

CITY OF BALTIMORE

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DEPARTMENT OF PUBLIC WORKS

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July 27, 2016

VIA OVERNIGHT MAIL

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Reference DOJ Case No. 90-5-1-1-4402/1

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RE: United States, et al. v. Mayor and City Council of Baltimore
Civil Action No. JFM-02-1524
Calendar Quarterly Report No. 55
For Calendar Quarter Ending June 30, 2016

Ladies and Gentlemen:

In the above referenced Consent Decree, the City of Baltimore agreed to submit a Calendar Quarterly Progress Report covering activities required by the Consent Decree. Included herewith is Calendar Quarterly Report No. 55, for the Calendar Quarter ending June 30, 2016.

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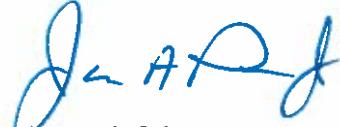
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July 27, 2016

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We trust that you will agree that the City of Baltimore is in compliance with this requirement of the Consent Decree. Please notify us if you have any questions related to this item.

Sincerely,



James A. Price Jr, Acting Bureau Head
Water & Wastewater

Enclosures

JAP:ajd

cc: Rudolph Chow, P.E.
Dana Cooper, Esquire
Ms. Dawn Lettman
Mr. George Nilson
Thomas Lingan, Esquire
Mr. Michael Gallagher
Art Shapiro, P.E.
Arthur Jones-Dove, P.E.
File

Statement of Certification

I certify under penalty of law that this information was 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 directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.



James A. Price Jr.
Acting Bureau Head



Civil Action No. JFM-02-1524
Calendar Quarterly Report No. 55
For Calendar Quarter Ending June 30, 2016

City of Baltimore Sanitary Sewer Overflow Consent Decree

Civil Action No. JFM-02-1524

Calendar Quarterly Report No. 55
For Calendar Quarter ending June 30, 2016

*Submitted:
July 29, 2016*

*Submitted To:
United States Environmental Protection Agency
United States Department of Justice
Maryland Department of the Environment*

*Prepared By:
City of Baltimore
Department of Public Works,
Bureau of Water and Wastewater*



Civil Action No. JFM-02-1524
Calendar Quarterly Report No. 55
For Calendar Quarter Ending June 30, 2016

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A. INTRODUCTION

This Calendar Quarterly Report is submitted pursuant to the requirements of a Consent Decree entered on September 30, 2002 in the United States District Court for the District of Maryland as part of the response to Civil Action No. JFM-02-1524. This Calendar Quarterly Report is intended to provide an update on the progress of remedial measures required by the Consent Decree and the status of various programs to be implemented.

The requirements for the Calendar Quarterly Report are specified in Paragraph 18 of the Consent Decree, which reads as follows:

"Beginning with the first full calendar quarter after the Date of Entry of the Consent Decree, Baltimore shall submit to EPA and MDE within thirty (30) days after the end of each calendar quarter until termination of this Consent Decree a Calendar Quarterly Progress Report ("Calendar Quarterly Report") covering the subject of this Consent Decree. This Calendar Quarterly Report shall contain the following:

- i. Progress reports on the implementation of the requirements of Section VII (Remedial Measures) as described in Paragraphs 8 through 15;
- ii. A description of any problems anticipated with respect to meeting the requirements of Section VII (Remedial Measures) of this Consent Decree; and
- iii. A description of all environmentally beneficial projects and SEP implementation activity in accordance with Paragraphs 29-33 of the Consent Decree; and
- iv. Any such additional matters as Baltimore believes should be brought to the attention of EPA and MDE."

It was noted that Paragraph 18 contained a typographical error. The Remedial Measures described in Paragraphs 8 through 15 comprise Section VI of the Consent Decree, and not Section VII. Accordingly, this Calendar Quarterly Report refers to Paragraphs 8 through 17 of the Consent Decree as Section VI.

B. PROGRESS OF IMPLEMENTATION OF SECTION VI REQUIREMENTS

For reference purposes, this Section B is organized so that the item numbers correspond directly to Paragraphs and subparagraphs in the Consent Decree.

Paragraph 8: Elimination of Sanitary Sewer Overflow and Combined Sewer Overflow Discharges

- A. General Requirements:** During the calendar quarter ending June 30, 2016, the City of Baltimore was in general compliance with the Clean Water Act and Title 9, Subtitle 3 of the Environment Article, Annotated Code of Maryland. Episodes of non-compliance include un-permitted sanitary sewer overflows (SSOs), as reported during the quarter in accordance with Paragraph 17 of the Consent Decree and as summarized in Appendix 5 herein.
- B. Construction Projects:** Appendix 1 to this Calendar Quarterly Report provides a status update for each of the construction projects listed in Appendix D of the Consent Decree.

1. Practical Completion

As design and construction progress, concerns and issues have arisen that may impact the schedule for some of the Paragraph 8 projects, are as follows:

Project No. 8: Stony Run Interceptor and Pumping Station: Due to significant public opposition to the proposed pumping station site in Wyman Park, additional pumping station locations were investigated. A new location at the Department of Public Works Solid Waste Site, near the intersection of Sisson Street and 29th Street had been selected and approved by MDE and EPA. To expedite the project, this project was split into 3 phases:

- SC 819 (Phase 1) is an upper portion of Stony Run interceptor and consists of rehabilitation, and partial replacement of pipelines and manholes located north of Wyndhurst Avenue. Practical completion of this project was complete as of October 14, 2006.
- SC 838 (Phase 2) is the middle portion of Stony Run interceptor and consists of rehabilitation and partial replacement of pipelines located between Cold Spring Lane and Wyndhurst Avenue. Practical completion of this project was complete as of March 21, 2007.
- SC 839 and SC 847 (Phase 3) consist of 20 mgd pumping station, force main and gravity sewer. Due to delay in siting the pump station, the City has requested and MDE has approved a 6-month extension for the project advertisement and completion dates. Both SC 839 and SC 847 were advertised on June 16, 2006. For Contract SC 839, the city received only one bid 65% above the engineers estimate. The city rejected this bid and had determined that the compressed construction schedule of one year is the primary reason for the unusually high bid amount and lack of competitive bidding. The

City re-advertised Contract SC 839 on October 27, 2006 and, anticipated that based on bids received in December, contract negotiations will begin. The City sent a letter on October 13, 2006 requesting an additional extension of fourteen (14) months to account for the additional time required for construction due to the increased scope of work. For SC 847 the city had awarded this contract to a successful bidder and the current duration was one year, however the full functionality and operation of the pumping station will depend on the progress of SC 839. Therefore, the City has requested to move the practical completion date for SC 839 and SC 847 from December 31, 2007 to February 28, 2009. A response from MDE was received on February 26, 2007, granting the requested extension. The Practical Completion deadline for both of these projects is now February 28, 2009. The extension letter request for the extension of SC 847 to May 31, 2009 was granted by EPA on June 22, 2009 and MDE on April 15, 2010. Practical Completion was achieved on May 29, 2009, for lower portion of project SC 839RR – Stony Run Interceptor. Conditional acceptance for SC 839RR was achieved on July 21, 2011.

2. SSO Structure Elimination

SSO No. 132 is located at the intersection of Springdale Avenue and Hilton Street. It was proposed to monitor this SSO structure for a twelve-month period ending September 18, 2004. During the calendar quarter ending September 30, 2005, activity was observed at this SSO structure on March 23, and March 28, 2005.

The City of Baltimore eliminated SSO No. 33 & No. 34 on December 10, 2008 and December 23, respectively. The City of Baltimore eliminated SSO No. 136 on January 21, 2009.

SSO No. 132 is located at intersection of Hilton Street & Springdale Ave

SSO No. 134 is located near the intersection of Liberty Heights and Elamont Road.

SSO No. 135 is located one block away from SSO No. 134, at the intersection of Liberty Heights and Dennlyn Road.

SSO No. 137 is located near the intersection of Shannon Drive and Brehms Lane.

SSO No. 138 is located at the intersection of Cold Spring Lane & Ayrdale Ave.

SSO No. 139 is located at the intersection of W Garrison Ave and Queensberry Ave.

The City is working on addressing these SSOs. The City has engaged the services of an engineering firm to investigate and evaluate the collection system adjacent to SSO Nos. 132, 134 and 135. The design to eliminate these SSOs is complete and the contract was advertised on February 10, 2012, bids were opened on April 4, 2012, contract was awarded on September 26, 2012, and Notice to Proceed was issued on February 4, 2013. Due to construction and bypass activity at SSO #132 (site P8_10_132S), SSO #134 (site HL32) and SSO #135 (site P8_10_135S) these meters were removed on 2/20/14, 8/17/13 and 6/13/14 and, respectively. These meters were re-installed on 9/11/14 after construction activities were concluded. **SSO #132 and #134 were eliminated and permanently sealed on June 27, 2016.**

SSO 150 located at the intersection of N Calvert St & Chancery Rd

SSO 151 located in the proximity of 4210 Curtis Ave



SSO 152 located at the intersection of N Charles St & W Lanvale St
SSO 153 located at the intersection of Fernhill Ave & Hillsdale Rd
SSO 154 located at N. Charles Street & W. Lafayette Avenue

Flow meters have been installed and will monitor these locations for 6 months. The collected data in conjunction with the hydraulic model will determine if they can be sealed.

The City will continue to monitor and evaluate activity at these SSO structures and will continue to keep EPA and MDE advised of progress in future Calendar Quarterly Reports.

Other than the concerns and issues noted here, all Paragraph 8 projects are complete. The milestone dates specified in Appendix D of the Consent Decree have all been met.

C. Separate Sanitary Sewer Characterization Report: This requirement has been completed.

D. Elimination of Combined Sewer Overflows:

Walbrook: This project has been completed.

Forest Park: During the calendar quarter ending September 30, 2006, combined sewer overflow (CSO) No. 13P was eliminated and the City reported that the Combined Sewer System has been separated and all CSO structures have been eliminated in the Forest Park neighborhood.

On October 11, 2006, the City sent a letter to MDE/EPA that included a report dated March 2006 entitled "Confirmatory Testing for Final Separation of Combined Sewer System in Forest Park Area". The letter also documented the elimination dates for the CSO structures associated with this area, including 10P, 11P, 13P, 18P, 19P, 21P, and 31P. Lastly, the City requested that post-construction monitoring be waived for these CSO structures since the eliminations were performed.

MDE responded to this letter on December 11, 2006, and approved the waiving of post monitoring for the CSO structures, with the exception of 13P. For this structure 13P, MDE noted that a site inspection was performed by MDE on October 19, 2006 that revealed the discharge of raw sewage. Therefore, MDE disapproved the waiving of the post-monitoring requirements at this location. On January 16, 2007, the City submitted a letter of response that included additional sampling results indicating that the high bacterial levels are due to stagnant pooling water at the outfall in lieu of a sewage discharge. It is therefore believed by the City that post-monitoring can be waived at overflow structure 13P. EPA requested that the City provide additional clarification regarding CSO 13P. Sampling was carried out on February 8, 2012 and a report and laboratory results were sent to EPA on March 21, 2012.

E. Flow and Rainfall Monitoring for Paragraph 8 Construction Projects:

As of June 30, 2016, 1 flow meters are installed as indicated in Table 8-1 specifically for Paragraph 8 Projects.

Table 8-1: Flow Monitor Installations for Paragraph 8 Projects

| Consent Decree Project ID No. | ADS Project ID No. | Project | No. of Meters | | |
|-------------------------------|--------------------|-------------------------------|---------------|-----|------|
| | | | April | May | June |
| 7 | 4 | Lower Jones Falls Interceptor | 0 | 0 | 0 |
| 8 | 5 | Stony Run Interceptor & P.S. | 1 | 1 | 1 |
| 10 | 7 | Greenmount Interceptor | 0 | 0 | 0 |
| Total | | | 1 | 1 | 1 |

A summary of rainfall and flow monitoring data collected during March, April and May 2016 (the data reported lags by one month due to the 30-day lag time in delivery of the prior month's data), prepared by RJN/ADS Environmental Services is submitted on a compact disk in the inside of the back cover of this Calendar Quarterly Report. The ADS report includes:

- Meter location maps
- Meter site reports
- Rain gauge location maps
- Tabular flow monitoring data
- Tabular rain gauge data
- Depth and velocity scattergraph plots
- Flow and rainfall data in Excel format

All flow meters are ADS Model 4000 flow monitors. Each meter was calibrated by manually measuring depth and velocity to confirm that the flow meters are functioning properly. Multiple measurements were obtained for each flow meter. These measurements are shown on the depth-velocity scattergraphs provided for the flow monitoring sites.

F. Progress Reports:

Progress of work under Paragraph 8 is as reported herein.

Paragraph 9: Collection System Evaluation and Sewersheds Plans

- A. The milestone dates for completion of the Sewersheds Study and Plan for each of the City's eight sewersheds, as established by Paragraph 9.B of the Consent Decree, recognize that evaluation work will not begin in earnest until several years after the Date of Entry.

Sewersheds Study and Plan: The City submitted Jones Falls, the first of the sewersheds plans to MDE/EPA and DOJ on December 26, 2008 with an approach plan for prioritizing the capital improvements recommended by the Jones Falls team and the other sewersheds. MDE/EPA submitted comments on the Jones Falls Report in a letter dated June 4, 2009. The City responded within 30 days. The Herring Run sewersheds plan was submitted to MDE/EPA and DOJ on June 26, 2009. The Low Level sewersheds plan was submitted to MDE/EPA and DOJ on December 22, 2009. The High Level sewersheds plan was submitted to MDE/EPA and DOJ on December 21, 2009. The Patapsco, Dundalk, Outfall and Gwynns Falls sewersheds plan were submitted to MDE, EPA and DOJ on June 15, 2010, June 18, 2010, June 25, 2010 and June 28, 2010, respectively. All eight (8) Sewersheds Plans/Reports were submitted by the milestone dates established in the Consent Decree.

In the Planning phase the Sewersheds teams have completed quality control and the quantities below are provided as final inspection quantities.

- A total of 33,227 manholes were inspected during Paragraph 9 sewersheds studies
- A total of 5,994,171 linear feet of sewers were CCTV inspected during Paragraph 9 sewersheds studies (~ 94%).

Any remaining assets will be inspected during Paragraph 9 rehabilitation projects.

B. The Sewersheds Study and Plan Elements: The Plan Elements in the Consent Decree are to be followed for each sewersheds.

C. Collection System Inspections: Please refer to Section A above for a summary of final inspection quantities.

In accordance with Paragraph 8 and 9 of the Consent Decree, many collection system components have been replaced, rehabilitated, and slip-lined. The City submitted to the EPA/MDE, under Paragraph 9 D (vii), a request for waiver of the Paragraph 9.D inspection requirements for these system components. In a letter dated September 04, 2007, MDE approved the request to waive inspection of selected portions of the collection system.

D. Infiltration and Inflow ("I/I") Evaluation: Flow monitoring began on May 09, 2006. As of June 30, 2016, the flow monitoring continues at 9 meter locations throughout the City, including the long term monitoring program.

E. Long-Term Capacity/Peak Flow Management: During the calendar quarter ending June 30, 2016, there was no capacity/flow management analysis activity related to the Sewersheds Studies and Plans.

F. Sewersheds Study and Plan(s) Approval and Implementation:

Sewersheds Study and Plan(s):

All eight (8) Sewersheds Plans/Reports have been submitted by the milestone dates

established in the Consent Decree.

Approval

The plans have been submitted. The City provided a technical workshop on February 26, 2009, addressed comments sent on June 4, 2009 for Jones Falls and met with MDE and EPA on May 3, 2010 to provide further justification on the use of the 2-year 24 hr design storm. In addition to other items such as an affordability analysis, MDE and EPA also requested that the City consider levels of improvement that would minimize SSOs in sensitive areas. Based on EPA's definition of "sensitive areas" received on June 28, 2010, the City evaluated an approach that includes the sewershed studies recommended improvements and accounts for higher levels of controls for minimizing SSOs in identified sensitive areas. The City received a letter from United States Environmental Protection Agency (EPA) dated February 10, 2011, stating that it has reviewed the Final Sewersheds Plans for Jones Falls, Herring Run, and High Level. Based on its review has concluded that after the City implements the proposed improvements (2-year 24-hour design storm) a significant number of overflows will remain during greater storm events, including 5-year and 10-year 24-hour storm events. Therefore, EPA cannot approve these sewershed plans as submitted because the recommended improvements fall short from the goal of the CD in ensuring that Baltimore's sewage collection system does not cause or contribute to SSOs.

EPA's response provides minimal direction on how the City should proceed with revising the plans. Therefore the City met with EPA and MDE on June 02, 2011, to better understand their expectations. During this meeting, the City presented a revised approach utilizing 64 years of historic rainfall data for determining the appropriate level of protection to be utilized as the basis of design for system improvements to reduce the number of SSOs. Based upon this meeting, EPA and MDE requested further clarification of the proposed methodology. The City submitted a white paper outlining the Continuous Simulation Methodology on June 30, 2011.

On July 8, 2011, representatives from EPA, MDE and the City participated in a conference call and the City answered EPA and MDE's questions regarding the white paper and the continuous simulation methodology. The City sent a follow-up letter to EPA and MDE on July 22, 2011 which further addressed EPA and MDE's questions. On August 29, 2011, EPA submitted additional comments and questions to the City and MDE. EPA and the City participated in a second conference call on August 31, 2011 during which the City responded to EPA's questions.

In a letter dated November 22, 2011, EPA requested that the City, simultaneously submit a proposed plan of improvements based on the continuous simulation approach in addition to a revised implementation plan based on a 10-year, 24 hour design storm by the end of 2011. The City submitted the requested information to EPA and MDE on December 30, 2011. The City received comments from EPA on the continuous simulation report on March 6, 2012 and responded in a letter dated March 22, 2012. EPA, MDE and the City met on March 8, 2012 to discuss on-going consent decree activities, the appropriate level of protection and modification to the compliance schedule. The EPA, MDE, and the City all agreed that starting with a baseline 5 year level of protection (LOP) to be augmented with greater protection in some areas is the right approach. It was that a series of technical workshops would be coordinated to develop the criteria to

be used in selecting the appropriate LOP. The first of these technical workshops was held on March 26, 2012, with representatives of the City, EPA Region 3 and MDE with other technical workshops to follow. During the workshop, EPA and MDE had some questions on the hybrid approach. The City provided the necessary clarification in a letter dated April 13, 2012.

On May 10, 2012, via e-mail, the City received preliminary guidance from EPA Region 3 on behalf of both EPA and MDE on the proposed continuous simulation methodology to address SSOs as follows:

1. Baltimore will submit a continuous simulation study and plan for each sewershed in its collection system to EPA and MDE by December 2012. Baltimore shall evaluate and propose hydraulic and capacity related improvements necessary to achieve a 5-year and 10-year SSO Level of Protection (LOP).
2. The decision on how to comply with the CD will remain with Baltimore. Based on modeling provided to date, the Agencies will not accept anything less than a 5-year LOP. However, where the calibrated modeling shows that there are remaining overflows, Baltimore will prioritize these overflows based on volume and develop a plan that will achieve a LOP necessary to meet CD requirements. This plan may include up to a 15-year LOP in some areas. These areas prioritized by volume will be addressed prior to the post construction monitoring phase."

EPA and MDE have indicated that they would be meeting in the near future to discuss the details associated with any proposed modifications to the consent decree and that a letter would be forthcoming once those details have been agreed to. The City submitted a letter dated, June 8th, 2012, to EPA and MDE acknowledging receipt of their e-mail on May 10. Further, the City requested a meeting to discuss the schedule, clarification regarding EPA's intentions, and regular coordination moving forward. To date the City still awaits a response from EPA and MDE. By letter dated September 10, 2012, the U.S. Department of Justice provided a proposal to modify the CD, extending the compliance deadline and addressing other issues.

On October 19, 2012, the EPA sent a letter to the City that included comments on the Integrated Planning Framework (IPF) presentation conducted by the City on September 24, 2012. On December 7, 2012, the City sent a letter to the Regulators regarding among other things the Sewershed Report Revisions and Integrated Planning. The City submitted the Sewershed Study and Plan Amendment in December 28, 2012.

The City met with EPA and MDE on January 31, 2013, to further discuss the revised Sewershed Report Revisions and Integrated Planning. Based upon this meeting, the City prepared a document called Phase 1 Adaptive Management Technical Memorandum (TM) that was submitted to EPA and MDE on February 28, 2013, detailing proposed projects, costs, estimated benefits and time frames for the first phase of the adaptive management approach.

The City received comments from EPA regarding the Technical Memorandum (TM) on March 12, 2013. The City responded to the comments in a letter dated April 11, 2013.

On November 1, 2013, the City received a response from the Regulators to the June 28, 2013, City letter regarding the time line for completion of Phase 2 Consent Decree work. The Regulators recognized the ongoing efforts by the City and indicated that they have no objection to the implementation of a refined version of the IPF and a two-phased adaptive management approach to complete the structural and hydraulic rehab under the Consent Decree. The Regulators also pointed out that a court approval of an amended Consent order is required if any deadlines are to be modified. **The City responded to the November 1, 2013 correspondence in a letter dated December 16, 2013 and met with EPA, DOJ and MDE on March 27, 2014 to provide a progress update on the Consent Decree. The City followed up with a letter dated May 12, 2014, to the Regulators highlighting the two phased adaptive management approach and re-iterating the City's willingness and commitment to move forward with the Consent Decree modification. On May 12, 2014 the City provided a response based on questions raised by EPA and MDE during the progress meeting on March 27, 2014. An additional follow-up conversation between EPA and the City on June 4, 2014 resulted in the Phase 1 Adaptive Management Contract Summary which was submitted to EPA on June 27, 2014.**

The City of Baltimore received a letter dated June 11, 2015, from the Department of Justice including proposed modifications to the City of Baltimore Consent Decree. Negotiations between the City and the Regulators on the modifications resulted in the United States Department of Justice lodging proposed modifications on June 1, 2016. The proposed modification establishes additional control measures, and provides more transparency to the public, as well as new interim milestones for completion of phase 1 and 2 projects, and a 2 year monitoring period before a final closure report is submitted by June 2033. The proposed modification will be open for public comment and requires court approval since it changes the terms and schedule of the original consent decree. The public will have a 60-day period to provide comments on the consent decree modification. All comments will be considered before the modification can be finalized by the court.

Implementation

The sewersheds studies and the system-wide hydraulic model clearly demonstrate how the sewage flows generated in the County will impact the recommended improvements within the City. Unfortunately, the timing of the City's and County's Consent Decrees limits the ability to best represent the planned improvements in the County. More importantly, County flows could be significant and could render a number of the recommended hydraulic improvements ineffective in eliminating SSOs. Conversely, we understand that the County is planning to reduce wet-weather flows which could result in over-sized hydraulic improvement projects and excessive costs for our downstream facilities. Since an estimate of the reduction in wet-weather flows from the County is not available at this time, the City cannot model this benefit. Therefore, we believe that implementing hydraulic improvements in the sewersheds that are impacted by County flows would be premature, may not result in the most fiscally responsible approach for the City, and may not achieve the Consent Decree goal of eliminating SSO's.

The Final Sewersheds Plans as submitted outlined how the City plans to implement all of the identified structural repairs and hydraulic improvement rehabilitation projects by January 1, 2016. However, the City believes this project scheduling ignores the inherent problem of lack of reliable Baltimore County hydraulic flow data crucial to five (5) of the City's sewersheds. The remaining three (3) sewersheds have no or minimal impacts from County flow. In addition to flow impacts from the County, the February 10, 2011, letter does not provide clear guidance for the City to evaluate all projects previously identified in the final sewershed plans. However, the City recognizes its responsibility to comply with the Clean Water Act and the Consent Decree, thus, the City is in good faith proceeding with some O&M related projects. These projects include designing other structural defect and hydraulic projects that will improve management of the collection system such as, cleaning and CIPP lining, point repairs, manhole rehabilitation, etc.

The City plans on advancing executable projects that are not impacted by the design storm selection while the City and MDE/EPA determine how best to address the misaligned Baltimore County Consent Decree data and the appropriate level of protection selection approach for Baltimore City. The City will monitor the collection system and calibrate the model, perform additional hydraulic simulations and assess the impact of County flows on the City's collection system, and determine the effectiveness of the selected construction projects and the effectiveness of projects implemented by the County. Doing so will allow the City to design and implement hydraulic improvements that more precisely comply with the intent of the Consent Decree, which is the elimination of SSOs. Appendix 2 of this Calendar Quarterly Report provides a status update for each of the construction projects being carried out under Paragraph 9 of the Consent Decree. The City will continue to coordinate with MDE and EPA to address the aforementioned issues and will revise the sewershed planning recommendations accordingly.

G. Progress Reports: Progress of work under Paragraph 9 is as reported herein.

Paragraph 10: Illegal Sewer Connections

- A. Illegal Private Connections:** During the calendar quarter ending June 30, 2016, Baltimore further addressed the list of suspected illegal connections to the collection system known to the City. The City had previously initiated enforcement actions for 14 suspected illegal connections by notifying the respective property owners of the suspected illegal connections and actions to be taken, as required by Paragraph 10.A of the Consent Decree. In accordance with the City's enforcement plan, staff of Housing and Community Development (HCD) inspected these 14 properties and determined that two were not illegal connections, ten required dye/smoke testing for confirmation, and two required further evaluation. The City performed dye testing and determined that only 5 are illegal connections. Furthermore, the City has identified and confirmed 33 additional properties within the Western Run Sewershed with potential illegal storm water connections to the sanitary system.

The City has further researched the 38 illegal connections documented in the past Quarterly Reports and has determined that the results of the testing performed to date cannot differentiate between an illegal connection or a privately-owned portion of a customer service connection lateral. Dye testing performed did prove that sources of inflow are connected to the sewer; however, it was not determined whether the connections were via direct connections to the sewer pipe or via the privately owned portion of the lateral. As such, the City should not have positively identified these as illegal connections and requests approval to remove the 38 connections from the list in Appendix 3 until further investigation can be performed. In February 2010, the City completed its illegal connections investigations in the Jones Falls Sewershed, including the 38 potential connections in the Western Run Area previously provided in Appendix 3, plus an additional 25 as identified in the Jones Falls Collection System Sewershed Study and Plan, utilizing dye-testing, smoke testing along with CCTV inspections. Based upon these investigations out of the 63 previously suspected illegal connections, only two illegal connections were confirmed. These locations are, 6309 Greenspring Ave and 4424 Marble Hall Rd.

6309 Greenspring Ave: A letter was sent to the property owner on August 08, 2011, and a follow up letter was sent on January 5, 2012. The second letter was returned unclaimed. Dye testing confirmed the location is abated.

4424 Marble Hall Road: On August 11, 2008 while performing dye testing as part of their field investigations, the Herring Run Sewershed team identified an illegal sewer connection at 4424 Marble Hall Road. Once an illegal connection is identified, the approved Illegal Connection Enforcement and Implementation Plan will be adhered to. This illegal connection has been found to be located on private property. The City has contacted its Housing Department (HCD) to send the owner a notice to eliminate this illegal connection. Additional dye-testing was carried out in March 2011 to satisfy HCD requirements and a letter was sent to HCD on May 25, 2011, for further action. A Violation Notice was issued in July 2011. A meeting was held on July 28, 2011, with Marble Hall Apartment management to discuss the progress of eliminating the illegal connection. Per the management of the apartment complex, the connection was rerouted in August 2011. Follow up testing was carried out in September which indicated that the fix did not prevent storm water from getting into the sanitary sewers. The City attempted to coordinate with the property owner to fix the problem permanently but the property owner is not responsive. This location has been referred to the Code Enforcement Legal Section of HCD (ID 28567). The violation has been corrected. A City representative visited the site and conducted visual inspection and dye test on March 11, 2013, to confirm. This location is closed.

The City plans to perform supplemental investigation as part of the Paragraph 9 Sewershed Studies. Under these studies, each of these connections and any additional connections will be investigated and a distinction will be made between the two types of connections as noted herein.

- B. Updated List of Illegal Connections:** Appendix 3 contains the updated list of known illegal connections.
- C. Illegal Connection Enforcement and Implementation Plan:** This requirement has

been completed as reported in Quarterly Report No. 7.

- D. In a letter dated May 05, 2003, MDE stated that they had reviewed the draft plan for implementation and enforcement with regard to illegal connections and found it to be acceptable. As requested by MDE, the City is considering the merits of adding a provision to the Plan that would enable the City Department of Public Works to actually do disconnections themselves and bill people for the materials and labor as a last resort if they have a situation where flows may cause a SSO and there is no cooperation from the property owner. To date, the need for this has not occurred. EPA in its letter dated January 12, 2005 has approved the Illegal Sewer Connection Detection and Enforcement Plan.
- E. Progress of work under Paragraph 10 is as reported herein.
- F. **Privately-Owned Portion of a Customer Service Connection Lateral:** During the calendar quarter ending June 30, 2016, no privately-owned portion of a customer service connection was identified as a source of I/I that causes or contributes to an overflow from the collection system. During this same quarter, no owners of such laterals were notified of the need to repair, rehabilitate, replace or terminate their laterals, and no enforcement actions in regard to such laterals were pending.

Paragraph 11: Pumping Station Inspection, Rehabilitation, and Repair

- A. **Pumping Station Rehabilitation and Repair:** As reported in Quarterly report No. 8, all pumping station rehabilitation projects are complete.
- B. **Pumping Station Inspection Procedures:** During the calendar quarter ending June 30, 2016, Baltimore inspected each of the eight pumping stations at least twice daily in accordance with Paragraph 11.B. All inspections were conducted in accordance with the inspection checklist attached as Appendix F to the Consent Decree, and completed inspection checklists are being maintained. All deficiencies noted during inspections were corrected within eight hours, or a work order was issued for correction. A listing of these work orders is attached as Appendix 4 to this Calendar Quarterly Report.

As reported in Quarterly Report No. 8, the project to upgrade the SCADA system for remote monitoring of pumping stations is completed. As such, the City of Baltimore recognizes that once daily pumping station inspections will satisfy the requirements of the Consent Decree in accordance with Paragraph 11.B.i.

- C. **Pumping Station Remote Monitoring:** As of June 30, 2016, Baltimore continuously monitored pumping station data in accordance with Paragraph 11.C. of the Consent Decree. Alarm data was electronically archived.
- D. **Pumping Station Equipment Inventory:** As of June 30, 2016, all pumps, motors, bar screens, sensors and other critical components of Baltimore's pumping stations had been assigned unique equipment identification numbers. These numbers are recorded in



the maintenance information management system ("MIMS") operated by Baltimore's Wastewater Facilities Division.

- E. Pumping Station Preventative Maintenance:** The MIMS system operated by Baltimore's Wastewater Facilities Division automatically generates work orders for preventive maintenance at Baltimore's eight pumping stations, including standard operating procedures and parts lists. During the calendar quarter ending June 30, 2016, the MIMS system was used to initiate and track scheduled preventive maintenance activities at the pumping stations.

During the calendar quarter ending December 31, 2002, a procedure for determining the cause of equipment and/or system failures was submitted as required by Paragraph 11.E.ii of the Consent Decree.

- F. Pumping Station Operation and Maintenance Manuals:** As of June 30, 2016, operations and maintenance ("O&M") manuals for each of Baltimore's eight pumping stations were up to date, reflecting current station configuration, equipment, and characteristics. Operating parameter value ranges for each pumping station are available in the standard operating procedures ("SOPs") for that pumping station, which are posted at the pumping station and considered part of the O&M manual. Pump run times are kept in the log books at each pumping station.
- G. Progress Reports:** Table 11-1 Summarizes the status of Baltimore's pumping station inspection and repair program during the calendar quarter ending June 30, 2016.

Table 11-1: Pumping Station Inspection and Repair Program

| Pumping Station | Date of Inspection Completion | Date of Repair Completion | Repairs or Improvements | No. of Overflows |
|-----------------|-------------------------------|---------------------------|-------------------------|------------------|
| Eastern Avenue | | | | None |
| Brooklyn | | | | None |
| Dundalk | | | | None |
| Jones Falls | | | | None |
| Locust Point | | | | None |
| Quad Avenue | | | | None |
| McComas | | | | None |
| Westport | | | | None |

Progress toward installation of the new SCADA system for remote monitoring of pumping stations is reported in item 11.C above

Paragraph 12: Collection and Transmission System Model

- A.** The hydraulic modeling task for each sewershed will be performed utilizing the previously-selected hydraulic modeling software package: InfoWorks, marketed by Innovyze.



- B. **Model Elements:** The InfoWorks hydraulic modeling package is fully compliant with the requirements listed in Paragraph 12.B.i of the Consent Decree.
- C. **Model Project Approach Report:** This draft Report was submitted by the February 27, 2003 milestone date (150 days from the Date of Entry of the Consent Decree).
- D. EPA in its letter dated January 12, 2005 has approved the Model Project Approach Report. Baltimore has initiated implementation of the Model Project Approach Report. The first phase of model implementation, involving the migration of the four models developed as part of previous sewersheds studies into an InfoWorks environment, is underway.
- E. **Model Certification:** Baltimore completed implementation of the Model for each sewersheds on or before submission of the respective Sewersheds Study and Plan required under Paragraph 9, and certified the model for each sewersheds at that time.
- F. **Progress Report:** The City continued development and enhancement of the model during this Quarterly period.

Paragraph 13: Collection System Operation and Maintenance

- A. During the calendar quarter ending June 30, 2016, Baltimore continued to review current practices and procedures for collection system operation and maintenance, and to identify any changes that are needed for full compliance with the requirements of Paragraph 13.A. of the Consent Decree.
- B. The draft Operations and Maintenance Program Report required under Paragraph 13.B. of the Consent Decree was submitted in accordance with the milestone date of January 28, 2003 (120 days from the Date of Entry of the Consent Decree). MDE has indicated approval of this draft Report; EPA has also approved this report in its letter dated January 12, 2005.
- C. The City of Baltimore has implemented root and grease control programs after approval of chemical products that will be used as part of the cleaning for root and grease problem areas. Those pipes that are found to have root and grease problems are being treated under these programs and recorded/tracked in the GIS system.
- D. **Progress Reports:** The implementation period of the Operations and Maintenance Plan was completed in July 2006. The City submitted the Year 1 Annual Report on October 30, 2007, which covered the time period from July 2006 to July 2007. This report includes all elements as specified in this section of the Consent Decree. The Year 2 Annual Report was submitted on October 30, 2008 and it covers the time period from July 2008 to June 2009. The Year 3 Annual Report was submitted to EPA/MDE and DOJ on October 27, 2009. The City of Baltimore submitted the fourth annual progress report, on October 28, 2010. The fifth annual progress report was submitted to EPA/MDE on October 21, 2011. The sixth annual progress report was submitted on October 25, 2012. The seventh annual progress report was submitted



on October 30, 2013. The eighth annual progress report was submitted on October 30, 2014. **The ninth annual progress report was submitted on October 13, 2015.**

Paragraph 14: Information Management System Program

- A. During the calendar quarter ending June 30, 2016, Baltimore continued to develop an information management system that will facilitate engineering analysis, evaluation, operation and maintenance of the collection system.
- B. **Geographic Information System:** On September 24, 2004, Baltimore demonstrated to EPA and MDE that the GIS is fully functioning and capable of displaying the information described in Paragraph 14.B.i through iv.
- C. **500 Scale Maps:** This requirement has been completed as reported in Quarterly Report No. 7.
- D. **Global Positioning System:** Water and Wastewater Maintenance crews are equipped with eight global positioning system ("GPS") units for use in collection system maintenance. A standard operating procedure (SOP) has been developed for the use of these units in locating collection system components. Maintenance crews have received appropriate training to use the GPS units.
- E. **Inventory of Collection System Components:** On September 24, 2004, Baltimore demonstrated to EPA and MDE that the GIS is fully functioning and capable of displaying the information described in Paragraph 14.E for each component.
- F. **Update Inventory of Collection System Components:** Within ninety (90) days of completion of inspection or rehabilitation of a collection system component as required under Paragraph 9, Baltimore will update the collection system inventory.
- G. **Progress Reports:** Development of the Baltimore collection system inventory database continued throughout the calendar quarter ending June 30, 2016. Most of the information currently in the database has been taken from record documents (for example, "as-built" drawings). **This information will be verified and supplemented with field inspection data/information, and all required database fields are being populated, as part of the Sewershed Studies required under Paragraph 9 of the Consent Decree. Progress toward implementation of the GIS is reported in Item 14.B. above.**

Paragraph 15: Valve Inspection and Repair Program

- A. All requirements of Paragraph 15 have been completed as summarized in Quarterly Report No. 7.
- B. **Progress Reports:** All requirements of Paragraph 15 have been completed as noted in Appendix H of Consent Decree.

Paragraph 16: Emergency Response Plan – Un-permitted Discharges

- A. **Emergency Response Plan (ERP):** Baltimore has developed and implemented an Emergency Response Plan for protection of public health and the environment in the event of an un-permitted discharge from the wastewater collection system.
- B. This requirement has been completed as reported in Quarterly Report No. 7.
- C. The EPA and MDE reviewed the draft Emergency Response Plan, and review comments were forwarded to Baltimore in a letter from EPA Region 3 received by Baltimore on July 23, 2002. The City of Baltimore revised the draft Emergency Response Plan accordingly by responding to the review comments within the 30-day requirement established by Paragraph 16.C. of the Consent Decree. MDE and EPA granted approval of the Plan in separate letters received by Baltimore on May 5, 2003, and May 14, 2003, respectively. As of the June 13, 2003 milestone date for implementation of the Plan (30 days from final approval), 70 copies of the Plan had been produced and distributed to appropriate staff.
- D. **Yearly Review and Update:** During the Calendar Quarter ending December 31, 2007, the City submitted the Yearly Update for 2007. The 2008 update was submitted on December 26, 2008. The City of Baltimore submitted updates to the ERP for 2009 on December 28, 2009. The 2010 annual updates to the ERP were submitted to the Regulators on December 28, 2010. The 2011 annual updates to the ERP were submitted to the Regulators on December 23, 2011. The 2012 annual updates to the ERP were submitted to the Regulators on December 21, 2012. The 2013 annual updates to the ERP were submitted to the Regulators on December 21, 2013. The 2014 annual updates to the ERP were submitted to the Regulators on December 18, 2014. **The 2015 annual updates to the ERP were submitted to the Regulators on December 8, 2015.**
- E. No portion of the Emergency Response Plan is in dispute at this time, and Baltimore has implemented the Plan in its entirety.

Paragraph 17: Reporting of Discharge Events and Recordkeeping

- A. During the calendar quarter ending June 30, 2016, Baltimore has complied with the reporting requirements for overflows from the wastewater collection system as established by Paragraph 17 of the Consent Decree, by NPDES Permit Numbers 21555 and 21601, by State Discharge Permit Numbers 89-DP-0581 and 93-DP-0580A, and by State and Federal regulations. Oral notifications of overflows were made to MDE within 24 hours that Baltimore first became aware of them, and written reports were forwarded within 5 days. A summary of reported overflows for the calendar quarter ending June 30, 2016 is provided in Appendix 5.
- B. During the calendar quarter ending June 30, 2016, Baltimore maintained a monitoring, sampling, analysis and reporting program to monitor water quality in Baltimore surface water. This program is administered by the Water Quality Management Section of the

Environmental Services Division in accordance with the requirements of the NPDES referenced in item 17.A. above. Monitoring results are published annually in Baltimore's Water Quality Report.

- C. Records of all sanitary sewer overflows from Baltimore's collection system during the calendar quarter ending June 30, 2016, are being maintained in accordance with the requirements of Paragraph 17.C.
- D. Copies of all written reports prepared pursuant to Paragraph 17 will be maintained for a minimum of 5 years, as required by Paragraph 17.D.

C. DESCRIPTION OF ANTICIPATED PROBLEMS WITH SECTION VI REQUIREMENTS

Issues and concerns related to Paragraph 8 construction projects are reported above in the Paragraph 8 section of this Calendar Quarterly Report. As of June 30, 2016, there were no other anticipated problems with Section VI requirements to report.

D. DESCRIPTION OF SEP ACTIVITIES

The study and 30% design for the Patapsco Wastewater Treatment Plant Enhanced Nutrient Removal (ENR) project was completed and submitted to Maryland Department of the Environment (MDE) and US EPA Region III (EPA) in September 2004. The MDE letter approving the 30% design for the Patapsco Wastewater Treatment Plant was on December 01, 2004. The EPA letter approving the 30% design was received May 24, 2005.

The consultant agreement for the design of the Patapsco Wastewater Treatment Plant ENR project was approved by the City's Board of Estimates on December 21, 2005. As of the calendar quarter ending June 30, 2016, SC 845R - BAF and tertiary PS bids were rejected and the project was re-advertised in December 2011 and bids were received on February 15, 2012. Notice to Proceed (NTP) for construction was issued on August 1, 2012 and the estimated construction completion date is February 2015. SC 852R - Denitrification filters project was advertised on March 27, 2009 and the bids were rejected. This project was re-advertised on October 13, 2009 and the successful bidder was awarded the NTP on December 29, 2009. **This project is currently in the construction phase.**

In addition, the City has selected the consultant for engineering services for SC 855 - ENR Modifications to the Existing Facilities at the Patapsco Wastewater Treatment Plant. As of the calendar quarter ending June 30, 2016, this contract was advertised on April 30, 2010, and bids were due on December 31, 2010. The construction NTP was issued on February 22, 2011. **The warranty period for this project is over.**

Contract for the Improvements to the Headworks and Wet Weather Flow Equalization at Back River WWTP Project SC 918H was re-advertised, interviews occurred on March 15th and selection of CMaR team occurred on May 4, 2016. NTP anticipated in July 2016. Project SC 918S - Site work and relocation of the County Force main was bid on February 5, 2016 and NTP anticipated in July 2016.

E. ADDITIONAL MATTERS FOR THE ATTENTION OF THE EPA AND MDE

As of the calendar quarter ending June 30, 2016 the City of Baltimore has updated the Sanitary Discharges of Unknown Origin (SDUO) tracking sheet to the Quarterly Report per the requirements of the policy letter by EPA and MDE dated March 31, 2009. The details of these sites are located in the SDUO tracking sheets in Appendix 5.

The City provided a response to MDE/EPA and requested additional time to research and develop possible methods of quantifying SDUOs in a letter dated April 30, 2009. The City submitted the SDUO Quantification Protocol to MDE and EPA for review, comments and approval on August 06, 2009. EPA/MDE issued a SDUO Quantification Protocol comment letter on December 21, 2009. The City of Baltimore issued a response letter to EPA/MDE on February 16, 2010. EPA/MDE approved the quantification protocol on October 12, 2010, and requested that the City apply the protocol to all resolved and outstanding SDUO sites since October 30, 2008, and to all future SDUOs. The City submitted a final approved copy of the SDUO Quantification Protocol to MDE/EPA on November 18, 2010 and sent in the application of the SDUO Protocol on December 28, 2010.

APPENDIX 1

STATUS OF PARAGRAPH 8 CONSTRUCTION PROJECTS



Civil Action No. JFM-02-1524
Calendar Quarterly Report No. 55
For Calendar Quarter Ending June 30, 2016

APPENDIX I
STATUS OF PARAGRAPHS 8 CONSTRUCTION PROJECTS
As of June 30, 2014

| PROJEC T NO. | PROJECT | DESCRIPTION AND REMARKS | DATE CONTRACT ADVERTISED | DATE OF PRACTICAL COMPLETION | DATE B&O STRUCTURES ELIMINATED | STRUCTURE(S) ELIMINATED | STATUS |
|-----------------|---|---|--------------------------------|---------------------------------|--------------------------------------|--|----------------------------|
| | | | | | | | UPPER JONES FALLS RIVERBED |
| 1 | Wadsworth River Interceptor (JPI) Branch Sewerity Contract Nos. 760 & 761 | 1. Installation approximately 800 linear feet of 30-inch parallel relief sewer from SP#448 to JPI0 (along JPI0A- JPI0B) (SC770). 2. Installation approximately 8,400 linear feet of 24-inch parallel relief sewer from SP#70 to JPI0 (SC770). 3. Rehabilitation approximately 3,300 linear feet of existing JPI0 sewer from SP#70 to JPI0 (SC770). | June 30, 2002 | June 30, 2004 | June 30, 2005 | Eliminate B&O Nos. 21, 22, 23, 24 and 25 Complete | |
| 2 | Upper Jones Falls Interceptor Sewerage Contract Nos. 772 & 724 (Nurs. & South of Fells Park) (SC 772) | 1. Rehabilitation of approximately 1,800 linear feet of existing 42- to 48-inch sewer located between JPI01 No. 18, Washington Flume, and JPI0, and approximately 6,370 linear feet of 48- to 60-inch sewer located between JPI42 and JPI0. Rehabilitation of approximately 1,000 linear feet of 60-inch sewer between JPI10 and JPI0, and approximately 1,350 linear feet of 60-inch sewer between JPI0 and the Jones Falls Pumping Station (SC 772). 2. Replacement of approximately 7,000 linear feet of 48-inch sewer between JPI0 and JPI42 (SC 724). 3. Manholes and stream bank restoration. | June 30, 2004 | December 27, 2006 | 12/20/2006** | Eliminate B&O Nos. 39 and 44 Complete | |
| 3 | Upper Jones Falls Pumping Station Manholes/Sewer - Lower Section and Valve Improvements of existing manhole/pump station Sewerage Contract No. BG2779 A (SC 805) | 1. Replacement of approximately 1600 linear feet of force main/pump station in Broadway from Old to East Chapel Street connecting to High Level sewer (SC 770). 2. Improvements to gate valves, blow-off valves and air release valves for existing force main/pump station sewer (SC 805). | December 30, 2002 | June 30, 2004 | 07/02/2005 - SEE STATUS | Committee to eliminate of B&O No. 5 Complete | |
| 4 | Jones Falls Pumping Station Force Main/Force Sewer Sewerage Contract No. 800 (SC 805) | Upgrade existing force main/pump station to handle increased flows from rehabilitation/upgraded Jones Falls Pumping Station as well as additional flows from possible future pumping stations in Shady Run and along the JSA branch. | June 30, 2005 | 12/20/2007** | May 2, 2008 | Committee to eliminate of B&O No. 6 Complete | |
| 5 | Lower Fells Pumping Station Sewerage Contract No. 822 | Upgrade existing pumping station to handle at least 50 mgd | December 30, 2006 | 12/20/2007** | June 30, 2008 | Eliminate B&O No. 5 Complete | |
| 6 | Construction of Collection System Upgrades in Upper Jones Falls Sewerage Contract No. 878 | New hydrants and valve improvements to areas adjacent to overflows | Existing enc'd contract | June 30, 2003 | June 30, 2004 | Eliminate B&O Nos. 20, 31, 32 and 36 Complete | |

Note: Shaded date cells indicate completion.

APPENDIX I
STATUS OF PARATOLOGY II CONSTRUCTION PROJECTS
As of June 30, 2016

| PROJ. E# NO. | PROJECT | DESCRIPTION AND REMARKS | DATE CONSTRUCTION CONTRACT ADVERTISED | DATE OF PRACTICAL COMPLETION | DATE SSO STRUCTURES ELIMINATED | SSO(S) STRUCTURES ELIMINATED | STATUS |
|------------------------------------|---|---|---|---------------------------------|--------------------------------------|--|--|
| LOWER JONES FALLS SEWERSHED | | | | | | | |
| 7 | Lower Jones Falls Interceptor (Upper Portion of Gravity Mainline) Sanitary Contract No. 773 & 810 | 1. Install approximately 7,000 linear feet of 16- to 24-inch parallel relief sewer from 200300 (near Jones Falls Pumping Station) to 4081 (at the connection of the JCS branch) [SCE116] 2. Rehabilitation of approximately 18,000 linear feet of existing sewer ranging from 12- to 30-inch [SCE773] 3. Inverted siphon rehabilitation in Falls Road (improvement #C0201) [SCE773] 4. Stream bank restoration along Utica Avenue near Mandeville Mills at Woodberry | July 31, 2003 | June 30, 2008 | 2/28/10** | Eliminate SSO No. 87 | Post Construction Monitoring Phase - Monitoring period is extended at one year |
| 8 | Storm Run Interceptor and Pumping Station (CR Branch)* Sanitary Contract No. 810, 820, 830 & 847 | 1. Construct a 20 mgd capacity pumping station near Department of Public Works Solid Waste Site near the intersection of 20th Street and Steam Street. 2. Install approximately 2,200 linear feet of 24-inch force main from new pumping station to JPS/P pressure sewer branch depends on location of pumping station. 3. Parallel approximately 10,000 linear feet of existing sewer from south of Crisleyville Lane (AEP-48) to the new pumping station with 18 to 36-inch sewer | December 30, 2005 [SCE-810 & 820]; June 30, 2008 [SCE-830 & 847] | 5/31/2010** | 2/28/10** | Candidate for elimination of SSO No. 72. Candidate for elimination of SSO No. 129 | Pactical completion was achieved on May 20, 2009 for the lower portion of the Storm Run interceptor (SC - S30). Non-CD portion of the project is new Storm Run Pump Station on August 20, 2009. The City submitted an elevation request to EPA and MDE for SSO 07 and 72 dated February 18, 2010 requesting elevation to February 28, 2011. The City further directed another submittal letter dated February 15, 2011 requesting an extension to June 26, 2019 to allow for adequate time for the City to complete the hydraulic reduction project at the BII-WWTP. The City believes as a major contributor to not being able to eliminate these SSOs. |
| 9 | Maryland Avenue Interceptor (JCS (Branch)) Contract No. 700 | 1. Replace (regrade) approximately 4,000 linear feet of existing 12- to 24-inch sewer with new 24- to 36-inch sewer along Branch Interceptor, including approach 901 N. Howard projected area 2. Improvements to sphere SSO No. 125 under I-395 (I-295/19-30/19) 3. Sewer replacement may require crossing the C.R.E. | December 30, 2003 | July 14, 2005 * | 2/28/10** | Eliminate SSO Nos. 69 & 125 | Construction Phase. SC-825-Elizabeth Valley was sent on 12-7-07 for a 90 day extension through March 26, 2008. This extension was approved and a submittal for elevation for SSO 69, through June 27, 2008 was submitted. Awaiting response from EPA. EPA. Predicted completion date of July 27, 2008. Maryland Final Report July 25, 2008. In a letter dated 11/02/2011, EPA approved the minor schedule modifications. |
| 10 | Chesapeake Avenue Interceptor JCS Branch* Sanitary Contract No. 820, 833 | 1. Install approximately 7,325 linear feet of 30 to 42-inch parallel relief sewer from Chesapeake Avenue to the high level Interceptor on Egger Street. 2. Line approximately 8,000 linear feet of 18- to 36-inch existing sewer | December 30, 2005 | 12/27/07 ** | 2/28/10** | Candidate for elimination of SSO No. 72 | |
| 11 | Elimination of Sothern Branch Avenue Bridge, west of RR tracks Sanitary Contract No. 800 | 1. Cleaning and inspection of siphons with repairs as necessary. 2. Elimination of Sothern. | On-call contract | June 30, 2004 | June 30, 2005 | Eliminate SSO No. 68 | Complete |
| HERRING RUN SEWERSHED | | | | | | | |
| 12 | Marrow Run Interceptor - Middle Sanitary Contract No. 7746 and 7751 | Construction of approximately 400 linear feet of 18-inch, approximately 600 linear feet of 24-inch, approximately 400 linear feet of 24-inch, approximately 1000 linear feet of 24-inch, and approximately 100 linear feet of 30-inch sewer to replace existing interceptor | June 30, 2003 | July 14, and Sept 2, 2005* | June 30, 2005 | Candidate for elimination of SSO Nos. 118 and 119 | Complete |
| 13 | Marrow Run Interceptor - Lower Sanitary Contract No. 821 and 843 | Construction of approximately 6000 linear feet of 42-inch, approximately 7100 linear feet of 36-inch siphons, and approximately 3700 linear feet of 34-inch sewer to replace the existing interceptor | June 30, 2005 | June 30, 2007 | June 30, 2005 | Eliminate SSO Nos. 63 and 94 | Construction Phase - Complete |
| 14 | Marrow Run Interceptor - Upper Sanitary Contract No. 817 | Construction of approximately 1700 linear feet of 18-inch and approximately 2200 linear feet of 24-inch sewer to replace the existing interceptor | June 30, 2004 | June 30, 2005 | June 30, 2005 | Candidate for elimination of SSO Nos. 118 and 119 | Complete |
| 15 | Completion of Catchment System Components in Herring Run Subwatershed | Average hydraulic and design improvements to areas subject to overflows | Existing contract | June 30, 2003 | June 30, 2004 | Eliminate SSO Nos. 69 and 100 | Complete |
| 16 | Elimination of Sothern Branches 1. 2-story New York south of RR tracks. San Fran. 1 - One-way Sanitary Contract No. 800 | 1. Cleaning and inspection of siphons with repairs as necessary. 2. Elimination of branches. | On-call contract | June 30, 2004 | June 30, 2005 | Eliminate SSO No. 92 | Complete* |

Note: Shaded date cells indicate completion.

Appendix I-1

APPENDIX I
STATUS OF PADDOCKY II CONSTRUCTION PROJECTS
As of June 30, 2016

| PROJ. # ID# | PROJECT | DESCRIPTION AND REMARKS | DATE CONSTRUCTION CONTRACT ADVERTISED | DATE OF PRACTICAL COMPLETION | DATE SSO STRUCTURES ELIMINATED | STRUCTURE(S) ELIMINATED | STATUS |
|------------------------------|--|--|---|---------------------------------|-----------------------------------|---|-------------------------------|
| GWINN FALLS SEWERSHED | | | | | | | |
| 17 | Pioneer Hill System Improvements including GFCI branch in Gwynne Park Submtry Contract Nos. 777 & 804 | Rehabilitation of approximately 12,000 linear feet of 12- to 24-inch conveyance piping (SSO777) and approximately 32,000 linear feet of 6- to 10-inch collection piping (SSO804) | June 30, 2003 | June 30, 2008 | June 30, 2007 | Eliminates SSO Nos. 230, 235 and 335 | Complete |
| 18 | Cloud Run System Improvements DMA Branch Submtry Contract No. 784, 823 | Cloud Run system rehabilitation of approximately 20,000 linear feet of 12- to 24-inch conveyance piping (SSO784) and approximately 11,000 linear feet of 6- to 12-inch collection piping (SSO823). | June 30, 2003 | June 30, 2008 | June 30, 2007 | Eliminates SSO Nos. 169 and 17P | Complete |
| 19 | Midtown Circle Interceptor Submtry Contract No. 826 | Cloud Run system rehabilitation 12,400 linear feet of 12- to 24-inch conveyance piping. | On-call contract | June 30, 2007 | June 30, 2008 | Eliminates SSO Nos. 239 and 24P | Construction Phase - Complete |
| 20 | Elimination of System Discharge Pipe No. 11 - American Road and Canal Street, Section No. 12 - Canal Street, east of Franklin Ave., SC No. 827 | 1. Cleaning and inspection of pipes with repair as necessary. 2. Elimination of blow-off. | On-call contract | June 30, 2004 | June 30, 2005 | Eliminates SSO Nos. 84 and 22P | Complete* |
| COMBINED SEWER AREAS | | | | | | | |
| 21 | Widmark Submtry Contract No. 780 | Implementation of Long Term Control Plan and combined sewer separation design in Widmark area | | June 30, 2002 | June 30, 2003 | Eliminates CSD No. 21P | Complete |
| 22 | Forest Park Submtry Contract Nos. 782 and 813 | Implementation of Long Term Control Plan and combined sewer separation design in Forest Park area | December 31, 2003 | June 30, 2005 | June 30, 2007 | Eliminates CSD Nos. 13P and 830 Nos. 10P, 11P, 12P, 18P, 19P, 20P, 21P and 31P and SCS Nos. 12P, 13P, 14P, 15P and 16P are discontinued | Complete |
| HIGH LEVEL SEWERSHED | | | | | | | |
| 23 | Gwynne Run Interceptor Submtry Contract No. 812 | Improvements to the Gwynne Run Interceptor | December 30, 2004 | February 25, 2007 | 12/27/2007** | Eliminates SSO Nos. 10A, 107 and 130 | Complete |
| 24 | Gwynne Run System Improvements Submtry Contract No. 817 | Assess hydraulics and design improvements to areas subject to overflow | June 30, 2003 | June 30, 2008 | June 30, 2007 | Eliminates SSO Nos. 50, 57, 60, 63, 100, 125, 127, 128 and 131 | Complete |
| 25 | Elimination of System Discharge Pipe Nos. 9 and 10 - west of Oakwood Street, south of Williams Avenue) SC No. 827 | 1. Cleaning and inspection of sections with repair as necessary. 2. Elimination of blow-offs. | On-call contract | June 30, 2004 | June 30, 2005 | Eliminates SSO Nos. 79 and 81 | Complete* |
| LOW LEVEL SEWERSHED | | | | | | | |
| 26 | Elimination of System Discharge Pipe No. 8 - rear of 1000 Ursula Avenue) SC No. 827 | 1. Cleaning and inspection of sections with repair as necessary. 2. Elimination of blow-offs. | On-call contract | June 30, 2004 | June 30, 2005 | Eliminates SSO No. 32P | Complete |

* Approved by MDE/EPAP. ** Approved by MDE. *** Approved by EPA

Note: Shaded date cells indicate completion.

APPENDIX 2

STATUS OF PARAGRAPH 9 CONSTRUCTION PROJECTS



STATUS OF PARAGRAPH 9 CONSTRUCTION PROJECTS

As of June 30, 2016

| Proj. No. | PROJECT | DESCRIPTION AND REMARKS | DATE CONTRACT ADVERTISED | DATE OF CONSTRUCTION COMPLETION | DATE OF EVALUATION COMPLETION | STATUS |
|-----------------------------|--|---|--------------------------|---------------------------------|-------------------------------|-------------|
| JONES FALLS SEWERAGE | | | | | | |
| F-1 | Lower Jones Falls Cleaning | SIC 870 - The work includes the Lower Jones Falls Interceptor, located in the Gentry sewage collection system. Typical work includes initial SONAR assessment to quantify sediment and sludge levels, cleaning 8,400 feet of 10' to 75' sanitary sewer between Falls Rd/Sphon to the High Level Bridge, with proper disposal of removed material, and post cleaning CCTV/SONAR/Lease assessment to document the internal condition of the pipes. | 5/11/2012 (A) | 5/11/2012 (A) | 5/11/2012 (A) | Completed |
| F-2 | Maryland Avenue Sewer System Cleaning | SIC 870 - The work includes Maryland Avenue Siphon, and sewage upgradient of the Maryland Avenue Siphon [18 and 24-inch sewer siphon]. Typical work includes initial SONAR assessment of the sanitary sewer to quantify sediment and sludge levels, cleaning of Maryland Avenue Siphon, and various sewers upgradient of the Maryland Avenue Siphon, with proper disposal of removed material, and post cleaning CCTV/SONAR/Lease assessment to document the internal condition of the pipes. | 5/20/2010 (A) | 5/20/2010 (A) | 5/20/2010 (A) | Completed |
| F-3 | Upper Jones Falls Interceptor Rehabilitation | Inspection of an inactive 42-inch diameter interceptor sewer along Jones Falls from Northern Parkway (MD 816(CC-2045(M)) to Cicale Spring Lane (MD 81000) (1022M)). Prior to reactivation of the 42-inch sewer, an internal inspection of the sewer was necessary to find the actual condition of the line. The City retained its technical support consultant (HCD) to carry out the inspection process. The field work was started in September 2008 and their findings were completed and a final report was delivered on June 30, 2010. | 4/27/11/2008 (A) | 4/27/11/2008 (A) | 4/27/11/2008 (A) | Completed |
| F-4 | SIC 805 MD Ave Sewer Rehab | SIC 805 - Repair and rehabilitation of sanitary sewer and manholes in the Maryland Ave sub-area/entire of the Jones Falls Sewershed. | 5/10/2011 (A) | 5/10/2011 (A) | 5/10/2011 (A) | Completed |
| F-5 | SC 806 - Slurry Run Area | Repair and rehabilitation of sanitary sewer and manholes in the Slurry Run Area of the Jones Falls Sewershed. | 7/27/2012 (A) | 5/30/2016 | 5/30/2017 | In Progress |
| F-6 | SC 809 - Western Run Area | Repair and rehabilitation of sanitary sewer and manholes in the Western Run Area of the Jones Falls Sewershed. | 7/27/2012 (A) | 10/30/2016 | 10/30/2017 | In Progress |
| F-7 | SC 900 - Upper Jones Falls and Maryland Avenue | Repair and rehabilitation of sanitary sewer and manholes in the Upper Jones Falls and Maryland Avenue areas of the Jones Falls Sewershed. | 7/27/2012 (A) | 5/30/2016 | 5/30/2016 | Completed |
| F-8 | SC 807T - Government, Hampden and Belvoir Hill | Repair and rehabilitation of sanitary sewer and manholes in the Greenmount, Hampden, and Belvoir Hill areas of the Jones Falls Sewershed. | 3/22/2013 (A) | 3/28/2017 | 3/28/2018 | In Progress |
| OUTFALL SEWERAGE | | | | | | |
| OF-1 | Sedimentation Cleaning Trunk Sewers in City of Baltimore | SIC 804 - Cleaning of Oufall Sewershed 60-Inch and Outfall Interceptor (From N. Bond Street to North Block of E. Lombard Street). | 5/20/2011 (A) | 5/20/2011 (A) | 5/20/2015 (A) | In Progress |
| OF-2 | SIC 034 - CLEARING OF THE OUTFALL INTERCEPTOR AND RELIEF SEWERS - PHASE II | Cleaning of the relief sewer and outfall interceptor - phase II | 1/21/2013 (A) | 1/21/2017 | 5/30/2018 | In Progress |
| OF-3 | SIC 010 - Sewer Rehab in the Outfall Sewershed | SC 919 - Sewer Rehab in the Outfall | 7/17/2015 (A) | 7/30/2018 | 7/30/2019 | In Progress |

Note: Shaded date cells indicate completion.

STATUS OF PARAGRAPH 9 CONSTRUCTION PROJECTS

As of June 30, 2016

| HIGH LEVEL SEWERSHED | | | | | | |
|----------------------|--|--|---------------------|----------------|---------------|--|
| H-L-1 | Lowry Heights Related Sewer | SC 579 - Design and construction 18" Related Sewer from intersection of Springdale Rd and N 7thton St to intersection of Woburn Ave and Liberty Heights Ave. (SC041 UNTA 00001). Work includes reconstruction and removal of existing 12" inch sewer line. Installation of 2400 LF of new 18-inch sewer line and 1200 LF of 20-inch sewer line. Evaluation phase will include continual monitoring of existing single-walled SC041, 132, 134 and 136 to ensure no overflows. | 3/27/2013 (A) | 10/02/2014 (A) | 4/11/2015 (A) | The contract was advertised on 2/10/12. Bids were due by 3/25/12. Bid date was extended to 4/6/12. The contract was awarded on 4/6/12 to Monumental Paving and Excavating Inc. No construction progress meeting was held on 5/1/13. |
| H-L-2 | SCB037 - East Baltimore Region | SC 507 - Repair and rehabilitation of sanitary sewer and manholes in the East region of the High Level Sewershed | 3/27/2013 (A) | 5/20/2017 | 5/20/2017 | The contract was advertised on 3/22/13. The lowest bidder is Inland Walkers. The project was awarded on 5/14/13 and NTP was issued on 11/1/13. Project in liquidated damages. |
| H-L-3 | SCB036 - West Baltimore Region | SC 506 - Repair and rehabilitation of sanitary sewer and manholes in the West region of the High Level Sewershed | 5/10/2013 (A) | 7/26/2016 | 7/26/2017 | The contract was advertised on 5/10/13. Lowest bidder is SAK Construction. The contract was awarded on 11/1/13 and NTP issued on 5/5/14. |
| H-L-4 | SCB032 - Improvements to Lower Gwynnies Run Interceptor - Phase II From Franklin Street to Edgewater Street - Infrastructure project | SC 502 - Improvements to Lower Gwynnies Run Interceptor - Phase II From Franklin Street to Edgewater Street - Infrastructure project | 7/26/2013 (A) | 11/18/18 (P) | 11/18/18 (P) | The contract was advertised on 7/26/13. Lowest bidder is Bradshaw Construction. Contract was awarded on 3/12/14 and NTP issued on 5/26/14. Project completed. |
| H-L-5 | SCB033 - High Level Interceptor Cleaning | SC 533 - cleaning of the High Level Interceptor | 7/26/2013 (A) | 4/20/2017 | 4/20/2018 | The contract was advertised on 7/26/13. Lowest bidder is Video Pipe Services. Contract was awarded to the second lowest bidder Proven Management. Award date is 4/23/14 and NTP issue date is 7/30/14. |
| H-L-6 | SCB035 - North Region of High Level sewershed | SC 505 - Repair and rehabilitation of sanitary sewer and manholes in the North region of the High Level Sewershed | 10/16/2013 (A) | 6/4/2016 (A) | 6/20/2016 | The contract was advertised on 10/16/13. Lowest bidder is SAK. Contract was awarded on 2/6/14 and NTP issued on 5/14/14. Project completed. |
| H-L-7 | SCB011 - Heming Run Sewer Improvement | SC 911 - Repair and rehabilitation of sanitary sewer and manholes in the Heming Run Sewershed. | 8/16/2013 (A) | 5/12/2016 | 5/10/2017 | The contract was advertised on 8/16/13. Lowest bidder is AM Liner East. Contract was awarded on 5/14/14 and NTP issued on 5/14/14. |
| H-R-1 | SCB006 - Heming Run Sewer Improvement | SC 906 - Repair and rehabilitation of sanitary sewer and manholes in the Heming Run Sewershed | 9/6/2013 (A) | 8/23/2016 | 8/23/2017 | The contract was advertised on 9/6/13. Lowest bidder is AM Liner East. Contract was awarded on 2/5/14 and NTP issued on 5/14/14. |
| H-R-2 | SCB007 - Heming Run Sewer Improvement | SC 908 - Repair and rehabilitation of sanitary sewer and manholes in the Heming Run Sewershed | 10/11/2013 (A) | 12/30/2016 | 12/30/2017 | The contract was advertised on 10/11/13. Lowest bidder is AM Liner East. Contract was awarded on 2/5/14 and NTP issued on 5/14/14. |
| H-R-3 | SCB009 - Heming Run Sewer Improvement | SC 909 - Repair and rehabilitation of sanitary sewer and manholes in the Heming Run Sewershed | 7/17/2015 (A) | 12/14/2017 | 12/14/2018 | The contract was advertised on 7/17/2015. Bid opening is 9/12/2015 and awarded to SAK |
| H-R-4 | SCB012 - Improvements to Sanitary Sewers in HR07A and along Chesterfield Avenue in Heming Run Sewershed | Improvements to Sanitary Sewers in HR07A and along Chesterfield Avenue in Heming Run Sewershed | Low Level Sewershed | | | |
| L-L-1 | SCB020N - Low Level Interceptor Cleaning | SC 822N - cleaning of the Low Level Interceptor | 11/31/2014 (P) | 12/31/2016 | 12/31/2016 | The contract was advertised on August 16, 2014. Lowest bidder is Video Pipe Services Contractors. Due to unbalanced bid file, the contract was readvertised on 2/7/14. Lowest bidder is Video Pipe Services Contractors. Award date is 7/23/14. NTP issued on 10/25/2014. Project completed. |
| L-L-2 | SCB013 - Western Region of Low Level | SC 013 - Repair and rehabilitation of sanitary sewer and manholes in the Western Region of the Low Level Sewershed. | 9/20/2013 (A) | 10/6/2015 | 10/7/2016 | The contract was advertised on 9/20/13. The lowest bidder is Matrix. Contract was awarded on 2/1/14 and NTP issued on 4/17/14. |
| L-L-3 | SCB012 - Eastern Region High Level | SC 012 - Repair and rehabilitation of sanitary sewer and manholes in the Eastern Region of the Low Level Sewershed. | 9/20/2013 (A) | 5/30/2016 | 5/30/2016 | The contract was advertised on 9/20/13. The lowest bidder is Instrumet. Contract awarded on 1/15/14 and NTP issued on 3/7/14. |
| L-L-4 | SCB014 - Improvements to Sanitary Sewers in Low Level Sewershed | SC 914 - Improvements to Sanitary Sewers in Low Level Sewershed | 4/26/2015 (A) | 6/26/2016 | 6/26/2016 | The contract was advertised on 6/26/2015. Bid opening is 7/26/2015. |

Note: Shaded date cells indicate completion.

STATUS OF PARAGRAPH 9 CONSTRUCTION PROJECTS

As of June 30, 2016

| Gwynn Falls Sewerized | | | | | | |
|--|---|---|---------------|-----------|-----------|--|
| GF-1 | SC920 - South Area Gwynn Falls | SC 920 - Improvements to the Gwynn Falls Sewerized Collection System - Area A | 6/3/2014 (A) | 7/23/2017 | 2/25/2018 | The contract was advertised on 6/21/14. The lowest bidder is SAK Construction. NIP was issued on 11/12/2015. |
| GF-2 | SCI9R - Medina Choice Pressure Sewer Inspection and Islands Sewer Rehab | SC 939R - Medina Choice Pressure Sewer Inspection and Upgrades Sewer Rehab | 6/26/2015 (A) | TBD (P) | TBD (P) | The contract was advertised on 6/26/2015. Bid opening is 7/26/2015. Bid is rejected. completion date TBD. |
| Dundalk Sewerized | | | | | | |
| DB-1 | SC 902 - Sewer Rehab in the Dundalk | SC 902 - Sewer Rehab in the Dundalk Sewerized | 3/8/2015 (A) | 6/20/2017 | 6/20/2018 | The contract was advertised on 3/6/15. Bid opening is 4/8/2015. The lowest bidder is SpeciaRe. NIP will be issued on 10/14/2015. |
| PA-1 | SC 903 - Sewer Rehab in the Patapsco Sewerized | SC 903 - Sewer Rehab in the Patapsco Sewerized | 7/25/2015 (A) | 8/31/2018 | 9/31/2019 | The contract was advertised on 7/7/2015. Bid opening is 9/26/2015. |
| Key - "SS - XX" = Sewerized Name - CD Project No | | | | | | |

APPENDIX 3

LIST OF ILLEGAL CONNECTIONS

APPENDIX 4

PUMPING STATION WORK ORDERS



Civil Action No. JFM-02-1524
Calendar Quarterly Report No. 55
For Calendar Quarter Ending June 30, 2016

05/07/16 10:41:39

Continued Backlog Report

ID ----> BACKLOG

CR's & MD's

% of 05/07/16

Status_10_L25

PAGE 42

| Fo. | No. | Loc. | Mechanics | Attaching | Wd | Plan | Short Problem | Full Problem | Description | Responsible | By | Craft | Wd | Work Sat | Wk Date | Issue | Imp. due | Cls |
|-----|-----|------|-----------|-----------|----|------|---------------|--------------|-------------|-------------|----|-------|----|----------|---------|-------|----------|-----|
| | | | | | | | | | | | | | | | | | | |

10571 Go_311 Work Order
CRAFT 315

C 05/07/16 10 41 39

Exhibit # Backlog Report

CH's & RD's

Rick River, Pa. & misc.
is of 05/07/16
Status: ID-K-25

Total # ELEC # Work Orders:

COUNT 10

FBI GRS-20140722 M45

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| No. | Area | Machine | Description | Sts | Pty Code W/3 | Plan | Short problem | Description | Full Problem | Req. Code | Wk | Brk Sat |
|-----|------|---------|-------------|------|--------------|------|---------------|-------------|--------------|-----------|----|---------|
| | | | | Date | | | | | | By | | |

METER 800012 FACILITY,FIREPLUG RD,METER 25 4 15 95070 95070-CLEAN FLANGE AT FER D/LA. OASIS/AR
CREDIT 10

Total # GRDS # Work Orders:
COUNT 1

FBI BY ZACH ATTENTION DRAWS
SUE W. HARRISON

20151223 W19

FBI 20151223 W19

Total # HA # Work Orders:

CREDIT 2

METER 900016 FACILITY,PROGRESS METER 25 4 16 95045 95045-REPLACE FILM REEL REQ BY R CARION JR

Total # DRSPR # Work Orders:
COUNT 1

| CITYID 99990001 MISC CITY WIDE PROJECTS | 25 | 3 | 16 95054 | 2 | ACTIV/URG INSTL EXHAUST AND EXHAUST FANS PER DRAWING; | JDN | RECHER 20140726 M00 |
|---|----|---|----------|---|---|-----|---------------------|
| | | | | | | | |

16.95053 ACED-DATE (BRACKET) FOR F FER BY R BERTON JR

RELU 20140418 437

Total # RADED # Work Orders:
COUNT 2

| CITYID 99990002 MISC CITY WIDE PROJECTS | 25 | 4 | 16 95092 | 2 | PERFORM 6-7-10 AND INSTL STAIN WATER MAINTENANCE LOCATION 1601 WEST 8A&10 ST | JDN | FENG 20110725 431 |
|---|----|---|----------|---|--|-----|-------------------|
| | | | | | | | |

16.95101 7 FER INVESTIGATE FLOOR 80 AT LOCH FAYEN DAN

RELU 20120515 651

Total # PFER # Work Orders:
COUNT 2

CITYID 99990003 MISC CITY WIDE PROJECTS 25 2 15 95112 4 PHASSIST WATER DEPT. WEA REQ BY W KELLEY PER LWA

Total # PM # Work Orders:
COUNT 1

CITYID 99990004 MISC CITY WIDE PROJECTS 25 2 14 95100 5 - ACTIV/URG/OSHA/ENVIRON MEET'S BM DETERINE

20150713 W22

649 20150729 W37

Total # SDRG # Work Orders:
COUNT 1

Area # MISD # Work Orders:
COUNT 47

Total Co # # Work Orders:
COUNT 47

05/02/16 10:41:39

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Centralized Backlog Report
Off's & Rep's
Back River - P.L. Misic
15 of 05/02/16
Status: Up to Date

| No. | Area | Loc. | Machine | Machine Description | MO Ref# | Part Code | Part Description | Short Problem Description | Full Problem Description | Description | Crash | W/O | W/H Sat | Req. | Req. | Issue | Tgt | Gen |
|-----|------|------|---------|------------------------|------------|--------------|---------------------|------------------------------|-----------------------------|-------------|-------|-----|---------|------|------|-------|-----|-----|
| | | | | | | | | | | | | | | | | | | |

FIRE, TOWER
CRAFT 2,400

END OF REPORT

07/05/16 01:24:54

Continued Backlog Report

VACUUM FIL CENTRAL 640000

ID: -----> BACT005

FACILITY, NEW CENTIFUGE RL

as of 07/05/16

07/05/16

CNT 1

10 25

Status

| Co. | Loc. | Machine | Machine Description | Wk | Plnr | Sts | Prty Code | Wk | Wk | Plnr | Sts | Prty Code | Wk | Wk | Wk |
|------------------------------------|----------------------------|---------|---------------------|----------|------|--|-----------|------------------|-----|----------|-----|---|-----|------------------|-----|
| 9 VACUUM FIL CENTRAL 640000 | FACILITY, NEW CENTIFUGE RL | 25 | 30 | 15.03655 | 2 | STRETCH LEAK IN CENTIFUGE LI LINE TO LEAN (NEED CORD) ON LINE OF FIRST FLOOR | WKF | STRETCH 20141114 | 489 | 16.03322 | 2 | REPLACE 16" SLEEVES PLEASE REPLACE THE 16" SLEEVE FEEDING FELTECH | WKF | STRETCH 20150929 | 411 |
| FACILITY, NEW CENTIFUGE RL | 25 | 4 | | | | | | | | | | | | | |
| Total • STRETCH • Work Orders: | | | | | | | | | | | | | | | |
| COUNT 2 | | | | | | | | | | | | | | | |
| Area • VACUUM FIL • Work Order \$: | | | | | | | | | | | | | | | |
| COUNT 155 | | | | | | | | | | | | | | | |
| Total • VACUUM FIL • Work Orders: | | | | | | | | | | | | | | | |
| COUNT 1 | | | | | | | | | | | | | | | |
| Area • VACUUM-FIL • Work Order \$: | | | | | | | | | | | | | | | |
| COUNT 1 | | | | | | | | | | | | | | | |
| Total • ELEC • Work Orders: | | | | | | | | | | | | | | | |
| COUNT 1 | | | | | | | | | | | | | | | |
| Area • VACUUM-FIL • Work Order \$: | | | | | | | | | | | | | | | |
| COUNT 2 | | | | | | | | | | | | | | | |
| Total Co. • 9 • Work Order \$: | | | | | | | | | | | | | | | |
| COUNT 2,070 | | | | | | | | | | | | | | | |

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07/05/16 08:26:54

Computer Backlog Report

ID —> BLOG

Page: 5

Crts & Mps
Back River, PS & MS.

as of 07/05/16

Status 10 & 25

Co. No. Area Loc. Number Machine Description

Wk#

Plnt Sis

Pty Cols W/D

Wk#

Code

Short Problem Description

Full Problem Description

Reg. By

Craft

Wk#

Issue Date

Wk#

Sit

Typ

dat

C/L

11 PUFFING ST JF \$21000 FACILITY,JONES FALLS 25 4 11.63151 1 ELEC-VERIFICATION TO CHECK HND 1 helperc 6-972
 QDAO 9771000 SYSTEM SEADA 25 4 11.63055 1 UPSYS-REFURB UPFRONT steleperc 6-972
 QDAO 1821000 SWITCH/FURN 25 4 12.60165 1 ELEC-REPLACE MEDIUM VOLTA AT QDAO USE FOR 15KV transformer
 MSPT 9771000 FACILITY,RESTRT 25 4 12.62734 1 ELEC-VERIFICATION TO STANDRD COMMUNICATION LINE 410 395-7574—catalyzer 6-972

Total # ELEC • Work Orders:

C/L

CAROL 986300 FACILITY,CAROLINE ST,P.S. 25 2D 16.00551 1 GND/S - VAC GEN TO CLEAN steleperc 6-972
 CAROL 986300 FACILITY,CAROLINE ST,P.S. 25 3D 16.00883 1 GND/S - VAC TRUCK TO CLEAN steleperc 6-972
 CAROL 986300 PUMP-STATION DRAIN #2 25 4 16.10075 1 GND/S-RESTITUTION PUMP TO 5 SEE KEITH RAYOR. REO BY J. MARICK 6-9748
 DOWAL 941000 FACILITY,DOWALK PUMPING 25 4 16.81877 1 GND/S-BOTH TRUCK NEEDED TO DO STANLAD. REO BY W.HODGES 6-9733
 DOWAL 941000 FACILITY,DOWALK PUMPING 25 4 16.82903 1 GND/S-BOTH TRUCK NEEDED TO WITH DELIVERY OF PARTS TO STANLAD. REO BY W.HODGES 6-9733
 EASTER 910104 IMPESTEL (NESTH) 25 3D 15.93230 1 GND/S-NEED WAT-ALL TUBE. WESTPORT SCREEN ROOM ADAPTER (DISPLATE FULL).
 EASTER 910104 PUMP,SPARE A4 25 4 16.80025 1 GND/S-BOTH TRUCK TO DELIVER EASLY TO EASTON AVE. P.S. ONE DATE OF 7/22/15. REO. BY W.HODGES 6-972

Total # GRCS • Work Orders:

C/L

BUDLYN 955301 FAN #1 EXHAUSTION ROW FO 25 4 15.81029 1 HA-REPLACE BELT REO. BY J. MARICK 6-9748
 BUDLYN 957700 FOUNTAIN,LOADING WATER 25 4 15.62554 2 BLDS/H-A/REPAIR OR REPLACE COOLER
 CAROL 986300 AIR CONDITIONER (WINDCH) 25 3D 15.82245 1 HA-REPLACE AC UNIT GEOLI STELEPERC 6-972
 CAROL 986300 AIR CONDITIONER (WINDCH) 25 3D 15.80178 1 HA-REPLACE AC UNIT (H) IN 9 PEC 6-972
 CAROL 986300 AIR CONDITIONER (WINDCH) 25 3D 16.82111 1 HA-REPAIR -REPLACE UNIT steleperc 6-972
 DOWAL 941007 FAN#-4 EXHAUST(ROOF) 25 3D 16.80130 1 HA-NOT WORKING NO AIR steleperc 6-972
 DOWAL 941000 FOUNTAIN,WATER 25 4 15.82555 2 BLDS/H-A/REPAIR OR REPLACE COOLER
 EASTER 910500 FAN EXHAUST (EAST) 25 3D 14.80005 2 HA/ELECS/REPAIR UNIT KEEP STELEPERC 6-972
 EASTER 910500 FAN EXHAUST 25 3D 14.80012 2 HA/ELECS/REPAIR UNIT KEEP STELEPERC 6-972
 EASTER 910500 AIR HANDLING UNIT AND CRU 25 3D 16.80188 1 HA/PENG- KEEPS SHUTTING OFF STELEPERC 6-972
 EASTER 910517 AIR HANDLING UNIT AND CRU 25 3D 16.82537 1 HA/PENG- REPAIR CRU (NO CONTROL POWER) 1 steleperc 6-972
 EASTER 910501 FAN,EXHAUST #1 25 3D 16.82621 1 HA/ ADJUST BELT (ISLAND) steleperc 6-972
 EASTER 910503 FAN,EXHAUST 25 4 13.82115 1 HA-REPAIR FAN (TRAPPED) 0 JOSH-STLEPERC 6-972
 EASTER 910504 HEATER,UNIT #4(FP/F PL) 25 4 13.82722 1 HA-REPAIR LEAVING HEATER STELEPERC 6-972
 EASTER 910513 HEATER,UNIT #1 25 4 14.81690 2 ELEPS/H-REPAIR HEATER UN STELEPERC 6-972
 EASTER 910514 HEATER,UNIT #2 25 4 14.81699 2 ELEPS/H-REPAIR HEATING F STELEPERC 6-972
 EASTER 910515 HEATER,UNIT #3(3RD FLOOR) 25 4 15.81623 1 HA-REPLACE HEATING UNIT 1 steleperc 6-972
 EASTER 910108 FOUNTAIN,WATER 25 4 15.82653 2 BLDS/H-A/REPAIR OR REPLACE COOLER
 EASTER 910100 FACILITY,EASTERN AVENUE 25 4 15.82570 1 HA-A/REPAIR DRAIN LINE @ OFFICE
 EASTER 910503 MECHINE,ICE/W/FILTERS 25 4 16.80673 1 HA-REPAIR ICE MAKER,NOT W.H.JOHNSON 6-972
 EASTER 910504 BOILER #1 25 4 16.80082 1 HA-REPLACE PRESSURE RELIEF VALVE IS BAD
 EASTER 910501 PUMP,RECIRC-#1(BOILER) 25 4 16.81689 1 TEMP/S/H-A/STISIT CLEAN FL STELEPERC 6-972
 EASTER 910501 FAN EXHAUST #1 25 4 16.82272 2 HA/ELECS-REPAIR FAN LOAD steleperc 6-972
 JF 927300 CONDENSING UNIT/COIL OF ASW 25 3D 16.82636 1 HA-REPAIR AC UNIT UP P NOT WORKING STELEPERC 6-972
 LCPD 985002 FOUNTAIN,WATER COOLER 25 4 15.80552 2 BLDS/H-A/REPAIR OR REPLACE WATER COOLER
 LCPD 985001 FACILITY,LOAD POINT 25 4 16.80016 2 BLDS/H-REPAIR/WATER COOLER W.JOHNSON 6-972
 PCST 976301 FOUNTAIN,WATER 25 4 16.80005 1 HA-HALTER NOT COLD W.JOHNSON 6-972
 QDAO 938905 FOUNTAIN,WATER 25 4 16.80005 1 HA-HALTER NOT COLD W.JOHNSON 6-972
 STUR 981152 UNIT,ALARM/LINE #2 25 4 15.82637 2 BLDS/H-A/REPAIR UP REFLAC COOLER
 MSPT 9771000 FACILITY,RESTRT 25 4 15.82335 2 HA/ADJUST BELT ON FAN UNIT STELEPERC 6-972

Total #

C/L

HJ

150535-6-95

07/05/16 08:24:54

Estimated Backlog Report

CITY & IND'S

PAGE 38

BACLOG

as of 07/05/16

Status 10 A/25

| Co. No. | Area | Loc. Number | Machine Description | Wk Code | Plnt Code | Wk Code | Short Problem Description | Full Problem Description | Crst By | Hd Issue Date | Hd Stat |
|------------|-----------------|---------------------------------|------------------------------|------------|--------------|---|--|-----------------------------|-----------------|------------------|------------|
| | | | | | | | | | | | C |
| 11 | PUMPING STATION | 991101 | PUMP, SCREEN & MONITOR | Z5 | 4 | 16.BUEGG | INPS/P (CLEAR FAULT ON 1601 WENT RUN) | stlperc 64972 | C5 | INSFS 20150922 | H41 |
| | | | Total • INPS • Work Orders: | | | | | | | | |
| | | | COUNT 46 | | | | | | | | |
| | | | Total • INST • Work Orders: | | | | | | | | |
| | | | COUNT 1 | | | | | | | | |
| | | | Total • RMEFB • Work Orders: | | | | | | | | |
| | | | COUNT 16 | | | | | | | | |
| DUNDAL | 941102 | PUFF, SERVICE #2 | Z5 | 4 | 15.81471 | RCLFB/REPAIR HOLE IN SIDE stlperc 64972 | | C5 | RMEFB 20150121 | H41 | |
| DUNDAL | 941102 | PUFF, SERVICE #2 | Z5 | 4 | 16.82205 | RCLFB/REPAIR SHAFT AND RDG RD 65773 | | H4 | 20160626 | H41 | |
| EASTER | 919003 | DUMPFISTER, (SOUTH) | Z5 | 4 | 16.82331 | RCLFB/HOLD KEY TOOL, RED, B | | H4 | 20160629 | H41 | |
| EASTER | 919003 | DUMPFISTER, (SOUTH) | Z5 | 4 | 15.82036 | RCLFB/PATCH HOLES IN DMPF YDL, SMITH 6-17738 | | THE | 20140405 | H49 | |
| EASTER | 919004 | DUMPFISTER, (SOUTH) | Z5 | 4 | 15.82123 | RCLFB/PATCH HOLD IN SIDE stlperc 64972 | | C5 | 20150923 | H31 | |
| EASTER | 919004 | DUMPFISTER, (SOUTH) | Z5 | 4 | 15.82126 | RCLFB/PATCH HOLD IN SIDE N. WORKERS 6-4972 | | H4 | 20150923 | H45 | |
| EASTER | 919102 | SCREEN, BAR (SOUTH) | Z5 | 4 | 15.82263 | RCLFB/REPAIR WHEEL ON DOOR H. JORDAN 6-4972 | | H4 | 20160616 | H49 | |
| EASTER | 919102 | SCREEN, BAR (NORTH) | Z5 | 4 | 16.82311 | RCLFB/MACHINE WIRE SPANNER DZ REIN BY H. JORDAN 65773 | | H4 | 20160111 | H41 | |
| EASTER | 919004 | DUMPFISTER, (NORTH) | Z5 | 4 | 15.82031 | RCLFB/REPAIR 4 WHEELS ON DUMPFISTER 64972 | | H4 | 20160615 | H49 | |
| EASTER | 919004 | DUMPFISTER, (NORTH) | Z5 | 4 | 16.82224 | RCLFB/REPAIR WHEELS ON DUMPFISTER stlperc 64972 | | C5 | 20160522 | H73 | |
| EASTER | 919004 | DUMPFISTER, (NORTH) | Z5 | 4 | 16.82225 | RCLFB/REPAIR SP1 IN SIDE O stlperc 64972 | | C5 | 20160522 | H73 | |
| EASTER | 919102 | TRAILER, GRASS | Z5 | 4 | 15.82225 | RCLFB/REPAIR WHEEL OR GEA H. JORDAN 6-4972 | | H4 | 20160623 | H45 | |
| JF | 9223302 | DRIVE, #2 BAR SCREEN | Z5 | 4 | 16.81721 | RCLFB/FABRICATE NEW SHEET RED, BY H. JORDAN 65733 | | H4 | 20160127 | H41 | |
| JF | 932001 | METER, OVERBOARD (LEVEL) | Z5 | 4 | 16.82032 | RCLFB/TAKE TYPAL BODY PLATE RED OR R BACON JR | | BRJ | 20160606 | H31 | |
| JF | 925731 | DUMPFISTER, (NORTH) 1601 | Z5 | 4 | 16.82010 | RCLFB/REPAIR HOLD IN DUMP H. JORDAN 6-4972 | | H4 | 20160609 | H45 | |
| QHD | 935305 | DUMPFISTER, #1 | Z5 | 4 | 16.82238 | RCLFB/REPAIR BROKEN WHEEL H. JORDAN 6-4972 | | H4 | 20160414 | H39 | |
| | | | Total • RMEFB • Work Orders: | | | | | | | | |
| | | | COUNT 16 | | | | | | | | |
| BRUNN | 941003 | TANK, HYDROSTATIC SEAL | Z5 | 4 | 14.60656 | RCLPS/OLDS/OPEN SYSTEM PRESSURE- stlperc 64972 | | C5 | RPA/PA 20131003 | H43 | |
| CULLAT | 946102 | PUMP, STAIN GRAIN/BEET PUMP STA | Z5 | 30 | 16.81326 | RCLPS/OLDS/GEAR BOX FOR (very noisy) stlperc 64972 | | C5 | 15/1201/26 | H45 | |
| CULLAT | 946102 | FACILITY, CONCRETE PUMP STA | Z5 | 4 | 14.60310 | RCLPS/OLSTAL, REPAIR 44 TO STATION stlperc 64972 | | C5 | 20140402 | H45 | |
| DUNDAL | 941102 | PUFF, SERVICE #2 | Z5 | 30 | 16.81046 | RCLPS/REPAIR #2 HMP. TECH BLEA BART | | H4 | 2015/02/20 | H52 | |
| DUNDAL | 941102 | PUFF, SERVICE #2 | Z5 | 30 | 16.82513 | RCLPS/INTAKE HMP. FWD OR LOAD TEST stlperc 64972 | | S | 16/16/20 | | |
| DUNDAL | 945201 | GENERATOR, GENERITY | Z5 | 4 | 14.60210 | RCLPS/INSPECT #1 H. JORDAN 64972 | | C5 | 20130623 | H18 | |
| DUNDAL | 946401 | STRAIGHT, WASHU PUMP #182 | Z5 | 4 | 14.81936 | RCLPS/ REPLACE VICK GAUCES REVERSE-STLPERC 64972 | | C5 | 20140212 | H15 | |
| DUNDAL | 941003 | FACILITY, GROUNDLY PUMPING | Z5 | 4 | 15.81635 | RCLPS/HPP/OUT VAULT FOR E.TELD OF H.JORDAN 65728 | | H4 | 20150210 | H1 | |
| DUNDAL | 941103 | PUMP, SERVICE #3 | Z5 | 4 | 15.81183 | RCLPS/REBUILD SPACE HPP. 65728 | | H4 | 2015/02/25 | H27 | |
| DUNDAL | 941104 | PUMP, SERVICE #4 | Z5 | 4 | 15.82124 | RCLPS/HECK #4 HMP. (MEDIUM) LEAKING | | H4 | 2015/04/04 | H42 | |
| DUNDAL | 945302 | PUMP, SERP #2 | Z5 | 4 | 15.82532 | RCLPS/ELPS REPAIR #2 HMP H. JORDAN 6-4972 | | H4 | 2015/06/08 | | |
| DUNDAL | 941105 | PUMP, SERVICE #2 | Z5 | 4 | 16.83230 | RCLPS/ CHECK MESH SEAL #15 stlperc 64972 | | C5 | 20160621 | H52 | |
| EASTER | 911101 | PUFF, SERVICE #1 | Z5 | 4 | 15.81103 | RCLPS/ CHECK OIL IN BEAR. stlperc 64972 | | C5 | 2014125 | H45 | |
| EASTER | 919006 | PUFF, SERVICE #1 | Z5 | 4 | 15.81032 | RCLPS/ ASSIST DEVIATIONS stlperc 64972 | | S | 2014125 | H45 | |
| EASTER | 911103 | PUFF, SERVICE #3 | Z5 | 4 | 15.80539 | RCLPS/CHECK WROP (LEAN ATTENIOR) ROBERT DESERIUS | | H4 | 2015/06/29 | H48 | |
| EASTER | 919007 | SCREEN, BAR (NORTH) | Z5 | 4 | 16.81116 | RCLPS/ MAINTENANCE TRACTOR stlperc 64972 | | C5 | 2015/11/13 | H55 | |
| EASTER | 913101 | SCREEN, BAR (NORTH) | Z5 | 4 | 16.81687 | RCLPS/ADAM SCREEN, RANE | | H4 | 2016/02/10 | H45 | |
| EASTER | 919102 | SCREEN, BAR (SOUTH) | Z5 | 4 | 16.82169 | RCLPS/ELPS/FREE REEDER R K5—65733 | | H4 | 2016/03/16 | H45 | |
| EASTER | 911104 | PUFF, SERVICE #4 | Z5 | 4 | 16.82357 | RCLPS/ AUGUST HAKING (LE STELPERC 64972 | | C5 | 2016/04/13 | H49 | |
| EASTER | 919104 | TRAILER/LBE 18'-WIDE/E | Z5 | 4 | 16.82006 | RCLPS/REPAIR HELLEANTER, LE attention H41) Pendar | | H4 | 2016/03/08 | H45 | |

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Continued Backlog Report

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ID: -----> BACKLOG
as of 07/05/16
Status 10 & 25

| Co. No. | Area Loc. | Machine Number | Machine Description | WO Sts | Ptnr Code | Prty Code | Short problem Description | Full Problem Description | Craft By | Wd Fusas Type | Wk Stat C 5 |
|------------|-------------------------|---------------------------|------------------------|---|--------------|--------------|------------------------------|-----------------------------|-------------|---------------------|----------------|
| 11 | FUFINNE ST EASTER 91100 | FACILITY-EASTERN AVENUE | 25 4 TAD 12.02630 | FENG- REPAIR CONCRETE PAD DITCHES IN TRIPPING HAZARD—SEE CHRIS STRIPLER 64972. | CS | PENG | 20120203 | W02 | | | |
| | EASTER 91100 | FACILITY-EASTERN AVENUE | 25 4 TAD 12.63000 | FENG/ INVESTIGATE REFL. OR SEE CHRIS 64972. | CS | | 20120205 | W51 | | | |
| | EASTER 91100 | FACILITY-EASTERN AVENUE | 25 4 16.82622 | FENG-PROVIDE AND INSTALL SS SYSTEM AND SECURITY CAMERA SURVEILLANCE SYSTEM UPDATES. | CS | | 20160419 | 409 | | | |
| | FTIC 90200 | FACILITY-FTIC FACILITY | 25 4 B.IZ 12.88674 | FENG- INVESTIGATE INSTALL BACON GENERATOR AUTOMATIC TRANSFER SWITCH FOR STATION. | JAD | | 20110831 | 451 | | | |
| | HILAND 96100 | FACILITY-HIGHGLAND | 25 4 B.IZ 12.91725 | FENG/ INVESTIGATE 110 VOLTS INGRADE -4 PER J MCGOWAN 64972. | CS | | 20111205 | 451 | | | |
| | JF 52100 | FACILITY-JONES FALLS | 25 4 TAD 12.80579 | FENG/HAVE PROBE LINE AND INSTALLED IN USTRAITS WFD ROOM STRIPLER 64972. | CS | | 20110809 | 440 | | | |
| | LOCPO 988500 | FACILITY-LOCPO POINT | 25 4 14.81255 | FENG/ RE-DISSET BAG OFF STRIPLER 64972. | CS | | 20131219 | W15 | | | |
| | PCST 977800 | SATCHEL-TRANSFER | 25 4 TAD 12.83588 | FENG-PROVIDE FUEL TANKS TO T. LIVIS | TAB | | 20120619 | 427 | | | |
| | FTIHD 999516 | TEST BACKFLOA PREVENTERS | 25 4 TC 10.85269 | FENG-TEST & CERTIFY BACKFLOA IN ALL PUMPING STATIONS. | CS | | 20140512 | 409 | | | |
| | PLTAD 999815 | ANNUAL CRANE INSPECTIONS | 25 4 14.82622 | FENG-PERFORM CRANE SAFETY IN ALL PUMPING STATIONS AND REPORT. | CS | | 20140529 | 409 | | | |
| | STRAIN 931125 | FACILITY-STRAINEY RNN P.S | 25 4 TAD 12.81159 | FENG-INVESTIGATE PUMPING UNIT FAILURE (OPERATIONAL PROBLEMS OR PUMP DESIGN) REQUESTER RLS | CS | | 20110831 | 451 | | | |
| | STRAIN 930126 | FACILITY-STRAINEY RNN P.S | 25 4 13.89160 | FENG-INVESTIGATE PUMP GAV WALL DESIGN PROBLEM STRIPLER 64972. | CS | | 20130115 | 451 | | | |
| | WSTPPT 971100 | FACILITY-WESTPORT | 25 4 PWA 13.80722 | FENG/INVESTIGATE INSTALL STRIPLER 64972. | CS | | 20121129 | 451 | | | |

Total • PENG • Work Orders:
COUNT 25

| | | | | |
|-------------|--------------|------|----------|---|
| PLST 978101 | PUMP,SUPP #1 | 25 5 | 16.82139 | PENG-RELEASE AND ATTACH PAC REED BY J. DEMETRIO |
| PLST 978102 | PUMP,SUPP #2 | 25 5 | 16.82140 | PENG-RELEASE AND ATTACH PAC REED BY J. DEMETRIO |

Total • PLST • Work Orders:
COUNT 2

| | | | | |
|---------------|--------------------------|-------|----------|---|
| CLINT 991121 | FACILITY-CLINTON STA. A1 | 25 3D | 15.80665 | PLCS/STAFF/STUDY-HD PANELED BY J. HAROLD 6-9748 |
| DORNAL 941104 | PUMP, SERVICE #4 | 25 4 | 17.00001 | PLCS/STAFF-ASSIST FOR OT RECEIVED REED. TO THIS JOB ON OPERATIVE. ALSO THE STREAMON WH 20160706 463 |

Total • STREAMON • Work Orders:
COUNT 2

Total • PLST • Work Orders:
COUNT 316

Total Co. • 11 • Work Orders:
COUNT 317

07/05/16 06:24:54

Confined Backlog Report

Or's & R's

FILE #2

| Co. No. | Area | Machine Number | Machine Description | W/O S/N | Plant Pwy Code W/O Code | Short Article Description | Full Problem Description | | Craft By | Req. Code | Wk Craft Date | Type Cnt C15 | |
|--------------------------------------|--------|---------------------------|--------------------------|---------|-------------------------|---------------------------|--|-----------------|-----------|-----------|---------------|--------------|--|
| Total • EEE • Work Orders: | | | | | | | | | | | | | |
| COUNT 11 | | | | | | | | | | | | | |
| 80 | MSIC | PETER 960012 | FACILITY,PREBICK ED,NETE | 25 | 4 | 15.50200 | 0205-450- CLEAN FLUE AT REED BY R BARTON JR | | PBL GEN | 20140729 | 445 | | |
| | | PETER 96005 | FACILITY,CHEM. WARE ST | 25 | 4 | 16.50184 | 0205-JET RD FLUE FOR ST REED BY R BARTON JR | | PBL GEN | 20160523 | 445 | | |
| Total • EEE • Work Orders: | | | | | | | | | | | | | |
| COUNT 2 | | | | | | | | | | | | | |
| MSIC | 960001 | WAREHOUSE 45 | | 25 | 4 | 14.50022 | EA-HD HEAT | SEE R HEDDERSON | EH EA | 20140113 | HIS | | |
| Total • HA • Work Orders: | | | | | | | | | | | | | |
| COUNT 1 | | | | | | | | | | | | | |
| PETER | 960001 | FACILITY,WALKER AVE. STA. | | 25 | 4 | 15.50100 | 1995- RESTORE PROGRAM BA REED BY R BARTON JR | | PBL MTS | 20160615 | R21 | | |
| Total • INSPE • Work Orders: | | | | | | | | | | | | | |
| COUNT 1 | | | | | | | | | | | | | |
| CITRIO | 959002 | FACILITY,GRAPHICS & SIGNS | | 25 | 3 | 16.50054 | 2 RT-REF/BEL-E-INSTALL EXHAUS AND EXHAUST FANS PER DRAWINGS. | | JOB TMWBS | 20160125 | MB | | |
| Total • RTFB • Work Orders: | | | | | | | | | | | | | |
| COUNT 1 | | | | | | | | | | | | | |
| CITRIO | 959300 | MSIC,CITY WIDE PROJECTS | | 25 | 4 | 17A 12.50032 | 2 PENE/PENE-FAB AND INSTL. STEIN WATER MAINTENACE LOCATION 1601 WEST BLDG. ST. | | JBD PEC | 20110205 | W01 | | |
| CITRIO | 959300 | MSIC,CITY WIDE PROJECTS | | 25 | 4 | 17B 12.50201 | 2 PENE-INVESTIGATE FLOOD DO AT LOCH RAVEN INP. | | JBD PEC | 20120315 | W01 | | |
| Total • PEC • Work Orders: | | | | | | | | | | | | | |
| COUNT 2 | | | | | | | | | | | | | |
| CITRIO | 959500 | MSIC,CITY WIDE PROJECTS | | 25 | 2 | 15.50112 | 4 RT-INSTL. HAIR DEPT.4541 REED BY M.ELLEY PER LIA | | HA M RT | 20130113 | #22 | | |
| Total • HA • Work Orders: | | | | | | | | | | | | | |
| COUNT 1 | | | | | | | | | | | | | |
| CITRIO | 959600 | MSIC,CITY WIDE PROJECTS | | 25 | 2 | 14.50100 | 5 RECF/FLLY/GRSF/ADG/STORN REESES ON OVERTIME. | | JAD STORN | 20140307 | 489 | | |
| Total • STORN • Work Orders: | | | | | | | | | | | | | |
| COUNT 1 | | | | | | | | | | | | | |
| Area • MSIC • Work Orders: | | | | | | | | | | | | | |
| COUNT 45 | | | | | | | | | | | | | |
| Total Co. • BD • Work Orders: | | | | | | | | | | | | | |
| COUNT 45 | | | | | | | | | | | | | |

10:-----> BACKLOG
as of 07/05/16
Status 10 4 25

07/05/16 00:24:54

Combined Backlog Report

Ch's & Hb's
Back River, FS & NSC.
as of 07/05/16
Status 10 & 25

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| Co. No. | Area | Loc. | Machine Number | Machine Description | ID | Prtr Code | W/O Code | W/O Number |
|---------|------|------|----------------|---------------------|----|-----------|----------|------------|
|---------|------|------|----------------|---------------------|----|-----------|----------|------------|

FINAL TOTALS
COUNT 2,432

| Short Problem Description | Full Problem Description |
|---------------------------|--------------------------|
|---------------------------|--------------------------|

*** END OF REPORT ***

IB:-----> BACKLOG

as of 07/05/16

Status 10 & 25

Craft Req. By

Mo Issn Date

Wrk Sht Typ dan C15

APPENDIX 5

SUMMARY OF REPORTED OVERFLOWS



Civil Action No. JFM-02-1524
Calendar Quarterly Report No. 55
For Calendar Quarter Ending June 30, 2016

SSO No. 67

| <u>Date</u> | <u>Surcharge Depth (in)**</u> | <u>Rainfall (in)</u> |
|-------------|-------------------------------|----------------------|
|-------------|-------------------------------|----------------------|

None Reported this Quarter

SSO No. 72

| <u>Date</u> | <u>Surcharge Depth (in)**</u> | <u>Rainfall (in)</u> |
|-------------|-------------------------------|----------------------|
|-------------|-------------------------------|----------------------|

5/6/2016 Flow Meter in Place 1.15

SSO No. 135

| <u>Date</u> | <u>Surcharge Depth (in)**</u> | <u>Rainfall (in)</u> |
|-------------|-------------------------------|----------------------|
|-------------|-------------------------------|----------------------|

None Reported this Quarter

SSO No. 137

| <u>Date</u> | <u>Surcharge Depth (in)**</u> | <u>Rainfall (in)</u> |
|-------------|-------------------------------|----------------------|
|-------------|-------------------------------|----------------------|

Flow monitor removed on July 1, 2015 for construction

SSO No. 138

Date

Surcharge Depth (in)**

Rainfall (in)

None Reported this Quarter

SSO No. 139

Date

Surcharge Depth (in)**

Rainfall (in)

None Reported this Quarter

SSO No. 153

Date

Surcharge Depth (in)**

Rainfall (in)

None Reported this Quarter

SSO No. 154

Date

Surcharge Depth (in)**

Rainfall (in)

None Reported this Quarter



Civil Action No. JFM-02-1524
Activity at SSO Structures
Calendar Quarterly Report No. 55
For Calendar Quarter Ending June 30, 2016

Appendix 5-2

Pumping Station Overflows

| <u>Pumping Station</u> | <u>Date</u> | <u>Volume Loss (gal)</u> | <u>Rainfall (in)</u> |
|------------------------|-------------|--------------------------|----------------------|
|------------------------|-------------|--------------------------|----------------------|

None Reported this Quarter

Wastewater Treatment Plant Overflows

| <u>WWTP</u> | <u>Date</u> | <u>Volume Loss (gal)</u> | <u>Rainfall (in)</u> |
|-------------|-------------|--------------------------|----------------------|
|-------------|-------------|--------------------------|----------------------|

Patapsco None Reported this
 Quarter

Back River None Reported this
 Quarter



City of Baltimore
Un-Permitted Sanitary Sewer Overflows
For Calendar Quarter Ending June 30, 2016

| Month | Estimated Volume (Gal) | Cause | Rain (In) | Receiving Waters | Location | Zip |
|-------|------------------------|---|-----------|------------------|---------------------------------|-------|
| APRIL | 232 | Rags, Grease | 0.22 | N/A | 3000 Reisterstown Rd | 21215 |
| APRIL | 760 | Rags, Grease | 0.16 | N/A | 18 W 25th St | 21218 |
| APRIL | 280 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0 | N/A | 2600 Strathmore Ave | 21214 |
| APRIL | Evidence of Overflow | Roots | 0.15 | N/A | 4004 Maine Ave | 21207 |
| APRIL | 310 | Rags, Roots | 0 | N/A | 2223 Wheatley Dr | 21207 |
| APRIL | 475 | Rags, Grease | 0 | Gwynns Falls | 1900 Ashburton St | 21216 |
| APRIL | Evidence of Overflow | Roots, Trash, Sand, Gravel, Rocks | 0 | N/A | 1630 Moreland Ave | 21216 |
| APRIL | Evidence of Overflow | Rags | 0 | N/A | 1550 Bruce Ct | 21217 |
| APRIL | 2,350 | Rags | 0.43 | Inner Harbor | 5300 Holabird Ave | 21224 |
| APRIL | Evidence of Overflow | Rags | 0.43 | N/A | 222 N Greene St | 21201 |
| APRIL | Evidence of Overflow | Rags, Grease | 0.43 | N/A | 1217 N Patterson Pak Ave | 21213 |
| APRIL | Evidence of Overflow | Unknown | 0.43 | N/A | 718 Lennox St | 21217 |
| APRIL | 720 | Rags, Trash, Sand, Gravel, Rocks | 0.43 | N/A | 1801 Chelsea Rd | 21216 |
| APRIL | Evidence of Overflow | Rags, Grease, Trash, Sand, Gravel, Rocks | 0 | N/A | 1800 Falls Rd | 21211 |
| APRIL | 1,250 | Rags, Trash, Sand, Gravel, Rocks | 0 | N/A | 2023 McHenry St | 21223 |
| APRIL | Evidence of Overflow | Trash, Sand, Gravel, Rocks | 0.33 | N/A | 1138 Scott St | 21230 |
| APRIL | Evidence of Overflow | Rags | 0 | N/A | 239 N Monroe St | 21223 |
| APRIL | Evidence of Overflow | Rags, Grease | 0.04 | N/A | 830 N Broadway | 21205 |
| APRIL | 192 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0.04 | N/A | 820 Bridgeview Rd | 21225 |
| APRIL | Evidence of Overflow | Rags | 0.04 | N/A | 1013 Darley Ave | 21218 |
| APRIL | 405 | Rags, Roots | 0 | Jones Falls | 1701 Sulgrave Ave | 21209 |
| APRIL | 482 | Rags, Roots | 0 | N/A | 903 Nottingham Rd | 21229 |
| APRIL | Evidence of Overflow | Rags | 0 | N/A | 4213 Ridge Wood Ave | 21215 |
| APRIL | Evidence of Overflow | Rags | 0 | N/A | 1318 Hull St | 21230 |
| APRIL | Evidence of Overflow | Pipe Break | 0 | N/A | 1507 N Collington Ave | 21213 |
| APRIL | Evidence of Overflow | Rags, Roots | 0 | N/A | 305 E University Pkwy | 21218 |
| APRIL | 800 | Rags, Grease | 0 | Gwynns Falls | 2700 Frederick Ave | 21223 |
| APRIL | Evidence of Overflow | Rags, Roots | 0 | N/A | 2801 Strathmore Ave | 21214 |
| APRIL | 360 | Rags, Trash, Sand, Gravel, Rocks | 0 | Patapsco River | 408 Cambria St | 21225 |
| APRIL | 1,130 | Rags, Roots, Grease, Trash, Sand, Gravel, Rocks | 0 | Gwynns Falls | 2223 Monticello Rd | 21216 |
| APRIL | 107 | Roots, Grease | 0 | N/A | 3630 Old Frederick Rd | 21229 |
| APRIL | 155 | Roots | 0 | N/A | 3739 Norton Rd | 21216 |
| APRIL | Evidence of Overflow | Rags, Roots, Trash, Sand, Gravel, Rocks | 0 | N/A | 1730 Bolton St | 21217 |
| APRIL | Evidence of Overflow | Pipe Break | 0 | N/A | 1533 Bentlou St | 21216 |
| APRIL | Evidence of Overflow | Rags, Grease, Trash, Sand, Gravel, Rocks | 0 | N/A | 5268 Cordelia Ave | 21215 |
| APRIL | 5,801 | Infiltration/Inflow, Pipe Break | 0 | Western Run | 5009 Blythewood Rd | 21210 |
| APRIL | Evidence of Overflow | Pipe Break | 0 | N/A | 3402 Woodbine Ave | 21207 |
| APRIL | 318 | Roots, Trash, Sand, Gravel, Rocks | 0 | N/A | 5204 Roland Park Country School | 21210 |
| APRIL | Evidence of Overflow | Rags | 0 | N/A | 912 N Montford Ave | 21213 |



Civil Action No. JFM-02-1524

Overflow Occurrences

Calendar Quarterly Report No. 55

For Calendar Quarter Ending June 30, 2016

City of Baltimore
Un-Permitted Sanitary Sewer Overflows
For Calendar Quarter Ending June 30, 2016

| Month | Estimated Volume (Gal) | Cause | Rain (in) | Receiving Waters | Location | Zip |
|-------|------------------------|--|-----------|------------------|-----------------------------|-------|
| APRIL | 345 | Rain, Pipe Break | 0 | Stony Run | 5512 Boxhill Lane | 21210 |
| APRIL | 375 | Grease, Trash, Sand, Gravel, Rocks | 0 | N/A | 6 N Hilton St | 21229 |
| APRIL | Evidence of Overflow | Trash, Sand, Gravel, Rocks | 0 | N/A | 721 E Preston St | 21202 |
| APRIL | Evidence of Overflow | Roots | 0 | N/A | 4101 Balfern Ave | 21213 |
| APRIL | Evidence of Overflow | Trash, Sand, Gravel, Rocks | 0 | N/A | 1007 N Iris Ave | 21205 |
| APRIL | Evidence of Overflow | Rags, Trash, Sand, Gravel, Rocks | 0.09 | N/A | 1450 Ridgely St | 21230 |
| APRIL | Evidence of Overflow | Pipe Break | 0.09 | N/A | 912 N Montford Ave | 21213 |
| APRIL | Evidence of Overflow | Rags | 0 | N/A | 4002 Ridgewood Rd | 21215 |
| APRIL | Evidence of Overflow | Trash, Sand, Gravel, Rocks | 0 | N/A | 4205 Elsrode Ave | 21214 |
| APRIL | Evidence of Overflow | Other | 0 | N/A | 2305 E Fairmount Ave | 21224 |
| APRIL | 2,000 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0 | Gwynns Falls | 4104 Fairview Ave | 21216 |
| APRIL | 202 | Rags, Roots, Trash, Sand, Gravel, Rocks | 0 | Biddison Run | 6830 Everall Ave | 21236 |
| APRIL | Evidence of Overflow | Grease | 0 | N/A | 502 Wingate Rd | 21210 |
| APRIL | Evidence of Overflow | Roots | 0 | N/A | 460 Roundview Rd | 21225 |
| APRIL | 184 | Rags, Trash, Sand, Gravel, Rocks | 0 | N/A | 1414 McCulloh St | 21217 |
| APRIL | 610 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0.19 | Colgate Creek | 6225 Boston St | 21224 |
| APRIL | Evidence of Overflow | Rags, Roots | 0.19 | N/A | 5137 Wetheredsville Rd | 21207 |
| APRIL | 136 | Roots, Trash, Sand, Gravel, Rocks | 0.04 | N/A | 1501 S Edgewood St | 21227 |
| APRIL | Evidence of Overflow | Rags, Trash, Sand, Gravel, Rocks | 0.04 | N/A | 10 E 22nd St | 21218 |
| MAY | Evidence of Overflow | Trash, Sand, Gravel, Rocks, Pipe Break | 0.33 | N/A | 1813 W. Lafayette Ave | 21217 |
| MAY | Evidence of Overflow | Roots | 0.07 | N/A | 2202 E Fairmont Ave | 21231 |
| MAY | 178 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0 | N/A | 428 E Preston St | 21202 |
| MAY | Evidence of Overflow | Rags, Roots | 1.14 | N/A | 1804 Bolton St | 21217 |
| MAY | 1,910 | Rags, Grease | 1.14 | N/A | 2900 Rosalind Ave | 21215 |
| MAY | Evidence of Overflow | Rags, Roots | 1.14 | N/A | 5816 Berkley Ave | 21215 |
| MAY | 694 | Rags | 1.14 | N/A | 6221 Greenspring Ave | 21209 |
| MAY | Evidence of Overflow | Unknown | 0 | N/A | 1318 Hull St | 21230 |
| MAY | Evidence of Overflow | Rags, Roots | 0 | N/A | 3007 Ridgewood Ave | 21215 |
| MAY | 368 | Rags, Grease | 0 | N/A | 3701 Southwestern Blvd | 21229 |
| MAY | 4,814 | Rags, Trash, Sand, Gravel, Rocks | 0 | Jones Falls | 2951 Rosalind Ave | 21215 |
| MAY | Evidence of Overflow | Rags, Pipe Break | 0.01 | N/A | 4522 Keswick Rd | 21210 |
| MAY | Evidence of Overflow | Roots | 0.01 | N/A | 4705 Keswick Rd | 21210 |
| MAY | 339 | Rags, Trash, Sand, Gravel, Rocks | 0.01 | N/A | Ravenwood Ave and Belair Rd | 21213 |
| MAY | 9,767 | Infiltration/Inflow, Pipe Break | 0.64 | Jones Falls | 2910 Woodlawn Ave | 21215 |
| MAY | Evidence of Overflow | Rags, Roots, Grease | 0.01 | N/A | 302 Woodlawn Rd | 21210 |
| MAY | 2,300 | Rags, Roots, Trash, Sand, Gravel, Rocks | 0.01 | N/A | 1052 Bethune Rd | 21225 |
| MAY | Ongoing | Infiltration/Inflow, Pipe Break | 0.01 | Jones Falls | 2904 Woodlawn Ave | 21215 |
| MAY | 1,394 | Infiltration/Inflow, Pipe Break | 0.01 | Jones Falls | 2912 Woodlawn Ave | 21215 |
| MAY | Evidence of Overflow | Pipe Break | 0.05 | N/A | 2725 Hampden Ave | 21211 |



City of Baltimore
Un-Permitted Sanitary Sewer Overflows
For Calendar Quarter Ending June 30, 2016

| Month | Estimated Volume (Gal) | Cause | Rain (In) | Receiving Waters | Location | Zip |
|-------|------------------------|--|-----------|------------------|--------------------------|-------|
| MAY | Evidence of Overflow | Rags, Roots | 0.12 | N/A | 104 Elmhurst Ave | 21210 |
| MAY | Evidence of Overflow | Rags, Roots | 0.12 | N/A | 6003 Pinehurst Rd | 21212 |
| MAY | Evidence of Overflow | Rags, Roots | 0 | N/A | 1821 W Mulberry St | 21223 |
| MAY | Evidence of Overflow | Rags, Grease | 0 | N/A | 2019 Barclay St | 21218 |
| MAY | Evidence of Overflow | Pipe Break | 0 | N/A | 2024 Smallwood St | 21216 |
| MAY | 940 | Grease, Trash, Sand, Gravel, Rocks | 0 | N/A | 1707 Warwick Ave | 21216 |
| MAY | Evidence of Overflow | Rags, Roots | 0 | N/A | 2417 Madison Ave | 21217 |
| MAY | 128 | Rags, Trash, Sand, Gravel, Rocks | 0 | N/A | 1621 N Chapel St | 21213 |
| MAY | Evidence of Overflow | Roots | 0 | N/A | 2418 Saint Paul St | 21218 |
| MAY | 450 | Rags, Roots, Grease | 0 | N/A | 3000 Harford Rd | 21218 |
| MAY | 350 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0 | Jones Falls | 4307 Laplata Ave | 21211 |
| MAY | Evidence of Overflow | Rags, Roots | 0.33 | N/A | 429 Westgate Rd | 21229 |
| MAY | 1,790 | Rags, Roots, Grease | 0.52 | N/A | 5268 Cordelia Ave | 21215 |
| MAY | 1,150 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0 | Jones Falls | 1510 Guildford Ave | 21202 |
| MAY | 6,230 | Pipe Break | 0 | Gwynns Falls | 1600 Forest Hill Ave | 21230 |
| MAY | Evidence of Overflow | Rags, Roots | 0 | N/A | 2800 Rosalind Ave | 21215 |
| MAY | Evidence of Overflow | | 0 | N/A | 3113 Tilden Dr | 21211 |
| MAY | 1,140 | Rags, Roots, Grease | 0 | N/A | Dolphin Ln and Park Ave | 21217 |
| MAY | 96 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0 | N/A | 2437 Maryland Ave | 21218 |
| JUNE | 650 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0.01 | N/A | 3446 Spelman Rd | 21225 |
| JUNE | Evidence of Overflow | Rags, Roots, Trash, Sand, Gravel, Rocks | 0.03 | N/A | 803 E 22nd St | 21218 |
| JUNE | Evidence of Overflow | Roots | 0 | N/A | 947 Montpelier St | 21218 |
| JUNE | Evidence of Overflow | Trash, Sand, Gravel, Rocks | 0 | N/A | 224 N Milton Ave | 21224 |
| JUNE | Evidence of Overflow | Rags, Roots | 0.03 | N/A | 3923 Boarman Ave | 21215 |
| JUNE | Evidence of Overflow | Grease | 0 | N/A | 2028 W Eagle St | 21223 |
| JUNE | Evidence of Overflow | Trash, Sand, Gravel, Rocks, Pipe Break | 0 | N/A | 224 N Milton Ave | 21224 |
| JUNE | 1,169 | Pipe Break | 0 | Herring Run | 2905 Christopher Ave | 21214 |
| JUNE | Evidence of Overflow | Trash, Sand, Gravel, Rocks | 0 | N/A | 2924 Mallview Rd | 21230 |
| JUNE | 6,250 | Pipe Break | 0 | Herring Run | 2905 Christopher Ave | 21214 |
| JUNE | 131 | Rags, Grease | 0 | N/A | 1425 Poplar Grove St | 21216 |
| JUNE | 3,045 | Rags, Grease | 0 | N/A | 336 S Calhoun St | 21223 |
| JUNE | Evidence of Overflow | Rags, Trash, Sand, Gravel, Rocks | 0.54 | N/A | 200 N Milton Ave | 21224 |
| JUNE | Evidence of Overflow | Roots, Trash, Sand, Gravel, Rocks | 0.54 | N/A | 2805 Overland Ave | 21214 |
| JUNE | Evidence of Overflow | Rags, Grease | 0.07 | N/A | Round Rd & Bridgeview Rd | 21225 |
| JUNE | 179 | Roots | 0.07 | Inner Harbor | 947 Montpelier St | 21218 |
| JUNE | Evidence of Overflow | Pipe Break | 0 | N/A | 2049 Whistler Ave | 21230 |
| JUNE | 375 | Trash, Sand, Gravel, Rocks | 0 | Inner Harbor | 220 N Milton Ave | 21224 |
| JUNE | Evidence of Overflow | Rags, Roots, Grease | 0 | N/A | 948 Bennett Pl | 21223 |



Civil Action No. JFM-02-1524

Overflow Occurrences

Calendar Quarterly Report No. 55

For Calendar Quarter Ending June 30, 2016

City of Baltimore
Un-Permitted Sanitary Sewer Overflows
For Calendar Quarter Ending June 30, 2016

| Month | Estimated Volume (Gal) | Cause | Rain (in) | Receiving Waters | Location | Zip |
|-------|------------------------|--|-----------|------------------|---------------------|-------|
| JUNE | 745 | Rags, Roots | 1.04 | Gwynns Falls | 3915 Stokes Dr | 21229 |
| JUNE | 15,000 | Rain | 1.04 | Jones Falls | 1901 Falls Rd | 21211 |
| JUNE | 820 | Rags, Grease, Roots | 0 | N/A | 917 Seagull Ave | 21225 |
| JUNE | 180 | Rags, Grease | 0 | N/A | 2040 Linden Ave | 21217 |
| JUNE | Evidence of Overflow | Roots | 0 | N/A | 201 Deepdene Rd | 21210 |
| JUNE | 595 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0.49 | Inner Harbor | 838 Herndon Ct | 21225 |
| JUNE | Evidence of Overflow | Grease, Trash, Sand, Gravel, Rocks | 0.49 | N/A | 1721 N Regester St | 21213 |
| JUNE | Evidence of Overflow | Rags, Trash, Sand, Gravel, Rocks | 0.49 | N/A | 5200 Beaufort Ave | 21215 |
| JUNE | Evidence of Overflow | Rags, Trash, Sand, Gravel, Rocks | 0.7 | N/A | 2257 Cedley St | 21230 |
| JUNE | 132 | Rags, Grease, Trash, Sand, Gravel, Rocks | 0.7 | N/A | 5713 Belair Rd | 21206 |
| JUNE | Evidence of Overflow | Rags, Roots | 0.03 | N/A | 5200 Beaufort Ave | 21215 |
| JUNE | Evidence of Overflow | Rags, Roots | 0.03 | N/A | 614 Hollen Rd | 21212 |
| JUNE | Evidence of Overflow | Roots | 0.03 | N/A | 3903 Mayberry Ave | 21206 |
| JUNE | Evidence of Overflow | Roots, Grease | 0.03 | N/A | 315 E 23rd St | 21218 |
| JUNE | 75 | Rags, Roots, Grease | 0.85 | N/A | 1200 Evesham Ave | 21239 |
| JUNE | Evidence of Overflow | Rags, Grease | 0.85 | N/A | 821 S Dean St | 21224 |
| JUNE | 390 | Rags, Roots | 0 | Jones Falls | 4100 Keswick Rd | 21210 |
| JUNE | 147 | Rags, Roots, Trash, Sand, Gravel, Rocks | 0 | Jones Falls | 6307 Western Run Dr | 21209 |



Updated through June 30 , 2016

| No. | SDOU No. | Date of Occurrence | Location | Zip Code | Stream Affected | Date of Resolution (See Note 6 Below) | Duration (Days) | Est. Quantity of Discharge in Gallons (7, 8, 9) | Measures Taken to Identify Source or Resolve | Future/Planned Work |
|-----|----------|--------------------|---|----------|-----------------|---------------------------------------|-----------------|---|--|--|
| 1 | 14 | 9/18/2007 | #H Campus | 21210 | Jones Falls | Resolved 01/17/14 | abated | 4,027,245 | V Follow up investigation requested utility connection. City TV and dye testing were used to confirm the source of spill/dye. | SDOU staff has addressed the issue and completed the required work to abate this SDOU. This SDOU is no longer active. |
| 2 | 20 | 11/6/2009 | 3302 Estee Place (trade 5-ft storm drain) | 21212 | Inlet Harbor | Not Resolved | On-going | 1,400,016 | T The owner has been working on resolving the problem. IDE engineer met with owner and issue has been resolved. The owner has followed the required work to abate the SDOU. DPW contractor has been assigned to install a new lateral. | Owner has addressed the plumbing for this location, City DW can install a lateral and connect it to a sanitary line. A contractor has been assigned under SDOU 20 to install a new lateral. This SDOU should be resolved by 07/30/2016 |
| 3 | 55 | 8/10/2011 | Marmota & Parkade | 21206 | Herring Run | Not Resolved- confirming process | On-going | 64512 | T Line has been lined; significant drop in ammonia readings (below 0.3 mg/l... Waiting for the system to flush residuals. Follow up is scheduled on 07/20/16 | Work has been completed under SCDA 3. Follow up with ammoxane and bacteria sampling to confirm abatement |
| 4 | 69 | 12/4/2012 | Fish & Grundy | 21224 | Inlet Harbor | Not Resolved- confirming process | On-going | 75435 | T Heavy clawing and CCTV performed. Dye testing of 2000 feet Ave confirmed the property is not the source. Manhole installed and the sanitary house connection (SIC) was disconnected from storm drain. Further investigation indicated house connected to the storm. Lateral has been redirected to the sanitary line. Ammonia level has dropped from 35 mg/l to 0.1 mg/l. Storm system has been flushed to clean it from residuals. | Uncharted utilities were found. Work has been completed under SCDA 4 (redirecting sanitary laterals from the storm to the sanitary line). Flushing the system many times is required to confirm abatement (high amount of residuals). |
| 5 | 76 | 7/26/2013 | 500 Block of Bloom St | 21217 | Jones Falls | Not Resolved | On-going | 1,341,778 | T CCTV performed in progress. Lining repair work was performed under Consent Decree project. Replacing/catching 3 manholes has been done. 10 Ft of sanitary line has been replaced. Special cleaning using RODDER truck has been requested. 30 ft pipe has been replaced. Lining 157 ft and one manhole has been scheduled. | Work has been assigned and partially completed. Assigned work should be completed on 07/20/16 |
| 6 | 82 | 9/17/2013 | Fish & Farley Streets | 21224 | Palafox | Not Resolved | On-going | 1,341,778 | T Dye test and CCTV in progress. Uncharted utilities were found. New investigation indicated more uncharted utilities. LH has been installed and request has been sent to connect to install a new LH to continue our investigations. | Our crew is in the process of finding new ways to determine the source of the average. City testing done 1/20/16. Any successful results, Project 6 has been assigned. A new manhole has been requested to finish investigation. Final abatement for this SDOU should be determined by the end of July 2016. |
| 7 | 87 | 8/16/2014 | Charles St. and Lamont St | 21214 | Jones Falls | Resolved 07/26/2016 | Abated | 28,065 | A 2 point repair, and 2 pipe segments were lined which abated SDOU. | Work has been completed which abated SDOU. This SDOU is no longer active |

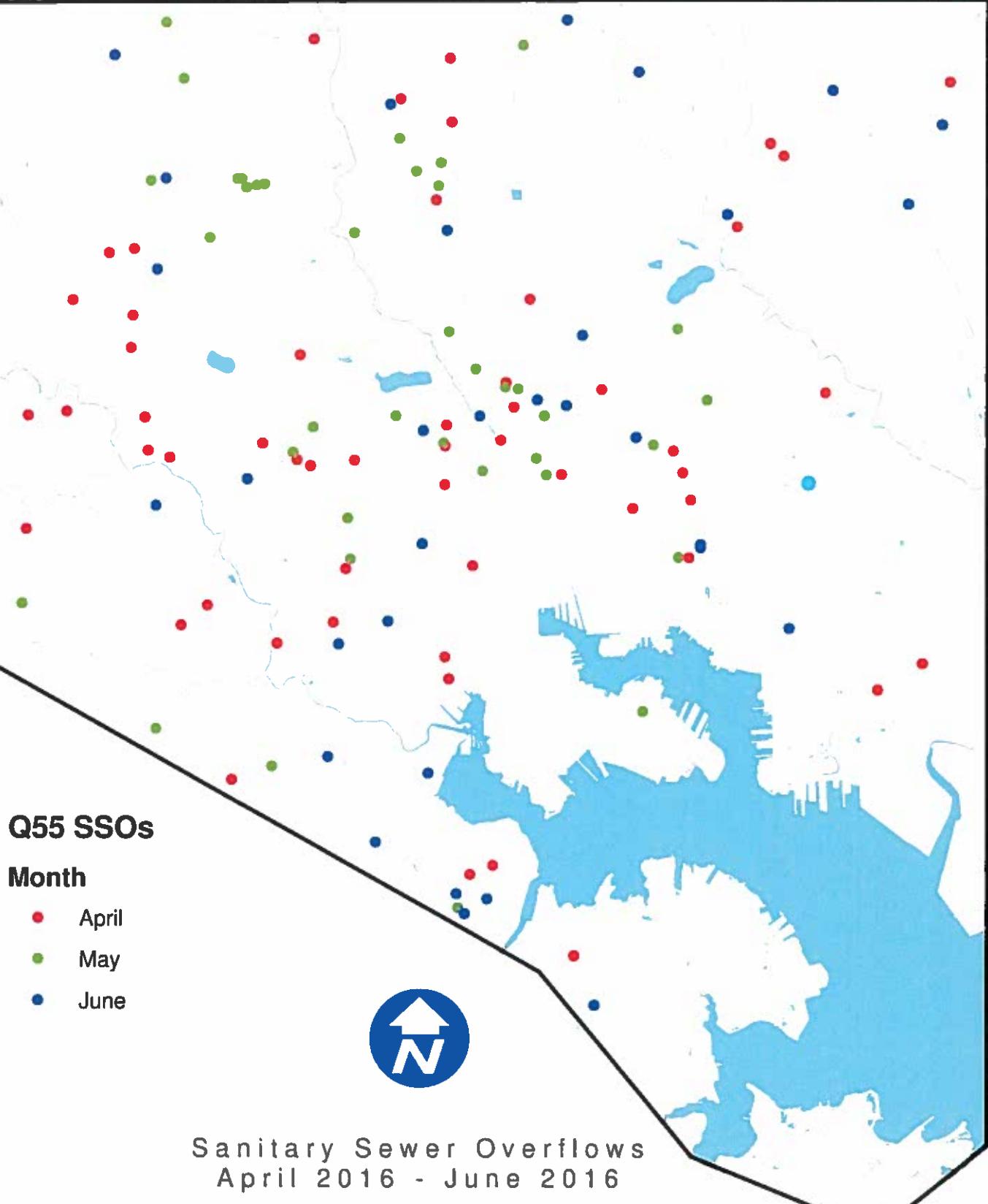
Updated through June 30 , 2016

| No. | SDOU No. | Date of Occurrence | Location | Zip Code | Stream Affected | Date of Resolution (See Note 6 Below) | Duration (Days) | Est. Quantity of Discharge in Gallons [7, 8, 9] | Measures Taken to Identify Source or Resolve | Future/Planned Work |
|-----|----------|--------------------|--|----------|-----------------|---------------------------------------|-----------------|---|--|--|
| 4 | 93 | 2/16/2015 | 2400-2500 Block of W Coldsping Ln | 21215 | Jones Falls | Not Received- confirming process | On-going | 5,437 | A | Ricant CCTV determined a break in a sewer segment. Ricant has been assigned to perform one-point-repair under SC#44. 274 ft pipe has been laid. No sign of dye, more sampling has been conducted to determine location. Large amount of ground water which makes confirming statement harder. Massive dye testing has been scheduled |
| 6 | 94 | 2/16/2015 | 2000 Block of Loyola Normandy | 21215 | Jones Falls | Not Received | On-going | 10,774 | A | Ricant recommendation was a part of current closure project SC#89. Work is completed. Lease branching and dye testing have been assigned. Living has been assigned until SC#42. Work should be completed before the end of July 30 2016 |
| 10 | 15/F02 | 7/10/2015 | 3731 Greenmount Ave (block connection) | 21218 | Jones Falls | Reached 3/1/2016 | Abated | 41,773 | A | Property owner has performed the required work under the supervision of DPW staff. Problem is abated |
| 11 | 15/F05 | 7/20/2015 | 224 39th Street (block connection) | 21218 | Jones Falls | Not Received- confirming process | On-going | 29,860 | V | Failure in the sanitary house connection. Piping repair has been completed. Confirming statement has been pending to gain access to the property to allow access to the property to confirm statement. |
| 12 | 15/B02 | 1/11/2015 | 114 E Lexington St. The Lenore Apartments (block connection) | 21202 | Inner Harbor | Reached 5/16/2016 | abated | 430,005 | A | 10 story building which was remodeled 2 years ago. Major plumbing materials have been done. Some apartments were directly connected to the downspouts. Property management was informed of the problem. Owner has commented that he agreed to take this SDOU. The SDOU is no longer active |
| 13 | 16/L02 | 1/7/2016 | Crest Rd & 5801 Greenspring Rd | 21209 | Inner Harbor | Not reached | On-going | 1,563 | A | Crack was found in the Sanitary system. CCTV and dye testing was performed to determine the leaking assets. Many repairs have been done, but SDOU is still active. Dye testing has indicated a small leak. Contractor is being assigned under SC#44 to complete the required work. |
| 14 | 16/B01 | 3/17/2016 | 1501 Haniddle Road | 21239 | Black River | Not reached | On-going | 1,011 | A | Sanauge is having 5 MGD free from unknown source (discharge estimated to be 0.25 GPM). Living has been performed for two segments of this one. Flow has dropped after flowing |

Updated through June 30 , 2016

| No. | SDUO No. | Date of Occurrence | Location | Zip Code | Stream Affected | Date of Resolution (See Note 6 Below) | Duration (Days) | Est. Quantity of Discharge in Gallons (7, 8, 9) | Measures Taken to Identify Source or Resolve | Future/Planned Work |
|---|----------|--------------------|-----------------------------|----------|-----------------|---------------------------------------|-----------------|---|--|--|
| 15 | 184501 | 4/15/2016 | Parkin homes | 21017 | Harbor | Not resolved | On-going | 128,160 A | Two lateral lines leaking to the storm system. CCTV and die testing have confirmed the leaking a static information was forwarded to property management. Contractor has been assigned to perform the required work. | |
| 16 | 184503 | 4/18/2016 | Friends School of Baltimore | 21210 | Jones Falls | Reached 5/26/2016 | Absent | 54,432 V | One of the building found connected to the storm system. Maintenance department has hired a contractor to perform the required work. | SDUO is no longer active |
| 17 | 184802 | 5/31/2016 | 2000 Fairmount Ave | 21223 | Harbor | Reached 6/24/2016 | Absent | 64 A | Broken lateral causing small portions of their sewage to back to sump pump. Owner has taken action to ablate SDUO. Broken lateral lines required. SDUO is no longer active | SDUO is no longer active. |
| 18 | 184802 | 6/14/2016 | 1501 Eastern Hwy | 21213 | Baird | Not resolved | On-going | 2080 V | Commercial building found connected to the storm system. Contractor has been hired to ablate SDUO | Contractor is in the process of obtaining permits. Work should be completed by the end July 2016 |
| SDUO Summary: 1. Total SDUO Sites Documented: 118 2. Total SDUO Sites Reached: 108 (90% complete) 3. Total Active SDUO Sites on Private Property: 4 4. Total SDUO Sites Unreached: 12 (10% in progress) 5. New SDUO Sites documented in the 1st Quarter: 3 6. Under the column entitled "Date of Resolution", if the node reaches Not Reached an end date of 03/31/2016 was used to determine the quantity of discharge up to that point. 7. All of the Estimated Quantities of Discharge listed in the above table are based on a start date of October 10, 2009 in accordance with the letter issued by EPA dated November 12, 2010. The actual start date of the sewer discharge based on testing is listed in the Date of Occurrence 8. IT - Flow calculated utilizing TKN concentration. (A) - Flow Calculated utilizing Ammonia concentration. (V) Total flow (by volume in Gallons) | | | | | | | | | | |

For all active sites, the City ultimately, plans on calculating flows using TKN - per guidelines of the approved protocol by EPA
 (g) For sites that have not yet been resolved, "Est. Quantity of Discharge (Gal)" is recalculated each quarter to reflect the slope of time and any recent field characterization (flow, NH3, TKN) that may have been collected for a given site



Updated: July 2016