 5 through 7 are not used in this report because no SSOs were reported at pump stations this quarter.

Table 2
City of Jackson, Mississippi
Quarterly Report No. 27 – October 2019 through December 2019
Pump Station SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waterway	Receiving Water	Rainfall, Inches	Reported Cause
NO PUMP STATION SSOs REPORTED - October 2019									
NO PUMP STATION SSOs REPORTED - November 2019									
NO PUMP STATION SSOs REPORTED - December 2019									

2.3 West Bank Interceptor SSOs

West Bank Interceptor SSOs at the Jefferson Street location are generally caused when flow to the Savanna WWTP exceeds the facility's pumping capacity. This creates the need to restrict influent flow to the facility in order to protect the facility from flooding and catastrophic damage. Insufficient pumping capacity can be caused by equipment failures at the facility, excessive flow caused by rain events, high river levels or a combination of all the above.

Table 3 lists West Bank Interceptor SSOs from October 2019 through December 2019.

Figures 9 through 11 are not used in this report because no SSOs were reported on the West Bank Interceptor this quarter.

Table 3
City of Jackson, Mississippi
Quarterly Report No. 27 – October 2019 through December 2019
West Bank Interceptor SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waterway	Receiving Water	Rainfall, Inches	Reported Cause
NO WEST BANK INTERCEPTOR SSOs REPORTED - October 2019									
NO WEST BANK INTERCEPTOR SSOs REPORTED - November 2019									
NO WEST BANK INTERCEPTOR SSOs REPORTED - December 2019									

2.4 Prohibited Bypasses

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 below.

Table 4 lists prohibited bypasses at the wastewater treatment plant for the quarter. Unlike SSOs, each event is considered as one bypass from the day it begins to the day it ends. The event is reported in the month the bypass ends.

Figure 13 shows total volume of prohibited bypasses for each month plotted logarithmically, along with monthly rainfall.

Figure 14 shows volume and river stages.

Figures 15 and 16 plot total duration for the month, first compared to rainfall and then compared to river stages. River stages are shown as monthly average daily maximum river stage and as the monthly maximum day river stage. Note that duration of prohibited bypasses is plotted in days.

There were two bypass events this reporting period on October 26, 2019 and December 11, 2019. Both events were reported to MDEQ as being caused by excessive flow due to rainfall. The duration of these events were 15 days and 21 days respectively although the December event was ongoing through the end of the reporting period. The Jackson area received a total of 7.06" of rain from October 25, 2019 through November 9, 2019 and a total of 4.99" from December 11, 2019 through December 31, 2019. Rainfall totals for the months of October and December exceeded normal rainfall by 49.4% and 28.7% respectively.

All bypassed volume is chlorinated, de-chlorinated and required samples taken are prior to blending with the mechanical plant effluent and subsequently discharged to the Pearl River.

Table 4
City of Jackson, Mississippi
Quarterly Report No. 27 – October 2019 through December 2019
Prohibited Bypasses

Date Began	Time Began	Location	Source	Estimated Duration, Days	Estimated Volume, Million Gallons	Reached Waterway	Receiving Water	Rainfall, Inches	Reported Cause
10/26/19	9:00 AM	3810 I 55 S	WWTP	15	748.30	YES	Pearl	1.88	Excessive flow
12/1/19	9:00 AM	3811 I 55 S	WWTP	21*	462.776*	YES	Pearl	0.77	Excessive flow

* Bypass was ongoing through the end of the reporting period. Volume reported is for December only.

Figure 13: Prohibited Bypass Volume vs. Rainfall



Figure 14: Prohibited Bypass Volume vs. River Stage

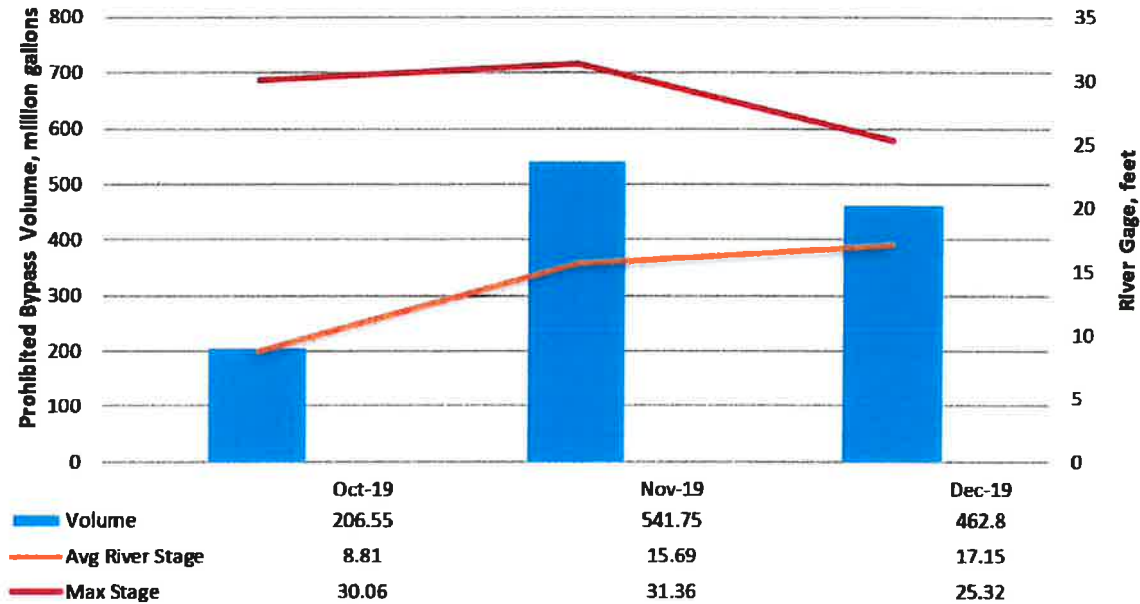


Figure 15: Prohibited Bypass Duration vs. Rainfall

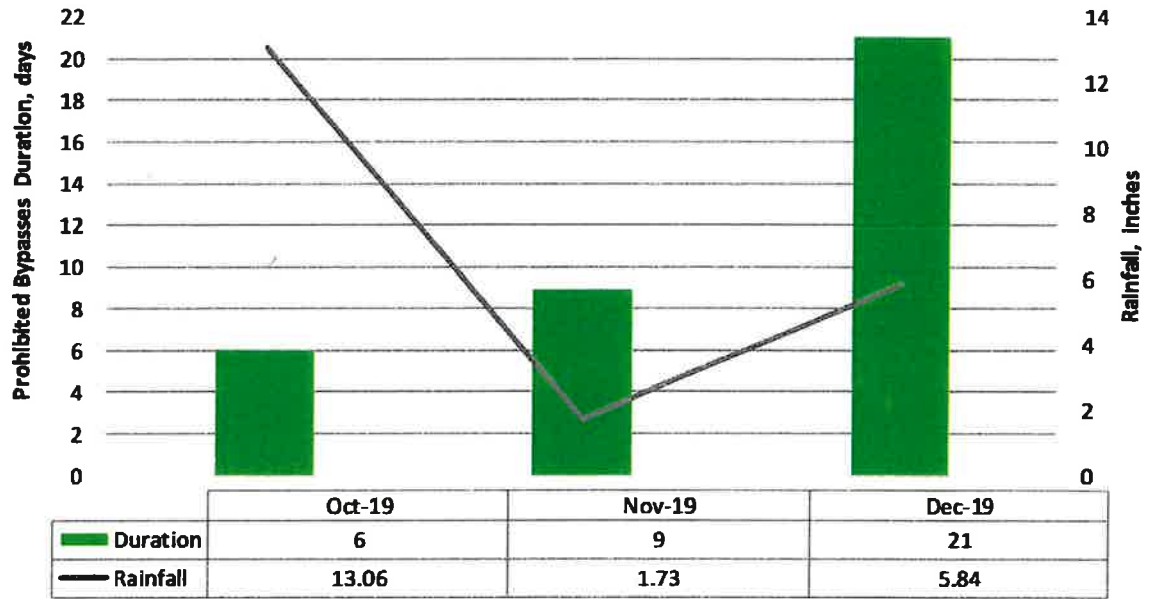


Figure 16: Prohibited Bypass Duration vs. River Stage

