

City of Memphis

Semi-Annual Report April 1, 2014 through September 30, 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.


Bobby D. Allen, P.E.


Date

Section 1

Introduction

On September 20, 2012, the United States District Court for the Western District of Tennessee entered a Consent Decree between the City of Memphis (the City) and the United States, the State of Tennessee, and the Tennessee Clean Water Network.

To fulfill the reporting requirements defined in Paragraph VIII.25. of the Consent Decree, the City has prepared this Semi-Annual Report, which includes the following information:

- A description of projects and activities completed and milestones achieved during the previous six month period pursuant to the requirements of the Consent Decree.
- A summary of significant projects and activities anticipated to be performed, and milestones anticipated to be achieved, in the next six month period pursuant to the requirements of the Consent Decree.
- Any additional information determined to be appropriate to demonstrate implementation of the remedial actions required under the Consent Decree.

This report is organized into four sections:

- **Section 1** provides an introduction.
- **Section 2** documents recent progress and anticipated continuing activities related to development and implementation of the Management, Operations, and Maintenance (MOM) Programs noted in the Consent Decree.
- **Section 3** identifies recent progress and anticipated continuing activities related to the Priority Rehabilitation Projects noted in the Consent Decree.
- **Section 4** provides a summary of additional actions that the City has recently completed and anticipates completing over the next six months to maintain compliance with the Consent Decree.

Section 2

Management, Operations, and Maintenance Programs

As defined in Paragraph V.10 of the Consent Decree, the City shall develop and implement specific MOM Programs. These MOM Programs are listed below along with a summary of activities completed in the previous six months and activities anticipated to be performed during the upcoming six months. A chart showing the status of compliance is presented as **Figure 2-1**. All MOM Programs activities are currently in compliance.

2.1 Sewer Overflow Response Plan

Activities Completed During This Reporting Period

The City submitted a Sewer Overflow Response Plan (SORP) to the U.S. Environmental Protection Agency (EPA) and Tennessee Department of Environment and Conservation (TDEC) on March 11, 2011, before the Consent Decree was entered. A copy of the SORP is included in Appendix B of the Consent Decree. During the previous reporting period, the City conducted a review of the SORP with no changes recommended at this time. The City continued to operate under the processes described in the SORP during the reporting period.

Activities Anticipated to be Performed During the Next Reporting Period

The City will continue to operate under the approved SORP.

2.2 Fats, Oil, and Grease Management Program

Activities Completed During This Reporting Period

During the previous reporting period, the City submitted an updated Fats, Oil, and Grease (FOG) Management Plan to EPA for approval. EPA issued a letter dated April 22, 2014, approving the updated FOG Management Plan. Upon receipt of this approval, the City began to operate under the processes described in the updated FOG Management Program. As discussed in the previous report, Food Establishment Waste Discharge (FEWD) reissued permits did not, at that time, include language requiring FEWDs to maintain documentation of training on site for review during routine FOG inspections. However, all permits issued after May 1, 2014, contain such language. In addition to conducting the required inspection and reporting activities, the City has continued public outreach efforts, such as the use of billboard and bus stop advertising and the distribution of "Can the Grease" door hangers and can lids to discourage residents from discarding cooking oils and other FOG in the sewer system.

Activities Anticipated to be Performed During the Next Reporting Period

The City will continue to operate under the approved updated FOG Management Plan.

CD Reference	CD Milestone	Progress Last Six Months						Anticipated Activities Next Six Months					
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
V.10.a	-	Continuing to implement program.						Continue to implement program.					
V.10.b	-	Received EPA approval of revisions on April 22. Continued to implement approved program.						Continue to implement program.					
V.10.c	9/19/2013	Awaiting comments from EPA and/or TDEC.						Respond to any comments received, revise program as appropriate, and implement approved program.					
V.10.c.iii	3/19/2013	Previously completed. SCADA is operational.											
V.10.d	9/19/2013	Received comments from EPA on August 28. Provided revised report on September 25.						Respond to any further comments received, revise program as appropriate, and implement approved program.					
V.10.e	3/19/2013	Awaiting comments from EPA and/or TDEC.						Respond to any comments received, revise program as appropriate, and implement approved program.					
V.10.f	9/19/2013	Submitted revised report on May 8. Received additional comments from EPA on June 5. Submitted response on July 3. Received approval on September 10.						Continue to implement program.					
V.10.g	Within 180 days of EPA approval of CSAP	Under development.						Submit to PDR, EPA, and TDEC.					

2.3 Lift Station and Force Main O&M Program

Activities Completed During This Reporting Period

The City is awaiting EPA and TDEC comments on the Lift Station and Force Main Operations and Maintenance (O&M) Program.

Activities Anticipated to be Performed During the Next Reporting Period

It is anticipated during the next reporting period that EPA, after consultation with TDEC, will provide the City comments on the Lift Station and Force Main O&M Program or approve the document as submitted. Section 14 of the Consent Decree generally envisions up to a 120-day period for EPA comments on deliverables. The City will respond to comments received from EPA, if any, and will revise the Lift Station and Force Main O&M Program, as appropriate. Once approved, the City will implement the Lift Station and Force Main O&M Program.

2.4 Gravity Sewer System O&M Program

Activities Completed During This Reporting Period

On August 28, 2014, EPA provided the City comments on the Gravity Sewer System O&M Program. The City addressed these comments and submitted an amended Gravity Sewer System O&M Program on September 25, 2014.

Activities Anticipated to be Performed During the Next Reporting Period

It is anticipated during the next reporting period that EPA, after consultation with TDEC, will approve the resubmitted Gravity Sewer System O&M Program or provide additional comments. The City will respond to additional comments received from EPA, if any, and will revise the Gravity Sewer System O&M Program, as appropriate. Once approved, the City will implement the Gravity Sewer System O&M Program.

2.5 Inter-Jurisdictional Agreement Program

Activities Completed During This Reporting Period

No additional activities regarding the Inter-Jurisdictional Agreement Program (IJAP) were completed during the reporting period, as the City is awaiting EPA and TDEC comments.

Activities Anticipated to be Performed During the Next Reporting Period

It is anticipated during the next reporting period that EPA, after consultation with TDEC, will provide the City comments on the IJAP or approve the IJAP as submitted. Section 14 of the Consent Decree generally envisions up to a 120-day period for EPA comments on deliverables. The City will respond to comments received from EPA, if any, and will revise the IJAP, as appropriate. Once approved, the City will follow the IJAP for new agreements and renewal of existing agreements related to the collection, conveyance, and treatment of sewage by the City from municipal satellite sewer systems.

2.6 Continuing Sewer Assessment Program

Activities Completed During This Reporting Period

The City completed development of the Continuing Sewer Assessment Program (CSAP), as required in Paragraph V.10.f of the Consent Decree and submitted the document to EPA and TDEC for review on September 16, 2013. Following an initial review of the CSAP by EPA, a summary of preliminary

comments from EPA was discussed with the City in March 2014 that resulted in a resubmittal of the report on May 8, 2014. The City received additional comments from EPA on June 5, 2014, which were addressed, and the revision submitted to EPA on July 3, 2014. On September 10, 2014, the City received approval of the CSAP from EPA. Formal implementation of the CSAP began on September 10, 2014.

Activities Anticipated to be Performed During the Next Reporting Period

During the next reporting period, the City will continue implementation of the CSAP in accordance with the timeframes presented in the Consent Decree. This is further described in Section 3.1.

2.7 Infrastructure Rehabilitation Program

Activities Completed During This Reporting Period

The City continued preliminary activities to support the development of the Infrastructure Rehabilitation Program (IRP), as required in Paragraph V.10.g of the Consent Decree.

Activities Anticipated to be Performed During the Next Reporting Period

During the next reporting period, it is anticipated that work on the IRP will continue, and the IRP will be submitted to the Public Documents Repository, EPA, and TDEC in accordance with the timeframes presented in the Consent Decree. Based on the approval date of the CSAP, the IRP will be submitted to EPA and TDEC by March 9, 2015.

Section 3

Priority Rehabilitation Projects

As defined in Paragraph V.11 of the Consent Decree, the City shall complete various Priority Rehabilitation Projects. These projects are listed below along with a summary of activities completed in the previous six months and activities anticipated to be performed during the upcoming six months. A chart showing the status of compliance is presented as **Figure 3-1**. All Priority Rehabilitation Project activities are currently in compliance.

3.1 Priority Areas Projects

Paragraph V.11.a of the Consent Decree identifies several areas of the City's wastewater collection and transmission system (WCTS) that should be assessed during the first and second years following approval of the CSAP. These areas are shown in Appendix E and F of the Consent Decree, respectively. Additionally, a subset of the first year priority area (Appendix E), as shown in Appendix G of the Consent Decree, is identified as a priority during implementation of the IRP. Rehabilitation projects within this area (Appendix G) are to be completed within six years and seven months after EPA's approval of the IRP.

The total estimated quantity of pipe to be assessed in the Year 1 Priority Area (Appendix E) is 1,329,600 linear feet. The total estimated quantity of pipe to be assessed in the Year 2 Priority Area (Appendix F) is 597,400 linear feet.

Activities Completed During This Reporting Period

Condition assessment work in the Year 1 and Year 2 priority areas was tied to approval of the CSAP, which occurred on September 10, 2014. However, some activities have been completed or are underway, including work associated with previously-identified pilot areas. The pilot study, as further described in Section 4, included the assessment of portions of the Year 1 (Appendix E) and Year 2 (Appendix F) areas. To date, approximately 188,000 linear feet and 38,000 linear feet of pipe and associated manholes are undergoing assessment in the Year 1 and Year 2 areas, respectively. This work is being completed in accordance with the procedures outlined in the draft CSAP which was subsequently approved by EPA, with the primary revision being the incorporation of Standard Operating Procedures (SOPs). Inasmuch as the SOPs were based upon practices the City was already implementing, this work is being done in accordance with the CSAP. Data generated during this pilot study is being reviewed and processed as it becomes available. Assets that could not be assessed, such as buried manholes, were identified, and these assets will be assessed as work continues in the priority areas. As an additional step in the data review, areas in need of immediate repair are being identified and scheduled for future work.

For the remaining portions of the priority areas, contracts for Phase 1 assessment activities were issued during the reporting period (May and June, 2014). This assessment work, which was initiated during the reporting period, includes approximately 517,400 linear in the Year 1 area and 7,800 linear feet in the Year 2 area. Although initiated prior to receiving final approval of the CSAP, the work completed is in accordance with the procedures outlined in the approved CSAP.

Additionally, bid packages for the Phase 2 assessment work were developed during this reporting period. This is expected to include the assessment of approximately 624,200 linear feet of sewer and associated manholes in the Year 1 area and approximately 551,600 linear feet of sewer and associated manholes in the Year 2 area.

Activities Anticipated to be Performed During the Next Reporting Period

Phase 1 assessment work is anticipated to be completed during the upcoming reporting (scheduled for December 2014).

The City anticipates soliciting proposals for the Phase 2 assessment work in October 2014 with an anticipated Notice to Proceed in December 2014. Phase 2 assessment work is currently scheduled to be complete in July 2015.

To complete assessment work associated with manholes that are buried or paved over in the Year 1 area, the City anticipates issuing a contract for uncovering and/or raising manholes during the upcoming reporting period. Assessment work will follow this manhole work and is anticipated to be completed in accordance with the timeframes established by the Consent Decree.

Reference	CD Milestone	Progress Last Six Months						Anticipated Activities Next Six Months					
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
.11.a	Within one year of EPA approval of CSAP	Continued work in pilot area. Following approval of the CSAP, condition assessment in Phase 1. Bid package preparation in Phase 2.						Continue condition assessment activities.					
	Within two years of EPA approval of CSAP	Continued work in pilot area. Following approval of the CSAP, condition assessment in Phase 1. Bid package preparation in Phase 2.						Continue condition assessment activities.					
	Via implementation of IRP	No work this period						No work anticipated until approval of the IRP					
	Six years and seven months after EPA approval of IRP	No work this period						No work anticipated until approval of the IRP					
	Within 27 months of EPA approval of IRP	No work this period						No work anticipated until IRP has been approved and rehabilitation projects are underway					
	Within six months of rehabilitation projects completion	No work this period						No work anticipated until rehabilitation projects are complete					
.11.b	9/19/2017	Preliminary work associated with the second critical area continued.						Continued evaluation and design of work for the second area.					
	Within six months of rehabilitation projects completion	No work this period						Final Critical Areas Project Report will be prepared after the second area is complete.					
1.1.c.(i)	9/19/2016	Previously completed.											
1.1.c.(ii)	9/19/2016	No work this period						Plans and specifications will be developed and bids solicited for assessment of the manholes.					
1.1.c.(iii)	9/19/2016	Construction contract was issued for 28 of the remaining manholes.						Rehabilitation of 28 manholes will continue. Plans and specifications will be developed for the remaining four manholes.					
1.1.c.(iv)	9/19/2016	Construction activities were completed.						Project is complete.					

3.2 Critical Infrastructure Areas Projects

Activities Completed During This Reporting Period

As discussed in Paragraph V.11.b of the Consent Decree, three areas within the WCTS were identified to receive prioritized rehabilitation due to the critical nature of the infrastructure and the potential consequences of large sanitary sewer overflows volumes in the event of a failure. A map showing the locations of these areas is included as Appendix H of the Consent Decree.

Preliminary work associated with the second critical area, which is a portion of the 96-inch interceptor at the entrance/exit ramp located at mile 51 of Interstate 240, continued through this reporting period.

Activities Anticipated to be Performed During the Next Reporting Period

It is anticipated that work associated with the second critical area will continue through the next reporting period and will be completed within the timeframe established in the Consent Decree. The Final Critical Areas Project Report is anticipated to be submitted within six months of completion of the second critical area, consistent with the terms of the Consent Decree.

3.3 Prior Assessment Areas Projects

Activities Completed During This Reporting Period

As discussed in Paragraph V.11.c of the Consent Decree, four additional rehabilitation projects have been identified based on previous inspection and assessment activities. These projects are to be completed within four years from the effective date of the Consent Decree.

Paragraph V.11.c.(iii) of the Consent Decree requires the rehabilitation of 64 manholes identified in the June 6, 2006 Buchart-Horn study report. Thirty-two of these manholes have previously been rehabilitated. As discussed in the last semi-annual reporting period, plans and specifications were developed, and bids were solicited for 28 of the remaining manholes. The City issued a contract in July for rehabilitation of these 28 manholes. The work was initiated during this reporting period and is anticipated to be completed within the next reporting period.

The work described in Paragraph V.11.c.(iv) includes cured-in-place pipe (CIPP) lining on segments of the Wolf River Interceptor between demarcation points W05-120 and W05-130. This work was completed during the reporting period.

Activities Anticipated to be Performed During the Next Reporting Period

During the upcoming reporting period, it is anticipated that the rehabilitation of the 28 manholes initiated in the previous reporting period will be completed. It is also anticipated that plans and specifications will be developed for rehabilitation of the remaining four manholes as discussed in Paragraph V.11.c.(iii).

During the next reporting period it is anticipated that plans and specifications will be developed, and bids solicited, for assessment of the Mud Island manholes and associated piping as per Paragraph V.11.c(ii).

Work associated with the remaining activities is anticipated to be completed within the timeframes established in the Consent Decree.

Section 4

Additional Measures to Maintain Compliance

In addition to the projects and activities described in the previous sections, the measures described below are related to the City's ongoing Consent Decree compliance.

4.1 M.C. Stiles WWTP Foam Study and Outfall Improvements

As described in Paragraph V.12 of the Consent Decree, the City is required to implement the M.C. Stiles Wastewater Treatment Plant (WWTP) Foam Study and Outfall Improvements Work Plan that was included as Appendix I of the Consent Decree. During preliminary design, CDM Smith determined that the recommended alternative in the Work Plan may not result in the desired reduction of foaming. As such, additional evaluation consisting of physical modeling and testing was performed to confirm a preferred alternative. As discussed with EPA, the additional evaluation activities extended the schedule that was originally presented in the Work Plan.

Activities Completed During This Reporting Period

On May 19, 2014, the first amendment of the Consent Decree, which identified a preferred alternative design consisting of a vortex structure and which included a revised construction schedule, was approved and filed with the court. The procurement process for construction of the vortex structure was initiated, including a mandatory pre-bid meeting that was held on September 23, 2014. Since this is a design/build process, it will require an engineer / contractor team to complete the project. Each team will be pre-qualified before they are allowed to submit a bid.

Activities Anticipated to be Performed During the Next Reporting Period

Bids from pre-qualified teams are scheduled to be received on November 12, 2014. The schedule presented in the amendment set forth 160 days for Design-Build Contractor Selection which would provide for a February 3, 2015, date for executing the contract. The potential breakdown of items under that 160-day period indicates that the City is slightly behind the time estimated for bids because, due to the complexity of the project, the City allowed additional time for the development of engineer / contractor teams and preparation of team qualifications. It is anticipated that an engineer / contractor team will be selected during the upcoming reporting period to construct the outfall project. It is anticipated that a contract will be executed during the next reporting period, ahead of the scheduled date of February 3, 2015.

4.2 State Projects

As outlined in Appendix J of the CD, the City agreed to spend \$645,000 to implement two state projects. The initial project is the color study which is being implemented at a cost of \$290,900. The remaining funds, or \$354,100, are required to be spent on converting the City's sanitary sewer drawings into a GIS format. Through the end of this reporting period, the City has expended \$250,000 on the GIS project. The remaining \$104,100 is anticipated to be expended by the end of the next reporting period. This will satisfy the requirements of Appendix J for conducting the two state projects. Activities associated with the two state projects are described in the following subsections.

4.2.1 State Project A – Color Study

As described in Appendix J of the Consent Decree, the City is required to undertake a color study to assist TDEC in the development of a numerical color permit limit.

Activities Completed During This Reporting Period

The University of Memphis' Ground Water Institute, through their contract with the City, completed the TDEC-approved color study project during this reporting period, and the Initial Study Results were submitted to TDEC on August 29, 2014. However, due to the inherent nature of this type of study, minimal similar studies completed, and the age of the studies that have been completed, determining a time frame to complete the study from the onset of the project was difficult. In order to successfully complete the project the City requested, and TDEC approved, an extension for submitting the Initial Study Results as per item 4 of Section II.C. of Appendix J of the Consent Decree. The extension extended the submittal date from May 17 until August 31. It should be noted that this extension was necessary to comply with interim milestones only. The schedule in the Consent Decree allowed 28 months to complete the project. Even with the time extension, the City submitted the Initial Study Results to TDEC in approximately 23 months.

Activities Anticipated to be Performed During the Next Reporting Period

It is anticipated during the next reporting period that the City will submit the final Initial Study Results.

4.2.2 State Project B – Geographic Information System

As provided by Appendix J of the Consent Decree, the City began implementing the transition of its sanitary sewer record information, primarily on paper maps, into an electronic Geographic Information System (GIS). This work is being completed by the University of Memphis Center for Partnerships in Geographic Information Systems (CPGIS).

Activities Completed During This Reporting Period

CPGIS completed converting basic information for the Year 1 and Year 2 Priority Areas from paper block maps into GIS. CPGIS developed maps showing the assets and associated asset number in these areas. Upon completion of the Year 1 and 2 Priority Areas, digitization efforts were extended to other areas of the WCTS. At the end of this reporting period, CPGIS has digitized approximately 31% of the City's WCTS.

As condition assessment GPS data is collected in the field, this data subsequently replaces the digitized data being developed by CPGIS. At the end of this reporting period, GIS data for approximately 6% of the City's WCTS has been updated based on field assessment data.

Activities Anticipated to be Performed During the Next Reporting Period

During the next reporting period CPGIS will continue to digitize future assessment areas. In addition, the existing WCTS GIS data will be updated with information collected during field investigation activities.

4.3 Program Administration Activities

Since entering into the Consent Decree, the City has conducted several administrative activities for the implementation of the Consent Decree program, known as the Sewer Assessment and Rehabilitation Program or SARP10.

Activities Completed During This Reporting Period

- **Coordination with Emergency Personnel:** Through the condition assessment process, the City coordinated weekly with fire and police department leadership to keep them abreast of on-going activities and work locations.
- **Coordination with Special Projects:** The SARP10 Team has been working closely with City personnel to identify upcoming City special projects that may require coordination with future sewer improvements. The sewer lines associated with the projects are assessed using CCTV to identify areas in need of repair. The repairs are subsequently conducted to avoid disrupting future construction activities and to avoid patching associated paved areas.
- **Street Paving Projects:** The SARP10 Team has been working closely with City and State personnel to identify upcoming street paving projects. The sewer lines associated with these streets are assessed using CCTV to identify areas in need of repair, and required repairs are subsequently made to avoid patching newly paved areas.
- **Workforce Development:** The City continued with its workforce development program. The program is comprised of five-stages: assess, recruit, train, place, and retain. The assessment phase identifies the types of jobs that will be needed to complete the Consent Decree-related work and that could be filled by local personnel. Subsequently potential candidates are identified and screened. These personnel are provided training as necessary to avail them for potential employment by contractors working on Consent Decree-related projects. As candidates are placed, their progress is monitored.

During this reporting period, approximately sixteen candidates were provided public engagement training. They provided a key piece of the SARP10 phase 1 public engagement project. These participants, identified as the “Green Team”, went door to door in the neighborhoods prior to work beginning in these areas. The Green Team distributed door hangers providing information about smoke testing and grease disposal. They also interacted with residents when possible. The team provided information to over 11,000 homes.

Also as a result of the program, three candidates have obtained full-time employment with assessment contractors working for the City. A fourth candidate has obtained full time employment with one of the Program Manager’s teaming partners and is in training to be a field inspector. This same teaming partner also provided summer employment for a local civil engineering student.

- **Public Relations:** The program continued to conduct public meetings in the assessment areas and will continue these efforts in the future.
- **Manhole Adjustment Contract:** A contract was procured to raise buried manholes to grade so that they can be accessed and assessed.
- **Point Repair Contract:** A contract was procured to complete high priority point repairs identified as part of the condition assessment program.

Activities Anticipated to be Performed During the Next Reporting Period

Implementation of the activities described above will continue through the upcoming reporting period. Additionally, the City anticipates releasing two additional contracts for manhole adjustments and point repairs.

4.4 Snowden Assessment and Rehabilitation

Although not required at the time by the Consent Decree (except to the extent that there is some minor overlap with the Appendix E and Appendix F areas), the City is already undertaking assessment and rehabilitation work in the Snowden area. The assessment area included approximately 87,400 linear feet of pipe and 251 manholes.

Activities Completed During This Reporting Period

Repair and rehabilitation work in the Snowden area has continued throughout the reporting period. To date, approximately 75 percent of the work has been completed, including approximately 58,600 linear feet of CIPP lining, 6,200 linear feet of pipe bursting, and 78 point repairs. Due to conditions encountered in the field, revisions to the original rehabilitation scope of work were required. As such the quantities of the various repair items changed, and the schedule was extended into the current reporting period.

Activities Anticipated to be Performed During the Next Reporting Period

Due to the field conditions, additional point repairs are anticipated to be scheduled. The rehabilitation work in the Snowden area is anticipated to be completed during the next six to twelve months.

4.5 Cane Creek and Hickory Hill Pilot Assessment Areas

Although not required at this time by the Consent Decree, the City identified two areas to serve as pilot areas to test the procedures being established through the CSAP and help the City in the development of the IRP. The first area, Cane Creek, includes a portion of the Year 1 Priority Area and encompasses approximately 283,000 linear feet of sewer. The second area, Hickory Hill, is located in the southeast portion of the City and includes approximately 40,900 linear feet of sewer. The Hickory Hill area, which was constructed much more recently than the Cane Creek area, was included as part of the pilot to provide assessment data that is more representative of the range of conditions found within the WCTS.

Activities Completed During This Reporting Period

The majority of the assessment work in these areas, which primarily included smoke testing, manhole inspection, and CCTV inspection, was completed during the reporting period. Additionally, the majority of the data generated from the assessment work has been reviewed.

Activities Anticipated to be Performed During the Next Reporting Period

During the upcoming reporting period, it is anticipated that the remaining condition assessment work will be completed, excluding some areas that may require manholes to be raised. Additional data generated from the assessment work will be reviewed and verified during the next reporting period. It is anticipated that buried manholes will be raised during the next reporting period. As the data is reviewed, areas in need of immediate repairs will be scheduled as necessary.

4.6 Loosahatchie Interceptor Assessment

The City is undertaking condition assessment of approximately 46,800 linear feet of the Old Loosahatchie Interceptor and 53,400 linear feet of the New Loosahatchie Interceptor to further understand its condition and to evaluate the need for cleaning and rehabilitation.

Activities Completed During This Reporting Period

The City had previously identified 22,000 linear feet of the Loosahatchie Interceptor for CCTV and sonar inspections to assess the condition of this interceptor but has expanded the project to include both the Old and New Loosahatchie Interceptors. The expanded project includes the assessment of 100,200 linear feet of interceptor and surveying manhole rim and pipe invert elevations. Approximately 25 percent of the surveying has been completed through the end of the monitoring period. The inspection and survey information will allow the City to identify structural defects along the interceptor, assess the amount of sediment in the pipe, and evaluate other potential concerns.

Activities Anticipated to be Performed During the Next Reporting Period

It is anticipated that during the upcoming reporting period that the additional assessment work will be conducted as described in this section. Surveying is anticipated to be completed during the upcoming reporting period, providing information for Old and New Loosahatchie interceptor manholes and pipes. It is also anticipated that a contract will be issued to perform CCTV and sonar assessment of interceptor pipes. The assessment data collected will be used to identify the amount of cleaning necessary and to document the condition of both interceptors for rehabilitation considerations.

4.7 Big Orange Lift Station Rehabilitation

The Grey's Creek Big Orange Lift Station is one of the City's largest stations with a capacity of approximately 3,500 gallons per minute.

Activities Completed During This Reporting Period

During the reporting period, rehabilitation of the Big Orange Lift Station was completed and the station returned to normal operation.

Activities Anticipated to be Performed During the Next Reporting Period

This project is complete, and no additional work is anticipated.