# City of Baltimore Sanitary Sewer Overflow Consent Decree

Civil Action No. JFM-02-1524

Calendar Quarterly Report No. 60 For Calendar Quarter ending September 30, 2017

Submitted: October 31, 2017

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

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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.

# <u>Paragraph 8: Elimination of Sanitary Sewer Overflow and Combined Sewer Overflow Discharges</u>

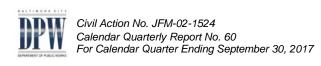
- A. General Requirements: During the calendar quarter ending September 30, 2017, the City of Baltimore was in general compliance with the Clean Water Act and Title 9, Subtitle 3 of the Environment Article, Annotated Code of Maryland. Episodes of non-compliance include un-permitted sanitary sewer overflows (SSOs), as reported during the quarter in accordance with Paragraph 17 of the Consent Decree and as summarized in Appendix 5 herein.
- **B.** <u>Construction Projects:</u> 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, concerns and issues 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 29<sup>th</sup> 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 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.

It was proposed to monitor SSO No. 132 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 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.

The City is working on addressing SSO No.s 135, 137, 138, and 139.

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

SSO 155 located at 3404 Glen Avenue

SSO 156 located at Charing Cross Road & Greenwich Avenue

SSO 157 located at E. 32<sup>nd</sup> Street & St. Paul/Hargrove Alley

Flow meter installation at SSO 150-154 was completed in June 2015. The collected data in conjunction with the hydraulic model will determine if they can be sealed. SSO 156, a new SSO structure, was first discovered on June 16, 2017. Flow meters have been installed at SSO 155 & 156 and the City will monitor these locations.

A new SSO structure has been confirmed, the City is taking next steps including performing a site investigation, installing a flow meter, and performing subsequent hydraulic modeling analysis of SSO 157.

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. <u>Separate Sanitary Sewer Characterization Report:</u> 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 September 30, 2017, no new flow meters were installed as indicated in Table 8-1 specifically for Paragraph 8 Projects.

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

Consent Decree	ADS			No. of Mete	rs
Project ID No.		Project	July	August	September
7	4	Lower Jones Falls Interceptor	0	0	0
8	5	Stony Run Interceptor & P.S.	0	0	0
10	7	Greenmount Interceptor	0	0	0
Total			0	0	0

A summary of rainfall and flow monitoring data collected during June, July and August 2017 (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 Sewershed Plans

**A.** The milestone dates for completion of the Sewershed 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.

Sewershed Study and Plan: The City submitted Jones Falls, the first of the sewershed 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 sewershed plan was submitted to MDE/EPA and DOJ on June 26, 2009. The Low Level sewershed plan was submitted to MDE/EPA and DOJ on December 22, 2009. The High Level sewershed plan was submitted to MDE/EPA and DOJ on December 21, 2009. The Patapsco, Dundalk, Outfall and Gwynns Falls sewershed 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) Sewershed Plans/Reports were submitted by the milestone dates established in the Consent Decree.

In the Planning phase the Sewershed 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 sewershed studies
- A total of 5,994,171 linear feet of sewers were CCTV inspected during Paragraph 9 sewershed studies (~ 94%).

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

- **B.** The Sewershed Study and Plan Elements: The Plan Elements in the Consent Decree are to be followed for each sewershed.
- **C.** <u>Collection System Inspections:</u> 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 wavier 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.** <u>Infiltration and Inflow ("I/I") Evaluation:</u> Flow monitoring began on May 09, 2006. As of September 30, 2017, the flow monitoring continues at 8 meter locations throughout the City, including the long term monitoring program.
- E. <u>Long-Term Capacity/Peak Flow Management:</u> During the calendar quarter ending September 30, 2017, there was no capacity/flow management analysis activity related to the Sewershed Studies and Plans.

### F. Sewershed Study and Plan(s) Approval and Implementation:

### Sewershed Study and Plan(s):

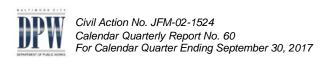
All eight (8) Sewershed Plans/Reports have been submitted by the milestone dates established in the Consent Decree.

### <u>Approval</u>

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 Sewershed 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:

- 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 5year 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 8<sup>th</sup>, 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 followup 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. The comment period is over and negotiations are proceeding on CD modifications. On Aug. 9, 2017, Baltimore's Board of Estimates (BOE) approved the City's modified sanitary sewer system Consent Decree. The Board's action now sends the Consent Decree back to the EPA, MDE, and DOJ for signatures and approval by the U.S. District Court.

### **Implementation**

The sewershed 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 Sewershed 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.

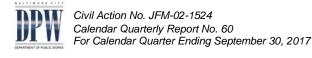
### Paragraph 10: Illegal Sewer Connections

A. <u>Illegal Private Connections:</u> During the calendar quarter ending September 30, 2017 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.

5207 Roland Avenue: CCTV inspection and dye testing revealed the existence of a direct connection from the downspout to an unmapped sanitary manhole. A letter was sent to the owner on January 3, 2017. This location has been abated.

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.** <u>Updated List of Illegal Connections:</u> Appendix 3 contains the updated list of known illegal connections.
- **C.** <u>Illegal Connection Enforcement and Implementation Plan:</u> This requirement has been completed as reported in Quarterly Report No. 7.

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.

Progress of work under Paragraph 10 is as reported herein.

**D.** Privately-Owned Portion of a Customer Service Connection Lateral: During the calendar quarter ending September 30, 2017, 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.

# <u>Paragraph 11: Pumping Station Inspection, Rehabilitation, and Repair</u>

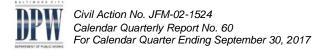
- **A.** Pumping Station Rehabilitation and Repair: As reported in Quarterly report No. 8, all pumping station rehabilitation projects are complete.
- B. <u>Pumping Station Inspection Procedures:</u> During the calendar quarter ending September 30, 2017, Baltimore inspected each of the eight pumping stations at least once 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.** <u>Pumping Station Remote Monitoring:</u> As of September 30, 2017, 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 September 30, 2017, 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. <u>Pumping Station Preventative Maintenance:</u> 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 September 30, 2017, 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. <u>Pumping Station Operation and Maintenance Manuals:</u> As of September 30, 2017, 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.



<u>Progress Reports:</u> Table 11-1 Summarizes the status of Baltimore's pumping station inspection and repair program during the calendar quarter ending September 30, 2017.

**Table 11-1: Pumping Station Inspection and Repair Program** 

Pumping	Date of Inspection	Date of Repair	Repairs or	No. of
Station	Completion	Completion	Improvements	Overflows
Eastern Avenue				None
Brooklyn	All Pumping			None
Dundalk	Stations			None
Jones Falls	inspected once	Soo Annondiy 1	Soo Annondiy 1	None
Locust Point	per day throughout	See Appendix 4	See Appendix 4	None
Quad Avenue	reporting			None
McComas	period			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

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

- **A.** <u>Model Elements:</u> The InfoWorks hydraulic modeling package is fully compliant with the requirements listed in Paragraph 12.B.i of the Consent Decree.
- **B.** <u>Model Project Approach Report:</u> This draft Report was submitted by the February 27, 2003 milestone date (150 days from the Date of Entry of the Consent Decree).
- **C.** 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 sewershed studies into an InfoWorks environment, is underway.
- **D.** <u>Model Certification:</u> Baltimore completed implementation of the Model for each sewershed on or before submission of the respective Sewershed Study and Plan required under Paragraph 9, and certified the model for each sewershed at that time.

<u>Progress Report:</u> 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 September 30, 2017, 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 30, 2013. The eighth annual progress report was submitted on October 30, 2014. The ninth annual progress report was submitted on October 13, 2015. The tenth annual progress report was submitted on October 20, 2016. The City is working on finalizing the eleventh annual progress report and will submit in October 2017.

### Paragraph 14: Information Management System Program

- **A.** During the calendar quarter ending September 30, 2017, Baltimore continued to develop an information management system that will facilitate engineering analysis, evaluation, operation and maintenance of the collection system.
- **B.** <u>Geographic Information System:</u> 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. <u>500 Scale Maps:</u> This requirement has been completed as reported in Quarterly Report No. 7.



- **D.** <u>Global Positioning System:</u> 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.** <u>Inventory of Collection System Components:</u> 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. <u>Update Inventory of Collection System Components:</u> 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 September 30, 2017. 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.** <u>Progress Reports</u>: 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

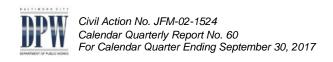


separate letters received by Baltimore on May 5, 2003, and May 14, 2003, respectively. As of the June 13, 2003 milestone date for implementation of the Plan (30 days from final approval), 70 copies of the Plan had been produced and distributed to appropriate staff.

- **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. The 2016 annual updates to the ERP were submitted to the Regulators on December 19, 2016.
- **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 September 30, 2017, 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 September 30, 2017 is provided in Appendix 5.
- **B.** During the calendar quarter ending September 30, 2017, 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 Monitoring & Investigations of the Office of Compliance and Laboratories 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 September 30, 2017, 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 September 30, 2017, 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 on 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. 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 expected construction completion date was February 2015. Project is overdue, OEC is monitoring contractor progress and LD's are being assessed. 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 and the expected construction completion date was August 2013. Project is overdue, OEC is monitoring contractor progress and LD's are being assessed.

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. 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. This project is completed.

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 15, 2016 and selection of Construction Management At Risk (CMAR) team occurred on May 4, 2016. NTP was issued on June 29, 2017. SC 918H is in the construction phase and approximately 5% complete. Project SC 918S – Site work and relocation of the County Force main was bid on February 5, 2016 and NTP was issued on July 22, 2016. SC 918S is under construction and approximately 99% complete.

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

As of the calendar quarter ending September 30, 2017 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

STATUS OF PARAGRAPH 8 CONSTRUCTION PROJECTS

			As of September 30, 2017				
PROJ.	JECT	DESCRIPTION AND REMARKS	DATE CONSTRUCTION CONTRACT ADVERTISED	DATE CONSTRUCTION DATE OF PRACTICAL CONTRACT COMPLETION ADVERTISED	DATE SSO STRUCTURES ELIMINATED	DATE SSO STRUCTURES ELIMINATED ELIMINATED	STATUS
		UPPERJ	UPPER JONES FALLS SEWERSHED	ERSHED			

		X	As of September 30, 2017				
PROJ. D NO.	PROJECT	DESCRIPTION AND REMARKS	DATE CONSTRUCTION CONTRACT ADVERTISED	DATE OF PRACTICAL COMPLETION	DATE SSO STRUCTURES ELIMINATED	SSO/CSO STRUCTURES ELIMINATED	STATUS
		UPPERJC	UPPER JONES FALLS SEWERSHED	RSHED			
-	Western Run Interceptor (JPI Branch) Sanitary Contract Nos. 760 & 789	. Install approximately 880 linear feet of 30-inch parallel relief sewer from JPIB49 to JP10 (along JP190A- JP184) (SC/760) 2. Install approximately 9,400 linear feet of 21- to 24-inch parallel relief sewer from JP107 to JP165 (SC/789) 3. Rehabilitate approximately 3,300 linear feet of existing 16-inch sewer from JP107 to JP120 (SC/789)	June 30, 2002	June 30, 2004	June 30, 2005	Elminates SSO nos. 21, 22, 23, 24 and 29	Complete
8	Upper Jones Falls Interceptor (North & South of Pepsi Cota Plant) Samilary Contract Nos. 772 & 824	1. Rehabilitation of approximately 1,800 linear feet of existing 42- to 48-inch sewer located between JPD1 (Mt. Washington Futne) and JP10, and approximately 6,570 linear feet of 48- to 60-inch sewer located between JP40 and JP16, and approximately 1,500 linear feet of 48' sewer between JP10 and JP16, and approximately 1,550 linear feet of 60' sewer between JP70 and the Jones Falis Pumping Station (85-772).  2. Replacement of approximately 7,080 linear feet of 48-inch sewer between JP18 and JP42 (8C 824).	June 30, 2004	December 27, 2006	12/30/2008 **	Elminates SSO Nos. 33 and 34	SC 772. Practical Completion was achieve on June 30, 2006.  SC 824. Construction Phase—The Practical on Passe—The SC 824. Construction Phase—The Practical on RESA of EASA—The Practical of the SSO elimination date to December 2008, MDE response eletter approving extension was received on September 5, 2007.  Eliminated SSO Nos 33 and 34 on 12/10 and 12/22308, respectively.
ю	New Jones Falls Force Main/Pressure Sewer - Lower Section and Valves improvements of E section and Valves sewer Sanitary Contract Nos. SC/779 & SC805	Replacement of approximately 1600 linear feet of force main/pressure sewer in Broadway from Oliver to     East Chase Street connecting to High Level sewer (SC 779)     Improvements to gate valves, blow-off valves and air refease valves for existing force main/pressure     sewer (SC 805)	December 30, 2002	June 30, 2004	6/30/2005 - SEE STATUS	Contributes to elimination of SSO No. 5	SSO No. 5 cannot be eliminated until projects 4 and 5 are completed.
4	Jonos Falls Pumping Station Force Mein Pressure Sewert Sanitary Contract No. 800	Upgrade existing force mains/pressure sewer to handle increased flows from rehabilitated/upgraded Jones Falts Pumping Station as well as additional flows from possible future pumping stations in Storry Run and along the JGA branch	June 30, 2005	12/29/2007**	May 2,2008	Contributes to elimination of SSO No. 5	Construction Phase** Letter sent to MDE and EPA on 6 +1-07 requesting additional 90 day practical completion exercision to December 2007 MDE response letter approving additional exercision received September 2, 2007, Letter sent to MDE and EPA on 12/17/07 requesting additional 60 day exercision for partial completion. Practical completion coursed on 1/23/05 Exercision request approval granted by MDE in a letter dated April 15, 2010. Awaiting response from EPA.
2	Jones Falls Pumping Station Sanitary Contract No. 822	Upgrade existing pumping station to handle at least 50 mgd	December 30, 2005	12/29/2007**	June 30, 2008	Elminates SSO No. 5	Construction Phase** Letter sent to MDE and EPA on 6.1-10.7 requesting additional 90 day practical completion extension to Desember 2007. MDE response letter approving additional extension received September 5, 2007. Beniticial Occupancy achieved 11/16/07.
9	Elimination of Collection System Overflows in Upper Jones Falls Sewershed Sanitary Contract No. 876	Assess hydraulics and design improvements to areas adjacent to overflows	Existing on-call contract	June 30, 2003	June 30, 2004	Eliminates SSO Nos. 20, 31, 32 and 36	Complete
		LOWER JU	LOWER JONES FALLS SEWERSHED	RSHED			
7	Lower Jones Falls Interceptor (Upper Portion of Gravity Mainline) Sanitary Contract Nos. 773 & 818	. Install approximately 7,900 linear feet of 18- to 24-inch parallel relief sewer from JG030 (near Jones Falls Pumping Station) to JG061 (at the connection of the JGE branch) (SC0818)  2. Rehabilitation of approximately 16,500 linear feet of existing sewer ranging from 12- to 50-inch (SC773)  3. Inverted sphon rehabilitation in Falls Road (mannole JG062) (SC773)  4. Stream bank restoration along Union Avenue near Meadow Mills at Woodberry	July 31, 2003	June 30, 2006	2/28/10***	Elminates SSO No. 67	Post Construction Monitoring Phase. Monitoring period is extended at one site.
∞	Story Run Interceptor and Pumping Station (JGF Branch)** Sanitary Contract No. 819, 838, 839 & 847	<ol> <li>Construct a 20 mgd capacity pumping station near Department of Public Works Solid Waste Site near the intersection of 28th Siteet and Seson Siteet.</li> <li>Install approximately 1.0500 linear feet OZA their blorde main from new pumping station to JFPS pressure swer liength depends on location of pumping station?</li> <li>Parallel approximately 10,800 linear feet of existing sewer from south of Coldspring Lane (JGF48) to the new pumping station with 18 to 36-inch sewer</li> </ol>	December 30, 2005 (SC-818 & 838) (Inne 30, 2006 (SC-839 & 847)	5/31/2009***	2/28/10***	Contributes to elimination of SSO No. 72; eliminates SSO No. 129	Practical completion was acheived on May 29, 2009 (for the lower portion of the Stony Run interceptor (SC- 839). Non-CD portion of the project is nearly complete. Flow monitor installed at new Stony Run Purp Station on August 26, 2003. The City submitted an exersion request to EPA and MDE for SSO 67 and 72 acide February 16, 2010 requesting an extension request to EPA and MDE for SSO 76 and 72 acide February 16, 2011 and extension to European an extension requesting an extension to Line 29, 2019 to allow for adequate time for the City to complete the hydraulic restriction polect arthe BR-WWITP, which the City believes is a major contributor to not being able to eliminate these SSOs.
6	Maryland Avenue Interceptor (JGB Branch) Sanitary Contract No. 799	Replace (upsize) approximately 4.400 linear feet of existing 12- to 24-inch sewer with new 21- to 36-inch sewer along branch inferceptor, excluding proposed 901 N. Howard project area     Improvements to sphoro/SSO No. 125 under I-88 (JGB16-JGB19)     Sewer replacement may require crossing the CLRL	December 30, 2003	July 14, 2005 *	June 30, 2006	Elminates SSO Nos. 69 & 125	Complete
10	Greenmount Avenue Interceptor (JGA Branch)* Senitary Contract No. 820, 833	<ol> <li>Install approximately 7,325 linear feet of 36 to 42-inch parallel relief sewer from Bonaparte Avenue to the High level Interceptor on Eager Street.</li> <li>Line approximately 6,000 linear feet of 15- to 33-inch existing sewer.</li> </ol>	December 30, 2005	12/27/07 **	2/28/10***	Contributes to elimination of SSO No. 72	Construction Phase, SC 833-Extension letter was sent on 122-70 from 122-7008. This extension mough March 29, 2008. This extension rots of day, it ruogh June a subsequent extension for 90 day, it ruogh June 27, 2008 was submitted. Availing response from MDEEPA, Practical completion acheived on May 27, 2008. Montraing period began July 25, 2006. In a letter date of 17,002/21, EPA approved the minor schedule modification.

Note: Shaded date cells indicate completion.

PROJ.	PROJECT	DESCRIPTION AND REMARKS	DATE CONSTRUCTION CONTRACT ADVERTISED	DATE OF PRACTICAL COMPLETION	DATE SSO STRUCTURES ELIMINATED	SSO/CSO STRUCTURES ELIMINATED	STATUS
£	Elimination of Siphon Blowoff (Siphon No. 6 - south of North Avenue Bridge, west of RR tracks) Sanitary Contract No. 830	<ol> <li>Cleaning and inspection of siphon with repairs as necessary.</li> <li>Elimination of blow-off.</li> </ol>	On-call contract	June 30, 2004	June 30, 2005	Eliminates SSO No. 68	Complete
		HERR	HERRING RUN SEWERSHED	-ED			
12	Moores Run Interceptor - Middle Section Storm Water Contract Nos. 7746 and 7751	Construction of approximately 400 linear feet of 18-inch, approximately 600 linear feet of 21-inch, approximately 1000 linear feet of 27-inch, and approximately 1000 linear feet of 27-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, 2006	Contributes to elimination of SSO Nos. 118 and 119	Complete
13	Moores Run Interceptor - Lower Section Sanitary Contract No. 801 and 843	Construction of approximately 6900 linear feet of 42-inch, approximately 2700 linear feet of 36-inch siphon, and approximately 3700 linear feet of 54-inch sewer to replace the existing interceptor	June 30, 2005	June 30, 2007	June 30, 2008	Eliminates SSO No. 93 and 94	Construction Phase - Complete
14	Moores Run Interceptor - Upper Section Sanitary Contract No. 817	Construction of approximately 1700 linear feet of 18-inch and approximately 2200 linear feet of 21-inch sewer to replace the existing interceptor	June 30, 2004	June 30, 2005	June 30, 2006	Contributes to elimination of SSO Nos. 118 and 119	Complete
15	Elimination of Collection System Overflows in Herring Run Sewershed	Elmination of Collection System Assess hydraulics and design improvements to areas adjacent to overflows Overflows	Existing on-call contract	June 30, 2003	June 30, 2004	Eliminates SSO Nos. 88 and 109	Complete
16	Elimination of Siphon Blowoffs (Siphon No. 2 - Bay View Yard south of RR tracks, Siphon No. 4 - Bowleys LaneMoravia Road) Sanitary Contract No. 830	Elimination of Siphon Blowoffs (Siphon No. 2 - Bay View Yard south 1. Cleaning and inspection of siphons with repairs as necessary. A R Tracksts, Siphon No. 4 - Bowleys 2. Elimination of blow-offs. Sanitary Contract No. 830	On-call contract	June 30, 2004	June 30, 2005	Eliminates SSO Nos. 92	Complete*
		BWYNI	GWYNNS FALLS SEWERSHED	нер			
17	Powder Mill System Improvements including GFG branch in Gwynns Falls Sewershed Sanitary Contract Nos. 777 & 804	Rehabilitation of approximately 12,000 linear feet of 12- to 24-inch conveyance piping (SC777) and approximately 33,000 linear feet of 8- to 10-inch collection piping (SC804)	June 30, 2003	June 30, 2006	June 30, 2007	Eliminates SSO Nos. 28P, 29P and 33P	Complete
18	Dead Run System Improvements DRA Branch Sanitary Contract No. 788, 825	Clean, inspect and rehabilitate of approximately 20,000 linear leet of 12- to 24-inch conveyance piping (CCE) and approximately 11,000 linear feet of 8-10 12-inch collection piping (SC788).	June 30, 2003	June 30, 2006	June 30, 2007	Eliminates SSO Nos. 16P and 17P	Complete
19	Maidens Choice Interceptor Sanitary Contract No. 826	Gean, inspect, and rehabilitate 12,400 linear feet of 12- to 24-inch conveyance piping.	On-call contract	June 30, 2007	June 30, 2008	Eliminates SSO Nos. 23P and 24P	Construction Phase - Complete
20	Elimination of Siphon Blowoffs (Siphon No. 11 - Annapois Road and Clare Street: Sphon No. 12 - Chesholm Rd. west of Franklintown Rd.) SC No. 827	<ol> <li>Cleaning and inspection of siphons with repairs as necessary.</li> <li>Elimination of blow-offs.</li> </ol>	On-call contract	June 30, 2004	June 30, 2005	Eliminates SSO Nos. 84 and 22P	Complete*

Note: Shaded date cells indicate completion.

STATUS		Complete	Complete		Complete	Complete	Complete*		Complete	
SSO/CSO STRUCTURES ELIMINATED		Eliminates CSO No. 21P	Eliminates CSO No. 13P and SSO Nos. 10P, 11P, 12P, 18P, 19P, 25P, 26P, 27P and 31P. SSO Nos. 10P, 18P, 19P & 31P are eliminated.		Eliminates SSO Nos. 106,107 and 130	Eliminates SSO Nos. 55, 56, 57, 60, 63, 103, 126, 127, 128 and 131	Eliminates SSO Nos. 79 and 81		Eliminates SSO No. 32P	
DATE SSO STRUCTURES ELIMINATED		June 30, 2003	June 30, 2006		12/27/2007**	June 30, 2007	June 30, 2005		June 30, 2005	
DATE OF PRACTICAL COMPLETION	EAS	June 30, 2002	June 30, 2005	RSHED	February 25, 2007	June 30, 2006	June 30, 2004	IED	June 30, 2004	
DATE CONSTRUCTION CONTRACT ADVERTISED	COMBINED SEWER AREAS		December 30, 2003	HIGH LEVEL SEWERSHED	December 30, 2004	June 30, 2003	On-call contract	LOW LEVEL SEWERSHED	On-call contract	
DESCRIPTION AND REMARKS	OOD	Implementation of Long Term Control Plan and combined sewer separation design in Walbrook area	Forest Park Sanitary Contract Nos. 789 and 813 Implementation of Long Tern Control Plan and combined sewer separation design in Forest Park area		Improvements to the Gwynns Run Interceptor	Assess hydraulics and design improvements to areas adjacent to overflows	<ol> <li>Cleaning and inspection of siphons with repairs as necessary.</li> <li>Elimination of blow-offs.</li> </ol>	POM	<ol> <li>Cleaning and inspection of sphon with repairs as necessary.</li> <li>Elimination of blow-off.</li> </ol>	Approved by MDE/EPA. ** Approved by MDE: ***Approved by EPA
PROJECT		Walbrook Sanitary Contract No. 780	Forest Park Sanitary Contract Nos. 780 and 813		Gwynns Run Interceptor Sanitary Contract No. 812	Gwynns Run System Improvements A Sanitary Contract No. 807	Elimination of Siphon Blowoffs (Siphon Nos., 9 and 10 - east of 1.) Dukeland Street, south of Wilkens 2. Avenue) SC No. 827		Elimination of Siphon Blowoff (Siphon No. 8 - rear of 800 Unetta Avenue) 2. Sanitary Contract No. 827	roved by MDE\EPA. ** Approve
PROJ. ID NO.		21	22		23	24	25		26	* Appr

Note: Shaded date cells indicate completion.

# **APPENDIX 2**

# STATUS OF PARAGRAPH 9 CONSTRUCTION PROJECTS

# STATUS OF PARAGRAPH 9 CONSTRUCTION PROJECTS As of September 30, 2017

	Services	of the lon SC 876).	Services of the ton SC 876).	spection condition mplete and deemed e pursued.	ner was the M Liner on s held on rth i March 20, was held on	e lowest tate is d by	The lowest on the lowest of by	The lowest	he lowest late is	ig of the	rd date is <b>ct in</b>	. Bid /26/2016.
STATUS	This contract was awarded to Video Pine S	In sometimes was award to video Tipe Services (VPS) on October 21, 2009. The Cleaning of the Lower Jones Falls and Maryland Ave. Siphon Cleaning were combined into one Project (SC 876)	This contract was awarded to Video Pipe Services (VPS) on October 21, 2009. The Cleaning of the Lower Jones Falls and Maryland Ave. Siphon Cleaning were combined into one Project (SC 876).	Per Consultant's (KCI) evaluation of the inspection and cleaning work, the line is in fairly good condition and can be re-activated without any major repair/freabilitation work. This project is complete and the City will utilize this line in the future as deemed necessary a Construction project will not be pursued. All Future work for this pipe will be tracked. All suture work for this pipe will be tracked will not see that work for this pipe will be acceptance was on 11/17/10, and Final Acceptance was on 19/22/11.	Bids were opened on 12/14/11 and AM Liner was the lowest bidder. Corntract was awarded to AML finer on 03/21/2012. Pre-construction meeting was held on May 17.  2012. Construction began June 2012. Fourth construction progress meeting was held on March 20, 2013. Last construction progress meeting was held on March 20, 2013. Construction completed.	The project was advertised on 7/27/12. The lowest bidder is histurorm Technologies. Award date is 1/3/13/12 and NTP issued on 2/8/13. Project is substantially completed by 8/1/2016.	The project was advertised on 7/2/12012. The lowest bidder is institution Technologies  Award date is 12/19/12 and NTP issued on 28/13. Project is substantially completed by 8/1/2016.	The project was advertised on 7/27/2012. The lowest bidder is Institution Technologies . Award date is 12/19/12 and NTP issued on 2/8/13. Project in liquidated damages	The contract was advertised on 3/22/13. The lowest bidder is Institution Technologies. Award date is 6/26/13 and NTP issued on 6/26/13. Project in liquidated damages	This contract was awarded to Metra industries, who was the lowest bidder, on 6/8/11. NTP was issued on 8/8/11. Cleaning of the outlail stopped as of 6/25/12. Project re-started on 4/29/13 and was completed on 4/27/14.	The contract was advertised on 12/13/13. The lowest bidder is Metra Industries. Award date is 3/12/14 and NTP issued on 4/24/14. <b>Project in liquidated damages.</b>	The contract was advertised on 7/17/2015. Bid opening is 8/26/2015 and NTP issued on 2/26/2016.
DATE OF EVALUATION COMPLETION		1/1/2013 (A)	1/1/2014 (A)	<b>∀</b> Z	5/8/2014 (A)	8/12017	8/1/2017	8/1/2017	8/1/2017	4/12/2015 (A)	6/30/2019	1/31/2020
DATE OF CONSTRUCTION COMPLETION		1/1/2012 (A)	1/1/2013 (A)	08/08/2010 (A)	05/20/2013 (A)	8/1/2016 (A)	8/1/2016 (A)	8/1/2016 (A)	8/1/2016 (A)	04/12/2014 (A)	6/30/2018	1/31/2019
DATE CONSTRUCTION CONTRACT ADVERTISED		5/20/2009 (A)	5/20/2009 (A)	07/15/2009 (A)	11/04/11(A)	7/27/2012 (A)	7/27/2012 (A)	7/27/2012 (A)	3/22/2013 (A)	08/05/11 (A)	12/13/2013 (A)	7/17/2015 (A)
DESCRIPTION AND REMARKS	JONES FALLS SEWERSHED SC 876 - The work includes the Lower Jones Falls Interceptor, located in the gravity sewage collection	system. Typical work includes intal SONAR assessment of the sanitary sewers to quantify sediment and debris levels, cleaning 8.400 teet of 10 to 75" sanitary sewers between Falls Rd Sphon to the High Level Interceptor, with proper disposal of removed material, and post cleaning CCTVISONARL asset assessment to document the internal condition of the pipes.	SC 876 - The work includes Maryland Avenue Sphon, and sewers upstream of the Maryland Avenue Sphon (18 and 24-ind sewer siphon). Typical work includes initial SONAR assessment of the sanitary sewers to quantify sediment and debris levels, cleaning of Inalyland Avenue Sphon, and various sewers upstream of the Maryland Avenue Sphon, with proper disposal of removed material, and post cleaning CCTWSONAR/Laser assessment to document the internal condition of the pipes.	Reactivation of an inactive 42-inch diameter interceptor sewer along Jones Falls from Northern Parkway (MH 519CC_2046/MH) to Cold Spring Lane (MH 519CO_1042/MH). Prior to reactivation of the 42-inch sewer, an internal inspection of the sewer was necessary to infort the actual condition of the ine. The City utilized its rethincial support consultant (KC) to carry out the inspection process. The field work was started in September 2009 and their findings were completed and a final report was delivered on June 30, 2010.	SC 885 - Repair and rehabilitation of sanitary sewer and manholes in the Maryland Ave sub-sewershed of the Jones Falls Sewershed.	Repair and rehabilitation of sanitary sewer and manholes in the Stony Run Area of the Jones Falls Sewershed.	Repair and rehabilitation of sanitary sewer and manholes in the Western Run Area of the Jones Falls Sewershed.	Repair and rehabiliation of sanitary sewer and manholes in the Upper Jones Falls and Maryland Avenue areas of the Jones Falls Sewershed.	Repair and rehabilitation of sanitary sewer and manholes in the Greenmount, Hampden, and Bolton Hill areas of the Jones Falls Sewershed.	SC 884 - Cleaning of Outfall Sewershed 99-Inch and Outfall Interceptor (From N. Bond Street to 6300 Block of E. Lombard Street)	Cleaning of the relief sewer and outfall interceptor - phase II	SC 919 - Sewer Rehab in the Outfall Sewershed
PROJECT		Lower Jones Falls Sewer Cleaning	Maryland Avenue Sewer Siphon Cleaning	Upper Jones Falls Interceptor Reactivation	SC 895 - MD Ave Sewer Rehab	SC 898 - Stony Run Area	SC 899 - Western Run Area	SC 900 - Upper Jones Falls and Maryland Avenue	SC 897R - Greenmount, Hampden and Bolton Hill	Sedment Cleaning Trunk Sewers in City of Baltimore.	SC934 - CLEANING OF THE OUTFALL INTERCEPTOR AND RELIEF SEWERS - PHASE II	SC919 - Sewer Rehab in the Outfall Sewershed
Proj. No.		JF-1	JF-2	요3	4-4	51	JF-6	JF-7	8-년	OF-1	OF-2	OF-3

# STATUS OF PARAGRAPH 9 CONSTRUCTION PROJECTS As of September 30, 2017

		HIGH I EVEL SEWERSHED				
H-1	Liberty Heights Relief Sewer	o and	2/10/2012 (A)	4/11/2014 (A)	4/11/2015 (A)	The contract was advertised on 2/10/12 Bids were due by 3/21/12, but date was extended to 4/4/12. The contract was awarded on a contract was awarded on 9/26/12 to Monumental Paving and Excavating Inc. Project was finally accepted on January 2016.
HL-2	SC907 - East Baltimore Region	SC 907 - Repair and rehabilitation of sanitary sewer and manholes in the East region of the High Level Sewershed.	3/22/2013 (A)	1/13/2016 (A)	1/12/2017	The contract was advertised on 3/22/13. The lowest bidder is faland Waters. The project was awarded on 8/14/13 and NTP was issued on 11/1/13. <b>Project is conditionally accepted on 1/1/3/2016</b> .
H3	SC906 - West Baltimore Region	SC 906 - Repair and rehabilitation of sanitary sewer and manholes in the West region of the High Level Sewershed.	5/10/2013 (A)	71/2016 (A)	7/1/2017	The contract was advertised on 5/10/13. Lowest Bidder is SAK Construction. The contract was awarded on 11/13/13 and NTF issued on 2.5/5/4.Project in conditionally accepted on 7/1/2016.
HL-4	SC932 - Improvements to Lower Gwynns Run Interceptor – Phase II From Frankin Street to Baltimore Street	SC 832 - Improvements to Lower Gwynns Run Interceptor – Phase II From Franklin Street to	7/26/2013 (A)	11/25/15 (A)	11/15/16 (P)	The contract was advertised on 7/26/13. Lowest Bldder Bradshaw Construction. Contract was awarded on 31/21/4 and NTP issued on 5/28/14. Project was finally accepted on 11/25/2016.
HL-5	SC933 - High Level Interceptor Cleaning	SC 933 - cleaning of the High Level Interceptor	7/26/2013 (A)	12/12/2016 (A)	12/12/2017	The contract was advertised on 7/26/13. Lowest Bidder is Video Pipe Services Construction. Due to an unbalanced both, the contract will be awarded to the second lowest bidder Proven Management. Award date is 4/23/14 and MTP Issue date is 7/30/14. Project was conditionally accepted on 12/12/2016.
HL-6	SC905 - North Region of High Level Sewershed		10/11/2013 (A) E	6/4/2015 (A)	6/3/2016	The contract was adventised on 10/11/13. Lowest Bidder is Spiniello. Contract was awarded on 3/19/14 and NTP issued on onleted. 6/2/14. Project completed.
		Herring Run Sewershed				
HR-1	SC911 - Herring Run Sewer Improvement		8/16/2013 (A)	1/20/2016 (A)	1/20/2017	The contract was adventised on 8/16/13. Lowest Bidder 8/4M liner East. Contract was awarded on 2/5/14 and NTP sixued on 6/14/14. Project is conditionally accepted on 1/20/2016.
HR-2	SC908 - Herring Run Sewer Improvement	SC 908 - Repair and rehabilitation of sanitary sewer and manholes in the Herring Run Sewershed.	9/6/2013 (A)	12/31/2017	12/31/2018	The contract was advertised on 9/6/13. Lowest Bidder is Anchor Constrcution. Due to issues with MBE/WBE, the contract was awarded to the second lowest bidder AM Liner East, Contract was awarded on 5/5/14 and NTP issued on 5/1/14. <b>Project in liquidated</b>
HR-3	SC909 - Herring Run Sewer Improvement	SC 909 - Repair and rehabilitation of sanitary sewer and manholes in the Herring Run Sewershed.	10/11/2013 (A)	7/6/2016 (A)	7/6/2017	The contract was advertised on 10/11/13. Lowest Bidder is Inland Construction. Contract was awarded on 1/29/14 and NTP Issued on 4/2/14. <b>Project is conditionally accepted on 7/6/2016</b> .
HR-4	SC937 - Improvements to Sanitary Sewers in HR07A and along Chesterfield Avenue in Herring Run Sewershed	Improvements to Santary Sewers in HR07A and along Chesterfield Avenue in Herring Run Sewershed	7/17/2015 (A)	2/11/2018	2/11/2019	The contract was advertised on 7/17/2015. Bid opening is 8/19/2015 and awarded to SAK.
F-1	SC922R - Low Level Interceptor Cleaning		1/31/2014 (P)	11/24/2015 (A)	11/30/2016 (A)	The contract was advertised on August 16, 2013. Lowest Bidder is Video Pipe Services Construction. Due to unitalisanced bits, his sontract was readvertised on 27/74. Lowest Bidder is Video Pipe Services Construction. Award date is 7/23/14. NTP issued on 10/1/20/16.
LL-2	SC913 - Western Region of Low Level	SC 913 - Repair and rehabilitation of sanitary sewer and manholes in the Western Region of the Low Level Sewershed.	9/20/2013 (A)	9/8/2015 (A)	10/8/2016 (A)	The contract was advertised on 9/20/13. The lowest bidder is Maira. Contract was awarded on 2/12/14 and NTP issued on 4/17/14. Project was finally accepted on 10/8/16.
LL-3	SC912 - Eastern Region High Level	SC 912 - Repair and rehabilitation of sanitary sewer and manholes in the Eastern Region of the Low Level Sewershed.	9/20/2013 (A)	8/1/2016(A)	9/30/2017	The contract was advertised on 9/20/13. The lowest bidder is Institution. Contract awarded on 1/15/14 and NTP issued on 3/7/14. <b>Project in liquidated damages</b> .

# STATUS OF PARAGRAPH 9 CONSTRUCTION PROJECTS As of September 30, 2017

LL-4	SC914 - Improvements to Santlary Sewers in Low Level Sewershed	SC 914 - Improvements to Sanitary Sewers in Low Level Sewershed	6/26/2015 (A)	2/28/2019	2/28/2020	The contract was advertised on 6/26/2015. Bid opening is 7/29/2015.
		Gwynns Falls Sewershed				
GF-1	SC920 - South Area Gwynns Falls	SC 920 - Improvements to the Gwynns Falls Sewershed Collection System - Area A	6/6/2014 (A)	12/30/2017	12/30/2018	The contract was advertised on 6/6/14. The lowest bidder is SAK Construction. NTP was issued on 1/12/2015.
GF-2	SC939R - Maidens Choice Pressure Sewer Inspection and Uplands Sewer Rehab	SC 939R - Maidens Choice Pressure Sewer Inspection and Uplands Sewer Rehab	6/26/2015 (A)	TBD (P)	TBD (P)	The contract was advertised on 6/26/2015. Bid opening is 7/29/2015. Bid is rejected, completion date TBD.
		Dundalk Sewershed				
DD-1	SC 902 - Sewer Rehab in the Dundalk	SC 902 - Sewer Rehab in the Dundalk Sewershed	3/6/2015 (A)	10/12/2017	10/12/2018	The contract was advertised on 3/6/15. Bid opening is 4/8/2015. The lowest bidder is Spiniello. NTP will be issued on 10/14/2015
		Patapsco Sewershed				
PA-1	SC 903 - Sewer Rehab in the Patapsco Sewershed	SC 903 - Sewer Rehab in the Palapaco Sewershed	7/24/2015 (A)	7/30/2018	7/30/2019	The contract was advertised on 7/24/2015. Bid opening is 8/26/2015.
Key: "SS	Key: "SS - XX" = Sewershed Name - CD Project No.					

# APPENDIX 3 LIST OF ILLEGAL CONNECTIONS

# City of Baltimore Sanitary Sewer Overflow Consent Decree CMI Action No. JFM-02-1524 List of Illegal Connections

100000	2000000		-					
Full Address		1 est ID	Person/Entity Responsible	Source Type	Date Identified	Dye Result	Current Status	Comments
_	eley Ave.	1/2 8 2	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
2. 6203 Biltmore Ave.	ore Ave.	311 A 2	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	s Ln.	212 B 7	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	s Ln.	212 B 6	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
5. 3601 Clarks Ln.	s Ln.	256 B 1	Property Owner	Area Drain	3/21/2005	Positive	Newly Identified	Confirmed Not Illegal
6. 2238 Crest Rd.	Rd.	14 A 2	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	Rd.	13 A 5	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
8.		13 A 6	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
5616	Cross Country Blvd.	99 A 2	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
6306	ne Dr.	154 B 2	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
11.		154 B 1	Property Owner	Downspout Connection	6/20/2005		Newly Identified	Confirmed Not Illegal
12 6908 Fieldcrest Rd	rest Rd	272 B 3	Property Owner	Downsport Connection	6/20/2005		Newly Identified	Confirmed Not Illegal
L	we Ave	275 B 13		Downsport Connection	6/20/2005		Newly Identified	Confirmed Not Illedal
								the vas confirmed as an illegal connection in January 2011 after carrying out more dive-testing. A letter was sent to the property owner on August 08.
		2			L 7 C 0 V			2011. A follow up letter dated 01/05/2012 was sent to the property owner
14. 0309. Greenspring Ave.		133. D 3.	riopeity Owner	Cowispour	40347.		ılleyal	requesting that the drain be disconnected. Corrective action has been
								taken. This location was tested and confirmed that the problem has been
								abated.
		153 B 4	Property Owner	Area Drain	3/28/2005	Positive	Newly Identified	Confirmed Not Illegal
16. 2212 Ken Oak Rd	Jak Rd.	100 A 1	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
		100 A 2	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	Jak Rd.	103 A 1	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	Ive.	50 B 4	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	vale Rd.	154 B 7	Property Owner	Downspout	9/20/2002		Newly Identified	Confirmed Not Illegal
21. 5815 Lochlea Rd.	ea Rd.	116 B 1	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
		0						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 relocating the illegal connection. Per the management of the
								apartment complex, the connection was re-routed in August 2011.
								Follow up testing was carried out in September which indicated that the
								fix has not prevented storm water defind into the sanitary sewers
22. 4424 Marbi	4424 Marble Hall Road		Property Manager	Stormwater Drain	4/13/2011		Illegal	Eurthor coordination is being done to permanently resolve the issue A
								letter dated 11/28/11 was sent to HCD to continue enforcement.
								Property owner is not responsive. DPW will coordinate with HCD for
								enforcement. This 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
								It was confirmed as an illegal connection in May 2011 after carrying out
23. 3 Millbrook Rd	ook Rd.	D 1	Property Owner/Trustee	Patio Drain	5/19/2011		Illegal	more dye-testing. A letter was sent to the property owner on August
								os, 2011. A follow up lettel dated 11/26/11 was sellt to the property
								owner requesting that the temporary sear becomes permanent.
24. 5806 Park I	Park Heights Ave.	78 B 4	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
		78 B 2	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
26.		78 B 3	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
27.		6 B 8L	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
28.		В	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
29. 5905 Park I	Park Heights Ave.		Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
6414	Heights Ave.	315 A 4	Property Owner	Downspout Connection	6/20/2005		Newly Identified	Confirmed Not Illegal
		315 A 3	Property Owner	Area Drain	3/22/2005	Positive	Newly Identified	
7126	Park Heights Ave.			Downspout Connection	6/20/2005		Newly Identified	Confirmed Not Illegal
33, 6311 Pearc	e Ave.	В		Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
		203 B 4	Property Owner	Downsport	6/20/2005		Newly Identified	Confirmed Not Illegal
35 6106 Pimlico Rd	'o Rd		Property Owner	Driveway Drain	3/28/2005	Positive	Newly Identified	Confirmed Not Illegal
36 6306 Pimlico Rd	to Rd	127 B 1	Property Owner	Downspolit	6/20/2005		Newly Identified	Confirmed Not Illegal
	Ave	30 B 1	Property Owner	Downsport	6/20/2005		Newly Identified	Confirmed Not Illegal
	urne Dd	334 A 1	Property Owner	Driveway Drain	3/15/2005	Docitivo	Newly Identified	Confirmed Not Illegal
	dille iva:	- 4		Diveway Dialli	2002/01/0	OSILIAC	Newly Identified	

39. 1702 South Rd. 40. 2177 Sulgrave Ave. 41. 2615 Taney Rd. 43. 2700 Taney Rd. 44. 2808 Taney Rd. 45. 2810 W. Strathmore Ave. 46. 2810 W. Strathmore Ave. 47. 3602 Chesholm Rd. 48. 6708 Park Heights Ave. 49. 4214 Groveland Ave. 50. 4414 Groveland Ave. 51. 2705 Queen Anne Ave. 51. 2705 Queen Anne Ave. 52. 5614. Sevard Ave	324 A 2						
		Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	370 B 6	320 B 6 Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	183 B 4	Property Owner	Driveway Drain	3/23/2005	Positive	Newly Identified	Confirmed Not Illegal
	183 B 2	183 B 2 Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	183 B 8	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	182 B 6	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	182 B 5	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
	180 A 5	Property Owner	Downspout	6/20/2005		Newly Identified	Confirmed Not Illegal
		Property Owner	Downspout	5/9/2005	Positive	Newly Identified	Confirmed Not Illegal
		Property Owner	Downspout	5/9/2005	Positive	Newly Identified	Confirmed Not Illegal
۵,		Property Owner	Downspout	5/9/2005	Positive	Newly Identified	Confirmed Not Illegal
		Property Owner	Downspout	5/9/2005	Positive	Newly Identified	Confirmed Not Illegal
		Property Owner	Downspout	5/9/2005	Positive	Newly Identified	Confirmed Not Illegal
		Property Owner	Swimming Pool	8/9/2011	Positive	Illegal	A letter dated 12/9/11 was sent to the property owner requesting that the drain be disconnected from the sanitary line. The illegal connection was removed by the owner.
53. 5207. Roland Ave		Property Owner	Downspout	12/27/2016	Positive	Illegal	A letter dated 1/3/17 was sent to the property owner requesting that the drain be disconnected from the sanitary line. The illegal connection was removed by the owner.

# **APPENDIX 4**

# PUMPING STATION WORK ORDERS

76 39AP		
ID:> DACKLDG	as of 10/02/17	26-54uc 10 # 2E
Conbined Nacklog Report	CM's & MID's	CONTRACTOR CONTRACTOR
10/02/17 09:08:11		

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The black   The			By					23 ± 25	CS CS	23	SS PAD	SJ	23 53	131	- FE	2 2	UD	S S	RIG	5 2	3 53	2	PH.	£ £	3 53	QA	24	היו	CS	CS	S3	3 23	H	23	2 2
The Dine   The Dine   Sts   Prty Code   WIN				PERG-ATTEND MEETING W/COH 930.			BLDS/ REFAIR RDIF LEAK (E stielpero 64972 RLDSS-TAKE REFAIRS TO MID in back of sta. Sullivan 6-4972			BLDS/REFAIR ROOF GEN ROOM (leak over Gen unit3 stielperc 64972	BLDS/ REFAIR BREAKEN LUCK on back door stielperc 64972 BLDG-REDF LEAKING DNTD EL ERUIFPRENT.		RLDS/ REPLACE DUUR KHUK "dFMvsnv jshkn ri dg-srrape ann patyt sta pimp riinh			-							BLDS-REPLACE WATER FUUNTA WORK AT ALL FOUNTAIN HAS NOT WORKED FOR DUER A YEAR	MIDS/ REPLACE CEILTHS TIL 1st FIR OFFice stielperc	OLDS/REPAIR FINIS TILES I Office stielperc 64972	need to be replaced it is		REDSTREFFIED OF DELICITIES INTREE RIGHTS CHAIN FINGT ERRITING THE TITES OF THE	BLDG-REEF LEAKING, SECONDA FER BY C. STIELPER		RLDS/ UNGLEG DRAIM LIME ( stielperc 64972	GLDS/ REPAIR DUIK SCREEK stielper 64972	BLDS-PAINT PUMP, MUTUR AND		•-1
		Plar Code W/II	Number		otal * PENG * DUNT 1		14,80991	13.82703 15.80820 15.82349	15.82654	16.82143	14.81687	14.82463	14,82882	15.81652	15.81871	18.80284	18,80744	15.81860	15.80621	15.81017	15, 81033	16.81106	16.82127	16.82156	16.82624	17.81649	17.81666	18 80765	14.81677	14,82488	15.80004	15.80828	15.81867	15.81868	15,01007
			Code																												4 2		5 4	4 4	L M
5		Nachine	Минрет	991125 CLINTON ST, FORCE MAIN			951000 FACILITY, BROOKLYH PUMPING 951000 FACILITY, BROOKLYH PUMPING	951000 FACILIY, BROOKLYN PUMPING 951000 FACILIY, BROOKLYN PUMPING 951000 FACILIY, BROOKLYN PUMPING	957701 FUUNTAIN, DRINKING MAYER 941D00 FACILITY, DUNDALK PUMPING	941000 FACILITY DUNDALK PUMPING	941000 FACILITY, DUNDALK FUMFING 941000 FACILITY, DUNDALK FUMFING	941000 FACILITY, DUNDALK FUMPING	941000 FACILITY, DUNDALK FUNFING 941000 FACTITY DANDALK FUNFING	941000 FACILITY, DUNDALK PUMPING	941000 FACILITY, DUNDALK PURPING	941000 FACILITY, DUNDALK FUNFING	947101 COMPRESSOR WANDTOR, BURBLE	911000 FACILITY, EASTERN AVENUE 911000 FACILITY EASTERN AVENUE	911000 FACILITY, EASTERN AVENUE	911000 FACILITY, EASTERN AVENUE	911000 FACILITY EASTERN AVENUE	911000 FACILITY, EASTERN AVENUE	911818 FOUNTAIN, MATER	911000 FACILITY, EASTERN AVERUE	911000 FACILITY, EASTERN AVENUE	911000 FACILITY, EASTERN AVENUE	914901 HERIER, HBT MATER	911000 FACTITY FROTERN AUFRIE	911000 FACILITY, EASTERN AVENUE	911000 FACILITY EASTERN AVENUE	ER 911000 FACILITY, EASTERN AVENUE 25	911000 FACILITY, EASTERN AVENUE	911203 NOTOR, SEWAGE PUMP #3	ER 911204 HOTOR, SENAGE PUMP \$4 25	911818 FDURTAIN, WATER
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FACILITY, JONES FALLS
FACILITY, JONES FALLS FACILITY, HIGHLAND TOUR FOUNTAIN, WATER COOLER FACILITY, LOCUST POINT FACILITY, JUNES FALLS FACILITY, JONES FALLS FACILITY, JUNES FALLS FACILITY JUNES FALLS FACILITY, JUNES FALLS FACILITY, LEGUST POINT FACILITY, LIBCUST POINT FACILITY JUNES FALLS FACILITY, JOHES FALLS FACILITY, RUAD AVENUE FACILITY MESTPORT FACILITY MESTPORT FACILITY, MCCDMRS FBUNTAIN UATER FOUNTAIN, MATER SCREEN, \$1 BAR HEATER, MATER Machine Tachine EASTER 911000 EASTER 911000 EASTER 916909 EASTER 916910 EASTER 911000 EASTER 911000 920012 Нинрег 921000 920091 921000 921000 921000 921000 926702 921000 921000 PUMPING ST EASTER 911818 926701 921000 921000 928101 928102 921000 EASTER 916000 EASTER 911000 EASTER 911000 EASTER 911000 **EASTER 911000** EASTER 911000 EASTER 911000 EASTER 911000 HILAND 961000 921000 921000 991004 DUNDAL 943101 **DUNDAL 947503** DRKLYN 9 CLINT HUND HUND HSTFT 10/02/17 09:08:11 4 4 4 4 4 Агез = . e U 0 0 0 0 . 1 E 0 0 0 0 1 .

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Note, P. 8, # Nice.  Fig.1 Problem  Fig.2 Fig.1 Problem  Fig.1 Fig.1 Problem  Fig.2 Sig.1 Problem  Fig.2 Fig.1 Problem  Fig.2	Plar Code 470		16.80642	16.80646	16.81334	18.80761	18,80762	18 80772	18 80773	18 80775	17,82807	17.81834	18.80286	18.80752	18.80774	18.80756	18.80500	18.80501	18.80502	18 86767	17.82813	Total * ELCPS * L	COURT 27	16.80651	16.80883	16.808/5	16.01301	15,82828	17.81290	17.81645	16.80026	17 80403	17,81085	17.82132	17.83065	Total * GRDS * Ho	CIUMI 12	15.81029	15.82346	16.80378	16.80020
Pbq.   Bbq.   CS   CS   CS   CS   CS   CS   CS   C	PS & Misc. Full Problem Description		ELCPS/ REPAIR REPLACE VAL (HDA Not working) stiel	ELCPS/ REPAIR VALVE UPERA CHUA suitches not worki	ELCPS-REPLACE LIGHTS IN P celling. 13 light are o	ELLES NEPLACE LIGHTS IN B replace lights in male	1 UA ZEI DOS-TENDETET MET THE POPKING ON BUTCHBEIC	ELOPS-INSTECT CHITDOTTES I CHAMBER IN the C	FICHCELLON FILTER IN MED DEFENDING Maith Rauson	FICH-REPUBLICATION OF BUILDING STREET	ELCPS-CHECK GENERALDE EXE GRAFAEDT exerciser tim	ELCPS-REPLACE FLUAT IN ME bad	ELCFS-MAKE REPAIRS TO MOT COOK operating 2 o stie	1 ELCPS/MCHPS-SYSTEM HIGH P REQ BY C. STIELPER	舌	1	THE THE CASE OF THE PURITY AND THE PURITY AND PURITY AN	FLEATS-CHELK #2 SURP PURP #2 SUMP PUMP NOT PUMPIN	FECTS-FZ SUMP FUTH ML FZ SUMP DUTP NOT HOURT	FIGN-CHECK TRANSFER SUIT CORP. For discular coather	ELCFS-CHECK BAR SCREEN FA TORQUE	Nork Brders:		GRADS / UAC CON TO CLEAN stielperc 64972	GRMDS /VAC TRUCK TO CLEAR stielpers 64972	PRESS. BROWNER TOWN THE SELF KELTH NATHUN. BEH I	CENC-ENGIN TRUEW WEEKER IN THE CYCLYRIN RED RY IL HIND	GRADS-WEED UAC-ALL INDCK MESCHOOTT SCREEN FOON du	GRADS- HEED TRUCK ID REMD from lot and delever to	GRND-RENBUE DUMPSTER FROM DUMPSTER NEEDS TO BE TH			GRDS-DELIUER MITTER TO TEA FOR K TAUROT	GRMD-HEIL-DUMPSTER MEEDS I dumpster needs to be va	CERNO-CLEAR BUT DUMPSTER I dumpster is full and se	enius vai, inuon ili ultani sureupeio un'il.		HA-REPLACE BELT BLDS/HA-REPAIR UR REPLACE	HA /REPLACE AC UNIT (BLBW stielperc 64972	HA/ REPLACE A/C UNIT C HI stielperc 64972	HA-WIT WIRKING MI AIR stielper 6 4972
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																	HA/ELEPS-INSPECT UNIT FOR EROOF Fan screen room tripping out 3 stielper 64972															INSPS-CALIBRATE SEASORS I the sensors for the gas detection system in the wetwell	avtonde	CALCINA	5-4016					INSPS-PUT BLEED VALUE ON COMPRESSOR WEEDS A BLEED VALUE INSTALED VOUNHOOCK 6-5194	
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Report Misc.			T KEEP	T KEEP	LIER E	T, KEPA	HIT, UK	PED 11	EATER	TING F	UNILLI	EPLACE	LINE II	MI	EAN PU	CLBUD	IT FUK	UFD R	ILINE. A	ROOF.	EPLACE	CBROKE	1 HC 1		EPLACE	AH HELL	FRN ME			III CON	晋	SURS I			ETECTO	GATE C	HI S	R, MUI	LC CON	WE DIN	OPER D
Combined Backlog Report CM's & MOD's Back River, PS & Misc.	35		HAZELCPSZREPAIR UNIT KEEP stielperc 64972	HAZELCPSZREPAIR UNIT KEEP stielpero 64972	HAZPENG- KEEPS SHUILING D SCLELIPFIC 64972 HAZPENG- REPAIR CHILLER ( no control nower ) stielber 64972	HA/ELCPS-ADJUST BELT, KEPA joint.	HA-UNCLOG LINE TO UNIT, UN ed	MA-REPAIR FAN CTRIPPED IN Load-stielperc 64972	HA/REPAIR LEAKING HEATER stielpero 64972	ELCHS/HA-KEFAIR HEATING F stielperc 64972	HA-REPLACE HEAT/AC UNIT I sticlpero	BLDS/NA-REPAIR OR REPLACE COOLEY	NEW TREATS ON THE LINE IN LINEAU ALGORA	HA-REPLACE PRESSURE RELIE VALVE is bad	MCHPS/HA- ASSISI CLEAN PU stielperc 64972	HA/ELCPS-REPAIR FAN CLOUD stielperc 64972	PECT UN	HR/ REPAIR A/E UNIT UPD R not working Jstlelperc 649/2	HA ARTHIN HE IN CUNIUM, N H. CORNEGUR 6-4712	HA-COMPENSING UNIT, ROOF, ROOM TRIPPING DUT.	BLDS/HA-REPAIR OR REPLACE water cooler	BLOS-FOUNTAIN, WATER GROKE H. JOHNSON 6-4972	-WATER HIT COLD	-WATER HOT COLD	BLDS/HA-KEPAIR UR REPLACE cooler	HAZADJUST BELT ON FAN MOT	HAZ ABJUST BELT UM FAN TU STIELPETG 64972 BLDSZHA-KEPAIR UR REPLACE GOULET			INSPS-CHECK SCADA, HUT COM H. Johnson 6-5194	INSPS-REPRIGRAM MODEN	HTE SEH	INSPS- CALIBRATE RADAN UN reading 3 stielperc 64972	CLUTS/ INSESTITUTES/IBBNIE COUNT CEMPROVI CONTY HI INSPS/ NEPRIK LEVEL CONTR CFAISE PEAGING) 64972	INSPEC-CHECK LEVEL DETECTO level detector not reading vdunnock 6-4016	INSTS/OPSEK-INVESTIGNTE C not working in auto-stielperc 64972	INSPS-PLC SRCEEN HAS BN P H. Johnson 6-4972	INSPS-CHECK RECORDER, MOT W.JOhnson 6-4972 INSPS-KEPLACE ARM ON RECO W.JOHNSON 6-4972	INSPS/ELCPS-CKECK PLC CON W Johnson 6-4972	EED VAL	INSPS- CHECK FOR PROPER D REA BY R DARTON JR
formed CH's	Short problem Description		CPS/REF	CPS/REF	MG- REF	CPS-4D	13 9010	PRIK F	PAIR LE	Z/HA-REF	PLACE !	THA-REP	DOTE T	PLACE F	S/HA- AS	CPS-REF	CPS-INS	EPRIK 6	DALINGT R	INDERSIF	HR-REP	FEMINTAL	LIATER A	MATER A	'HA-REPA	JANST BE	IBJUST 0			3-CHECK	-REPRINE	-CALIBR	- CALIB	V REPAI	-CHECK	ZOPSEK-	S-PLC SR	-CHEUK	/ELCPS-	-PUT BE	INSPS- CHECK FOR PROPER D REA BY R DARTUN
Cor Bac	Short					2 HA/EI	HA-U	HA-RI		2 ELCP		Z BLBS/	HAH HA-RH	HA-RI	1 NCHP		2 HA/EI	HR/	HO / OH	HA-EL		2 BLDS-	H H		2 BLDS/	HA/AH	HRZ 6	rk firdare.	al us s	INSPI	INSP	INSP	INSPI P EL COS		INSP	1 INSTS	INSP	TASE	2 INSPS		INSPI
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			(L)	S SUN F	SED C		ATR HAMDLING UNIT AND CHI		HEATER, UNIT #4(PUMP FLR) HEATER HWIT #1		HEATER, UNIT #3(3RD FLOOR)	Attendade	MACHINE TOF LIFES		WILER)			COMPENSING UNITYMBE ABOUT	TRUTT ARREST	WELS IN	JOH ER	FIGINT				: #2	1 1			PAKEL SCADA I/O TERMINAL	PAMEL,SCADA I/U TERMIMAL	L GAS	LOUGH 807, WELL LEVEL #2 CH	11	FACILITY, CAROLINE ST. P.S.	1 #1	F Fad a de ado	ETHELL	The orthogram	COMPRESSOR, AIRCIASTRUMENT	MUNITUR, GAS
	ine	ption	FAR, EXHAUST (EAST)	UST THE	AIR HANDLING UNIT AND	JST #1	THE UNI	UST	HIT #4(F	III #2	TIT #3CE	, WATER	MACHINII, CHAILAN HYEN	1	PUMP, KECIRC. \$1 (DILLER)	JST #1	121	HE UNITTY	CHANGASTAG BATTCANDE	FACILITY, JOHES FALLS	FOUNTAIN, WATER COOLER	FACILITY, LOCUST POINT	FOUNTALH MATER	HATER	HATER.	UNIT, AIRHANDLING #2	UNII,AIKHAADLIAG #1 FACILITY,WESTPURT			104 I/B	TVI HON	DETECTOR, WET WELL GAS	LUMP 897, WELL LEVEL	BBLER	CARGILIN	CUNTROLLER, PUMP, #1	יונ ייייי	RECORDER, CHART, HETHELL RECORDER, CHART, HETHELL	JTC JT	IR, AIRCI	SAS
	Nachine	Description	AN , EXHAL	FAH, EXHAUST	IR HANDL	FAH, EXHAUST #1	IR HANDI	FAH, EXHAUST	HEATER, UNIT #4	HEATER, UNIT #2	EATER, UR	FIRMATAIN, MATER	SCHENE 1	BUILER #1	UMP, RECL	FAH, EXHAUST #1	FAH, EXHAUST	UNDERSE!	TABLETAL	SCILITY,	UNTAIN,	ACELITY,	FOUNTALH MATER	FUUNTALH, MATER	FIUNTAIN, MATER	HIT, AIR	HII, RIKI ACILITY,			WEL, SCA	THEL, SUR	ETECTOR,	MAP 1997,	SYSTEM BUBBLER	TELLITY,	THYTROLLE	CONTROL, PLC	CURULN THRDER	CONTRIB., PLC	THPRESSI	MUNITUR, GAS
	Machine	Kunber			915417 AI				915404 HE				PI DUOLLY						727301 LL			985000 FA					991151 UN 971000 FA			956416 PR			950036 LU					985805 KE			940017 NE
	76	Loc. Hu	ERSTER 91	EASTER 91	ERSTER 929	EASTER 91	EASTER 91	EASTER 91	EASTER 91	EASTER 91	EASTER 919	EASTER 911	FOSTER 91	EASTER 91	EASTER 91	EASTER 91	STER					-					STRUM 991 USTPT 971			BRKLYH 950	BRKLYH 954	BRKLYN 950018	BRKLYN 951					CAROL 985		H .	DUNDAL 940
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	CM's & MBD's as of 10/02/17  Rack River, FS & Misc. Status 10 & 25  Plar Short problem FULI Problem Craft  Code M/D Description Description	Number	IMSPS/REPAIR CHART PEW ND STIELDERG 64972	ge out of inkO	82034 IASTS-IASTHIL KEW ULINASU M.UGAGSON 0-4772 82625 IASTS/ CHANGE RECURDER TU SKIELDET 64972	INSPS-FLOW METER WEEDS PE Flow chart recorder needs pen to be replaced not working	15.82533 INSPS/ RESIDNE GUMMINALMI Station LOFF line 3 Stielper 64972 16.82627 INSPS/ REPLACE TO SERVINE Conf vosakion 3 stielper 64972	INSPS/ RELACE TRANSDUCE readings stielper 6 5194	INSPS-CHECK CALIBRATION G check calibration on transducer readings out of range	12.80543 IASPS/ REPAIR RETER AUT W SCLEIDERC 64972 13.80543 TAVRS- CHECK FOR PROBER IN RED MY R DARTON JR	2 INSPS/ELCPS-SOUTH RAKE MI RUN. H. Johnson 6-4972	INSPS-REPAIR DR REPLACE A arm is lose on pressure recorder udunnock 6-4972	18.80766 INVENS-FIBM NETER IS GIVIN Teading. Need to be check 18.80766 TAVERS-FIBM NETER IS GIVIN Teading. Need to be check 18.80703 TAVERS-FIBER HONER	INSPS-CHECK MODEN check noden not responding vdunnock-6-4016	INSPS-REPLACE FLOW METER	INSPECTABLE MINERAL MINERAL MARKET IS AND COMMUNICATING VOUNDOCK 6-5194	15.80273 2 INSPSZELYS HHRE KEFHIKAN HIJ SUKKER FELV-BILELFER. 04772 16.80414 2 INSPSZ ELEPS_INVESIGNIE breaker 52-6 fualt 3 stielperc 64972	INSPS/RESTURE DACK UP FLD to control scheme stielper c 64972	INSPS-REPAIR FAULT, WINT RED BY C. STIELPER	12.81514 INSPS/ INSPECT FUR PRUPER STREAMING CS. LS. 114.82482 INSPS-REPLACE RAD UNIT RER RY R BARRON JR.	INSPS-RECALIBRATE GAS MET light will not reset	16.80036 INSTSYREPAIR UR REPLACE C (no pressure ) stielperc 64972	INSPS-REPAIR MUDEN STATIO COMMUNICATING	INSPS-REPLACE GAS DETECTU	INSPIN-CORRECT PLC MALFUNC C no process control ) stielper 64972	17.82144 INSPS/REFLECE (M)TERY ID STREAMEN 6497/2	INSTS/ REPORT LEAK CRIEED stielperc 64972	INSPS-CHECK GAS METER ALA CLEAR.	16.81879 INSPS-CHECK GAS HETER, ALA OFF 71 ARCHE TANGERT INST HEREA DISH HARE AREA AREA AREA AREA AREA AREA ARE		INSES-DROER & INDICATE THE COMMISSION FRIM	INSPS/REPAIR CHART PER NO stielperc 64972	INSPS- REPLACE DAD MUNITO REA BY R DANTON JR	INSPS-ARM IN RECURDER HIT N. johnson 6-4972	16.823// IANNEN MELENNER PRE CHOT HOPKINGS STIELDERS 049/2 17 9045: TANGEDERS OF PRIFFIED HAR ARE ARE ARE ARE ARE ARE ARE ARE ARE A	INSTANCTING WHO NEED IN FELLING FELLOWE gas detector not norking voonnous obligated. INSTANCTING THE NEED REPORTED THE N	2	2 INSTS/ELCES-REPAIR FAULT CF-8 over temp3 stielperc 64972	12.80847 INSPECTINGFET FOR REFROIT STIELDETC 64972
= 35 おおおおおおおおおおおおおおおおおおおおおおおおおおおおおおおおおお	1	Code	70	4 4	0 K0					মা ম ক ক	· 47	5	KI K	4	4	4 6				21 F1 4 4	4		4				1 14	5 4	FU FU ALA	U F.	. 8	4	4	13. 14 4 .	4	u N		30	4

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PAGE 72	Craft WI Wrk Sht Code Issue Typ dwn Date Cls	IMSPS 20170911 W15		.T 20120719 H15 20170331 H15		HEHFB 20170728 W39 20160719 W39	20160706 W15 20160719 W39		20160127 W54		20161227 W15 20170731 W39		20170628 M15 20170817 W39			ZUISIZUB NIS		20170616 415		20140212 N15 20140210 N15		28150608				20151113 W65			20170421 W18	20170421 418	
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Combined Backlog Report ID:	Short problem Description Description	IMSPS-REPLACE ARM OH FLOH the arm on the Flow recorder is ink is very light can not	w Nork Orders:	IAST-10 DRDER OF TRANSMIT FOR REPLACEMENT. SEE C.Mells/R. Garton 6-9744 IASP-REPLACE 84S DETECTUR replace gas detector not working vdunnock 65194	Mork Brders:	NCHFD-REPAIR WHEEL UN DUM wheel on dumpster came off vdunnock 6-4016 NCFAD-REPAIR WERR RIMGCER H.HOUNS 69733	FBV REFAIR BENT TRAILER J SLIGTPERS 64972 MTHFR-EFPHAFF ALL FINE LH L. LABASON 6-4972				MCHEB-REPLACE WHEEL, COMIN H. JOHNSON 6-4972		NCHFO-PUT HASP DW ALL DOO Fou Station NCHFO-REPAIR LOCKING MECH the looking mechanism on the metal gate is bent vdunnock 6-4	M Nork Brders:	2 MCHPS/ELCPS-CHECK SYSTEM	NCHAS/CHECK BEAR DUX FUR (very noisy) stielperc 64972 Mines/Javidi Treprant I fo ciation) stielper 64972		2 ELEEPS/MOHPS-#3 VACCUM NE #3 vaccum pump is not building vaccum vd 6-5194	4	MCMPS/ REPLACE VAC GAUGES Neters-stielperc 64972 MCMPS-BIMP DIF UGUIT FUR F RED RY U MONKS 69748	MCHPS-REDUILD SPARE PUMP.	2 NCHPS/ELCPS REPAIR #22UMP W.Johnson 6-9972 2 FIFBYMEMDS FWFTV REGREE # 1 harcrade chick in unfuell channel uninnnok 6-0972	2 ELCPS-CHECK EXAUST FAN IN		MCHPS/ ASSIST DPE	RCHPS, WINIERIZE, IMPRIUM STIELPERG 64972 MCHPS- REPAIR MIUFR (UTIL GHIPARIAN:WIll Hadaraz	2		NCHPS-REPACK CHAE VALUELL M. JOHNSON 6-4972 MCHPS-REPACK CHAE VALUELL M. JOHNSON 6-4972	NCHPS-REPACK CONE VALVECL	
	Plar Prty Code H/D Code Number	18.80755	Total * INSPS *	13.80022	Total * INST * CDURT 2	18.80304	17.00005	17.00021	16.81721	17.81056	17.81285	17.82810	17.83076	Total * MCHFB * COUNT 13	14.80966	16.81426	16.81345	17.83063	14,80810	14,81936	15.81885	15.82632	18.80746	15.81030	15.81032	17,00011	17.82426	17.82433	17,82434	17.82436	
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	Mine Machine Sts	171 NETER, FLOW NETER 25		DOL METER, FLUH TRANSMITTER 25 DIS DETECTOR, MET WELL GAS 25		100 FACILITY, GROOKLYN PUMPING 25 102 PUMP, SEHAGE #2	TRAILER, RIDING MGHER, MITH	DUMPSTER, CSTUTH)	1 INHILLEN, KIDING BUNKK, KIIH ZS 302 DRIVE, #2 BAR SCREEN 25	DRIVE, #1 BAR SCREEN	732 BUNFSTER, JFZ002(SCREEK RN 25 301 UALUE CHECK (PUMP RDIN) 25	NOTOR, \$2 SEMAGE PUMPOSUBM	126 FACILITY, STUNEY RUN P.S 25 300 FACILITY, WESTFURT 25		TANK, HYDRUPHEUMATIC SEAL	TO FOURT, STUND BROLDCERSTAN/N 25.	PURP, SEHAGE #2	503 FUMP, URGUUM #3 25	GENERATUR, EMERGENCY,	TOT STRAINER, VACUUM PUMP #18,2 25	FUMP, SEHAGE #3	SOZ PUNTY, SUMP & Z.	FAH, PRV-4 WET WELL EXHAUS	PURP, SEHRGE #1	FIGH SAUM \$1	HINER, KIDING GKRUELY(IN S HINER PHISH 70" W/RAGICSKAP	PUMP, VACUUM #3	URLUE, CHINE BY PUMP	102 VALVE, CHAE #2 PUMP 25 103 VALVE, CHAE #3 PUMP 25	WALUE, CINE #4 PUMP	
10/02/17 09:08:11	Co. Hachine No. Area Loc. Hunber	11 PUMPING ST STRUM 991171		DUNDAL 940001 RUAD 930018		BRKLYN 951000 DUNDAL 941102	EASTER 8414	ERSTER 919035	JF 924302		JF 926732 NCST 978501		STRUN 991126 WSTPT 971000			CILERT 949102	DUNDAL 941102	DUNDAL 944603	DURBAL 945201	DURDAL 944401	DUNDAL 941103	DUNDAL 946302		ERSTER 911101	EASTER 919026	EASTER 919002	ERSTER 912403	ERSTER 912101	EASTER 912102 EASTER 912103	EASTER 912104	

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CARL TAYET, 1 O R 1123C.	Short problem Full Problem Description Description				ç	7	TICHTO-LINGUIST OFFICE IN D. REG. BY M. HUKS. 09755	MCHICA-TUCTOR FOR FIRE FUN			TO STRUCKERHOUSE STRUCK FOR EATEN PHER OWN REPORTE UNIXABLE	1	2 ELCPS/NCHPS-REPAIR NOTORY	2	MCHPS/ASSIST INSPS HITH R		NCHPSZINSPECT FUND CPUMPI	7	5 MCHPS/ REPLACE PRESSURE G Enot working) 64972 stielper	* Hork IIrders:	5 HECH - REPAIR DIL PAW CL stielpero 64972	Mork Orders:		A SIBSEVINSES-TABLESTEETE C not marking in auto-etislners 64972	2 6	4 6	2	2 ELCPS/OPSEK- REPAIR DRIVE	2								5 2 IPSEK/INSPS-FAULT CODE 20 REQ BY C.STIELPER	* Work Orders:			PENG-INVESTIGATE ELECTRIC	H	
	at W/D	Hunber	17.82437	17.83077	16.81139	18.80022	17.82773	17 01//1	17.01001	10 007E4	18 80757	16 82628	17,82135	14.82430	14.82438	16.81712	15, 82017	16,80661	17.80815	Total * NCHFS COUNT 40	13,80655	Total * MECH *	COUNT 1	15, 81484	16 02022	10.02023	16.80874	16.82641	17,80383	16.80878	15.82624	16.80877	16.82635	15.82362	16.81117	16.82175	17.81655	Total * DPSEK	COUNT 14	) 13.80684		15,80603	
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	ne Machine	r Description	S VALUE, CUNE &5 PUMP						74 JUNE 11111 47										16 FACILITY,STUREY RUN P.S		EASTER 911106 PUMP, STANDBY SENAGE			H CHATRILLER RIGHT #1	CHATERLICE BUND		CONTROL OFD #4 NEWAGE	CONTROL UFD #2 SEURGE	CONTREL VFD #3 SEMAGE								B CONTROLLER, PROGRAMMABLE			DO FACILITY, BROOKLYN PUMPING			
	Rachine	Humber	R 912105		923304				707070	107220	100777	932107	931201	932302	930102				991126		R 91110			985701			N 948105	948103	1 948164	R 919509	928005	928002	928004	928002			975003			BRKLYN 951000	COLGAT 949501	A 941000	
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PAGE 74	WO Wrk Sht Issue Tup dun				10 HS1			119 HD9			14 409			.29 HE1		20170906 W48		JCW STORM 20140915 W90								
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Combined Dacklog Report ID:> BACKLUG CM's & NUD's as of 10/02/17 Back River, PS & Misc. Status 10 & 25	m Full Problem Description	AND THE RESERVE OF THE PROPERTY OF THE PROPERT	EDS REP requester r slayton 6-9752	STEEPER	US PETGENIEGATE CAUSE OF FUN station. SUILIVAN 64972. US PERGETRUFATTEGIF PINNYTHIF A NATI SAATI NAHATAM ABATAM/CARIS 64972.	1per64972		PERG-PROVIDE AND INSTALL SS SYSTEM AND SECURITY CAMERA SURVEILLANCE SYSTEM UPURADES. TO		PERG-HAUE PHINKE LINE AMD installed in upstairs UFD room stielperc 64972		rener ne-vaneur belam urf streipero omyrz PEMG-INVESTIGGTE PREMETUR bump failure (operational problems or bump design) reguester RES	PERG-INVESTIGATE PUMP CAV Hell design problem stielper 64972	FEMG/INVESTIGNTE IMSTALL stielperc 64972		2 PH/MCHPS- LUBRICATE CARRI Stielperc 65194 CS		3 ELCPS/NGHPS/STBRN-ND PDWE REQ DY J. MARDCK 6-9748		:545						
Contài Back	WE Fire Short problem Sts Frtu Code W/D Description	Code Nunber	25 4 TAD 12.80569	25 4 TAD 13.80683	25 30 13.81592 P-10EST 25 4 BJZ 12.82123 2 PFHG-THU	4 TAD 12 82363	4 TAD 12.83030	4 16.82362	25 4 BJZ 12,81525 PFR67 TA	25 4 TAD 12.80529	25 4 17.00015	4 TRD 12.81199	25 4 13.81,600	4 NKA 13.80727 2	Total * PENG * Nork Orders: COURT 20	25 30 18.80750	Total # PM # Mork Drders:	CDURT 1 25 3D 15.80605 3 ELCFS/N	Total * STORM * Work Orders: COUNT 1	Area * FUMPING ST * Nork Orders: COUNT 319	Total Co. * 11 * Work Orders: COUNT 320					
	Machine	Ğ			FACTILITY EASTERN AUFRIEF				FACTLITY HIGH ANDTHEN			FACILITY STONEY RUN P. S		FACILITY, MESTPORT		DUNDAL 947504 FAN, PRU-4 WET WELL EXHAUS		CLINT 991121 FACILITY, CLINTON STA. #1								
10/02/17 09:08:11	Go. Hachine	Area Loc.	11 FUNPING ST DUNDAL 941000	DUNDAL 941000	EASTER 91000	EASTER 911000	EASTER 911000	145	HTLAND 961000		JF 923201			MSTPT 971000		DUNDAL 947504		CLINT 991121								
																						07 14 T			0	D

#### **APPENDIX 5**

### SUMMARY OF REPORTED OVERFLOWS

#### **SSOs Structures**

	SSO No. 67	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
7/28/2017	95.25	2.58
	SSO No. 72	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
7/28/2017	105.9	2.58
	SSO No. 135	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
	None Reported this Quarter	
	SSO No. 137	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
Flow monito	or removed on July 1, 2015 for cons	struction
	SSO No. 138	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
	None Reported this Quarter	



	SSO No. 139	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
	None Reported this Quarter	
	SSO No. 150	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
	None Reported this Quarter	
,		
	SSO No. 151	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
	None Reported this Quarter	



	SSO No. 152	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
6/19/2017	1.51	1.40
7/1/2017	1.95	0.35
7/6/2017	1.39	1.54
7/28/2017	6.94	2.58
8/1/2017	5.76	0.49
8/12/2017	3.91	0.60
8/15/17	4.09	0.89
8/18/17	2.56	0.66
	SSO No. 153	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
	None Reported this Quarter	
	SSO No. 154	
<u>Date</u>	Surcharge Depth (in)	Rainfall (in)
	None Reported this Quarter	



		SSO No. 155	
<u>Date</u>		Surcharge Depth (in)	Rainfall (in)
	Noi	ne Reported this Quarter	
		SSO No. 156	
<u>Date</u>		Surcharge Depth (in)	Rainfall (in)
	Noi	ne Reported this Quarter	
	Pump	oing Station Overflows	
Pumping Station	<u>Date</u>	Volume Loss (gal)	Rainfall (in)
	None	Reported this Quarter	
	Wastewater	Treatment Plant Overflow	/S
<u>WWTP</u>	<u>Date</u>	Volume Loss (gal)	Rainfall (in)
Patapsco		None Reported this Quarter	
Back River		None Reported this Quarter	



#### City of Baltimore Un-Permitted Sanitary Sewer Overflows For Calendar Quarter Ending September 30, 2017

Date	Estimated Volume (Gal)	Cause	Rain (in)	Receiving Waters	Location	Zip
7/1/2017	25,819	Rain	0.45	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
7/2/2017	5	Rags, Roots, Grease	0.00	N/A	2105 Hollins Ferry Rd	21230
7/2/2017	4	Roots	0.00	N/A	5115 Norwood Rd	21212
7/3/2017	5	Trash	0.00	N/A	3128 Weaver Ave	21214
7/3/2017	5	Roots	0.00	N/A	3303 Abell Ave	21218
7/4/2017	16	Rags, Trash	0.08	N/A	5809 Benton Heights Ave	21206
7/5/2017	50	Rags, Trash	0.00	N/A	6016 Bellona Ave	21212
7/6/2017	8,877	Rain	0.87	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
7/8/2017	22	Trash	0.00	N/A	4624 Reisterstown Rd	21215
7/11/2017	6	Rags, Grease	0.00	N/A	5306 Valiquet Ave	21206
7/13/2017	4	Roots, Trash	0.00	N/A	3407 Parkside Dr	21206
7/14/2017	10	Other	0.33	N/A	5708 Falls Rd (Private)	21209
7/14/2017	1	Other	0.33	N/A	2801 Annapolis Rd (Private)	21230
7/16/2017	4	Rags, Roots	0.00	N/A	3652 Elm Ave	21211
7/18/2017	6	Rags, Roots, Trash	0.09	N/A	337 N Charles St	21202
7/20/2017	2,705	Rags, Grease, Trash, Structural	0.00	Jones Falls	3600 Keystone Ave	21211
7/22/2017	0	Rags, Trash	0.10	N/A	2944 Keswick Rd	21218
7/27/2017	15	Rags, Grease, Trash	0.00	N/A	1300 E Northern Pkwy	21239
7/28/2017	4,693	Rain	2.70	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
7/28/2017	496,000	Rain	2.70	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
7/28/2017	2,233,000	Rain	2.70	Jones Falls	1901 Falls Rd - SSO #67	21217
7/28/2017	4,309,000	Rain	2.70	Jones Falls	428 E Preston St - SSO #72	21202
7/29/2017	10	Trash, Unknown	0.54	N/A	5070 Wabash Ave (Private)	21215
7/29/2017	589,000	Rain	0.54	N/A	1715 E Eager St	21205
7/31/2017	9,500	Grease, Trash	0.00	N/A	1910 Benhill Ave	21226
8/1/2017	66	Rags, Grease, Trash	0.24	N/A	Wyndholme Cir & Wyndholme Way (Private)	21228
8/1/2017	229,000	Rain	0.24	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
8/3/2017	45	Roots	0.45	N/A	119 S Augusta St	21229
8/3/2017	6,593	Rain	0.45	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
8/6/2017	280	Rags, Roots	0.00	N/A	2820 W North Ave	21216
8/7/2017	4,550	Rain	0.67	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
8/8/2017	15	Trash	0.01	N/A	1303 Belt St	21230
8/9/2017	305	Rags, Grease, Trash	0.00	N/A	851 Braddish Ave	21216
8/12/2017	3,000	Rain	0.62	Jones Falls	1901 Falls Rd - SSO #67	21217
8/12/2017	264,000	Rain	0.62	Jones Falls	428 E Preston St - SSO #72	21202
8/12/2017	1,500	Rain	0.62	Jones Falls	W Garrison Ave & Queensberry Rd - SSO #139	21215
8/12/2017	164,500	Rain	0.62	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
8/15/2017	464,500	Rain	0.89	Jones Falls	428 E Preston St - SSO #72	21202
8/15/2017	2,000	Rain	0.89	Jones Falls	1901 Falls Rd - SSO #67	21217
8/15/2017	103,500	Rain	0.89	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
8/16/2017	750	Rags, Grease, Trash	0.01	N/A	Broening Hwy & O'Donnell St	21224
8/16/2017	11	Rags, Roots, Trash	0.01	N/A	3014 Frisby St	21218
8/16/2017	1,464	Rags, Grease	0.01	N/A	600 N Bradford St	21205
8/17/2017	3	Rags	0.03	Jones Falls	3349 Falls Rd	21211
8/18/2017	16,000	Rain	0.87	Jones Falls	W Garrison Ave & Queensberry Rd - SSO #139	21215
8/18/2017	42,500	Rain	0.87	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
8/19/2017	755	Trash, Sand, Gravel, Rocks	0.04	N/A	2115 N Forest Park Ave	21207
8/19/2017	5	Roots, Trash	0.04	N/A	1419 W Mulberry St	21223
8/22/2017	450	Rags, Roots, Grease	0.10	Herring Run	2200 E Northern Pkwy	21234
8/23/2017	506	Rags, Grease, Trash	0.03	N/A	501 Beaumont Ave	21212
8/25/2017	44,250	Structural	0.07	Gwynns Falls	2501 W Lexington St	21223
8/26/2017	6	Rags, Roots	0.00	N/A	1015 W 37th St	21211
8/26/2017	10	Rags, Roots	0.00	N/A	1004 Reverdy Rd	21212
8/28/2017	95	Rags, Grease, Trash	0.00	N/A	5306 Valiquet Ave	21206
8/28/2017	292	Rags, Roots	0.00	N/A	1820 W Fayette St	21223
8/28/2017	5	Rags, Roots, Trash	0.00	N/A	2723 Louise Ave	21214
	-	U-,, ··· <del>····</del> ··		Gwynns Falls	<del>-</del>	21230

#### City of Baltimore Un-Permitted Sanitary Sewer Overflows For Calendar Quarter Ending September 30, 2017

Date	Estimated Volume (Gal)	Cause	Rain (in)	Receiving Waters	Location	Zip
9/1/2017	274	Rags, Roots, Trash	0.00	N/A	406 Kingston Rd	21229
9/1/2017	11	Rags, Roots	0.00	N/A	1806 Druid Hill Ave	21217
9/2/2017	1,500	Rain	0.69	Jones Falls	N Charles St & W Lanvale St - SSO #152	21202
9/3/2017	240	Rags, Grease	0.01	N/A	6100 The Alameda	21239
9/4/2017	192	Rags, Roots	0.00	N/A	605 E 35th St	21218
9/5/2017	102	Structural	0.64	Jones Falls	2918 Woodland Ave	21215
9/5/2017	104	Rags, Trash, Structural	0.64	N/A	1522 E Biddle St	21213
9/5/2017	500	Rain	0.64	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
9/6/2017	11	Rags, Trash	0.48	N/A	1809 Bolton St	21217
9/7/2017	2,140	Rags, Grease, Trash, Sand, Gravel, Rocks	0.00	N/A	E Preston St & Guilford Ave	21202
9/7/2017	10	Grease, Trash	0.00	N/A	6513 Eastern Pkwy	21214
9/8/2017	10	Rags, Grease	0.00	N/A	1628 Braddish Ave	21216
9/9/2017	5	Rags, Roots	0.00	N/A	412 E Biddle St	21202
9/11/2017	1,090	Rags, Trash	0.00	N/A	1100 Covington St	21230
9/12/2017	6	Rags, Roots, Trash	0.00	N/A	Deepdene Rd & Edgevale Rd	21210
9/12/2017	5	Rags, Roots, Trash	0.00	N/A	5813 Loch Raven Blvd	21239
9/12/2017	Ongoing	Structural	0.00	Gwynns Falls	2505 W Lexington St	21223
9/12/2017	8	Rags, Grease, Trash	0.00	N/A	711 N Payson St	21217
9/13/2017	14	Rags, Roots, Grease, Trash	0.10	N/A	421 E 22nd St	21218
9/14/2017	104	Grease, Trash	0.01	N/A	826 North Point Rd	21224
9/14/2017	900	Rags, Trash	0.01	N/A	709 Chesapeake Ave	21225
9/14/2017	141,000	Other	0.01	Jones Falls	N Charles St and W Lanvale St - SSO #152	21202
9/16/2017	8	Roots, Trash	0.00	N/A	6711 Park Heights Ave	21215
9/17/2017	7	Roots	0.00	N/A	3132 Guilford Ave	21218
9/18/2017	195	Rags, Grease, Trash	0.02	N/A	115 S Kresson St	21224
9/18/2017	1,290	Rags, Grease, Trash, Sand, Gravel, Rocks	0.02	Gwynns Falls	410 Brunswick St	21223
9/18/2017	214	Grease, Structural	0.02	N/A	2423 W Garrison Ave (Private)	21215
9/18/2017	74	Rags, Roots, Trash	0.02	N/A	Deepdene Rd & Edgevale Rd	21210
9/18/2017	4	Rags, Roots, Trash	0.02	N/A	3812 Reisterstown Rd	21215
9/19/2017	2	Rags, Roots, Trash	0.00	N/A	5502 Benton Heights Ave	21206
9/19/2017	4	Rags, Trash	0.00	N/A	2913 Windsor Ave	21216
9/21/2017	1,193,000	Grease, Trash	0.00	Jones Falls	N Charles St & W Lanvale St - SSO #152	21201
9/22/2017	4	Rags, Roots, Trash	0.00	N/A	4116 Fairhaven Ave	21226
9/22/2017	6	Rags, Roots, Trash	0.00	N/A	2563 Marbourne Ave	21230
9/23/2017	486	Rags, Grease, Trash	0.00	Gwynns Falls	300 S Bentalou St	21223
9/25/2017	48	Rags, Roots, Trash	0.00	N/A	6222 Benhurst Rd	21209
9/27/2017	4	Rags, Roots, Rain	0.00	N/A	302 E 33rd St	21218
9/29/2017	Ongoing	Structural	0.00	Jones Falls	3500 Parkdale Ave	21211
9/29/2017	4	Rags, Roots	0.00	N/A	3623 Old York Rd	21218
9/29/2017	10	Rags, Trash	0.00	N/A	1352 Cedarcroft Rd	21239

# SDUOs Updated through September 30, 2017

Future/Planned Work	Work has been assigned. Walting for assigned work to be completed to confirm abatement.  Deliety due funding issues, Contractor has sent the schedule to complete the required work, work should be completed by Dec. 2016.  Owner is in the process of engaging contrador to perform the required abatment work. Communication is on-going to find a recolution. SDUO is Abated.	Work should be completed by Dec 2016. Owner is in the process to engage contractor to perform the required abstrment work. Communication is on-going to find a resolution. SDUO is abated.	More investigations are on-going to determine the source of the sewage. Work has been competed, in monitoring stage to confirm abatement. SDUO is a bated.	More investigations are on-going to determine the source of the sewage. <b>SDUO</b> is abated.	More investigations are on-going to determine the source of the sewage. Point repair was performed. Under monitoring to confirm abatement.	School hired a contactor to CCTV and map their entire system to spot any defects. Work has been in progress. <b>SDUO is abated.</b>	Abatement is in-progress.	SDUO is abated.	Contractor has been engaged to reinstate a lateral.
Measures Taken to Identify Source or Resolve	Two laterals found leaking to the storm system. CCTV and dye the storm system. CCTV and dye the storp was desired as set increasing was confirmed the always assets, increasing was formed out to preform the required work. DPW staff met with a property manager to determine the scope do work and make the streadied. Work has been scheduled to be completed by December 2016.  Owner (HARC) has been working on scheduling a contractor to repair sanitary line.	Danaged private sanitary line. Property management has been contacted to take action. Contractor was assigned to replace 159 H. of satisfarine. Work should be completed by Dec 2016. (private SDUD).  (PMBC) has been working on scheduling a contractor to repair sanitary line.	relatively high ammonia values. Sewage is leaving laterals in small volume, Lateral lauchingh pass been performed to determine the integrity of the laterals 3 laterals have been repaired the service of Sewage volume has dropped identified leaking house cornection transfered to SSO on 3*10/2017 (SSO ID.4/47); Repairs have been completed. Monitoring system to clear residuals to confirm abatment.	High animonia readings without noticeable sewage source. CCTV for laterals and days testing have been performed. Cleanout for 4518 exposed for daye testing and cits. Intermitted issue, More sampling and investigation has been in progress to determine the issue.	Sanitay lateral is leaking to inlet. Investigation has been on-going to determine the leaking asset. Point repair has been done. 12 If of sanitay lateral has been replaced. In monitoring stage to confirm batement.	Sewage found discharging from outfall on Friends school properry. All assets are private. School is currently taking conrective actions. A. School has repeted as collegated sewer fine. Small profit on of the problem is still unknown. School has engated on-call contractor to assess the entire sewer system to determine the source of the sewage.	Portion of apartment building found comected to the storm.  DPW is working with wwwer to take the proper measurment.  Issue has been esciated to abate SDUO ASAP.	Business found connected to the strom. Owner has been engaged to take the proper measurement.	Sewage found leaking from apartment building due to multiple issues. Point-repair and extensive cleaning has caused to relief sewage. System is under monitoring to confirm abatement. Continue monitoring to confirm abatement.
Est. Quantity of Discharge in Gallons (7, 8, 9)	549,360 V	S83,200 V	22,320 V	3,485	3,802 A	339,840	354,240 V	V 11,189	205,200 V
Duration (Days)	545	405	310	242	on-going	118	On-going	111	on-going
Date of Resolution (See Note 6 Below)	Resolved	Resolved	Resolved	Resolved	Not Resolved	Resolved	Notresolved	Resolved	Not resolved
Stream Affected	Harbor	Harbor	Jones Falls	Gwynns Falls	Back River	Jones Falls	Jones Falls	Jones Falis	Jones Falls
Zip Code	21017	21017	21215	21216	21206	21210	21201	21201	21202
Location	Perkins homes (Private)	Perkins Homes (Ballou Court) (Pinate)	2900 Block of Woodland Ave	4500 Block of Wakerield Rd	Cheserfield Are & Karon Ave	5114 N Charles St, Friends School	101 W Read Street	221 W Read Steet	1001 Wilmot Court
Date of Occurrence	4/15/2016	9/2/2016	11/1/2016	11/14/2016	3/3/2017	3/30/2017	6/1/2017	6/8/2017	7/142017
SDUO No.	16HB01	16HB03	16JF04	16GF01	17BR01	17 JF01	17JF02	17JF03	17 JF04
No.	ю	Ф	ın	ω	ω	Ø	Έ	27	£1



## SDUOs Updated through September 30, 2017

Future/Planned Work	Work has been in progress to redirect the lateral to santary system	SDUO is abated.	In the process of finding a proper way to abate SDUO
Measures Taken to Identify Source or Resolve	Direct connection to the Storm System. Appeared to be Work has been in progress to redirect the lateral to sankary going.	Damaged lateral causing sewage to backup and overflow y from deasnout. Wrner has been engaged to life a contractor to cornect the situation. Owner has replaced lateral which abated SDUO.	2.890 V Sewage from House connection infiltrating into the clearwater pipe leading into the stormdrain.
Est. Quantity of Discharge in Gallons (7, 8, 9)	A 966'6	4,464 V	2,880 V
Duration (Days)	on-going	31	on-going
Date of Resolution (See Note 6 Below)	Notresolved	Resolved	Notresolved
Stream Affected	Gwynns Falls	Gwynns Falls	Gwynns Falls
Zip Code	21207	21207	21207
Location	3206 Miford Ave	4202 Maire Ave	5104 Norwood Ave
Date of Occurrence	8/9/2017	8/15/2017	9/27/2017
SDUO No.	17GF01	17GF02	17GF03
N.	41	15	91





