

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

UNITED STATES OF AMERICA,)
)
 Plaintiff,)
)
 and)
)
 STATE OF MARYLAND,)
)
 Plaintiff-Intervenor,)
)
 v.)
)
 MAYOR AND CITY COUNCIL)
 OF BALTIMORE, MARYLAND,)
)
 Defendant.)
 _____)

Civil Action No. JFM-02-1524

MODIFIED CONSENT DECREE

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WHEREAS, Plaintiff, the United States of America (“United States”), by the authority of the Attorney General of the United States and through its undersigned counsel, acting at the request and on behalf of the Administrator of the United States Environmental Protection Agency (“EPA”), filed a Complaint in this action on April 26, 2002, seeking injunctive relief and civil penalties pursuant to Section 309 of the Clean Water Act, 33 U.S.C. § 1319, naming as Defendant the Mayor and City Council of Baltimore, Maryland (collectively, “Baltimore”, “Baltimore City” or “the City”) pursuant to Section 309(e) of the Clean Water Act, 33 U.S.C. § 1319(e); and

WHEREAS, Plaintiff, the State of Maryland, on behalf of the Maryland Department of the Environment (“MDE”), filed a motion to intervene, and a Complaint in Intervention against Baltimore for its alleged violations of the Clean Water Act, and Title 9, Subtitle 3 of the Environment Article, Annotated Code of Maryland; and

WHEREAS, Baltimore operates publicly owned treatment works (“POTWs”), including the Back River Wastewater Treatment Plant and the Patapsco Wastewater Treatment Plant, that serve the citizens of Baltimore and several surrounding counties; and

WHEREAS, the United States alleged in 2002 and continues to allege that Baltimore has violated and continues to violate Section 301 of the Clean Water Act, 33 U.S.C. § 1311, by discharging untreated sewage from its Collection System to the Back River, Patapsco River, and the Chesapeake Bay and several smaller water bodies and other waters of the United States; and the State of Maryland alleged in 2002 and continues to allege that Baltimore has violated and continues to violate Section 301 of the Clean Water Act, 33 U.S.C. § 1311, and Sections 9-322 and 9-323 of the Environment Article, Annotated Code of Maryland, by discharging untreated

sewage from its Collection System to the Back River, Patapsco River, and the Chesapeake Bay and several smaller water bodies and other waters of the State of Maryland; and

WHEREAS, without making any admission of law or fact, and without admitting any violation of any law or regulation, Baltimore denies that it has willfully or negligently violated any provision of the Clean Water Act and state water pollution control laws. Baltimore further alleges that at all times it has acted in good faith in a sincere effort to comply with the Clean Water Act, and that any sewage discharges that have occurred to date have been unintentional; and

WHEREAS, in the best interests of the public, and to avoid the expense and delay of litigation, Baltimore wishes to work in a cooperative partnership with MDE and EPA in an effort to continue to enhance water quality and to minimize future discharges as set forth in this Modified Consent Decree; and

WHEREAS, in 2002 the Court entered a Consent Decree (“2002 Consent Decree”) that required Baltimore to pay civil penalties and to implement a series of remedial measures, including among others, the elimination of certain sanitary sewer overflow structures, the inspection of the collection system, infiltration and inflow evaluation, rainfall and flow monitoring, rehabilitation of certain pumping stations, and development of a collection system model; and

WHEREAS, Baltimore agrees that all the activities undertaken pursuant to the 2002 Consent Decree that were completed will need to be monitored, evaluated, updated and repaired as part of its responsibility to ensure ongoing maintenance and operation of Baltimore’s Collection System; and

WHEREAS, Baltimore's wastewater collection, treatment and disposal system must treat approximately 250 million gallons each day of wastewater flow generated by Baltimore residents and its surrounding suburban counties, and

WHEREAS, between the Date of Entry of the 2002 Consent Decree and the date of lodging of this Modified Consent Decree, Baltimore has invested more than \$710 million in public resources to improve water quality and reduce Collection System discharges; and

WHEREAS, Baltimore has increased its sewer rates since the entry of the 2002 Consent Decree in order to meet the requirements of the Clean Water Act; and

WHEREAS, the Baltimore City Department of Public Works has developed and is implementing an asset management program for operations and maintenance of the Collection System that includes a Fats, Oils and Grease ("FOG") Program; a Root Control Program; and a Trunk Sewer Inspection Program; and

WHEREAS, Baltimore is committed to integrated planning based on EPA's guidance entitled "Integrated Municipal Stormwater and Wastewater Planning Approach Framework", dated May 2012, and

WHEREAS, the Parties acknowledge that further investment of public resources is necessary to continue to maintain and improve Baltimore's Collection System and to achieve compliance with the Clean Water Act; and

WHEREAS, while conducting work pursuant to the 2002 Consent Decree, Baltimore identified a significant hydraulic restriction that impacts flow to the Back River Wastewater Treatment Plant, extending six miles upstream and contributing to recurring manhole overflows, and which should be addressed before implementation of certain other rehabilitation projects required by the 2002 Consent Decree; and

WHEREAS, Baltimore has developed a citywide Collection System model to predict peak flows that allows Baltimore to better consider a citywide system response to peak flow and the impact of storage solutions to address wet weather overflows; and

WHEREAS, through a phased adaptive management approach Baltimore will focus on rehabilitation projects where they will most effectively address sanitary sewer overflows; and

WHEREAS this Modified Consent Decree will allow Baltimore additional time to address sanitary sewer overflows; will eliminate the existing Back River Wastewater Treatment Plant hydraulic restriction; will require attention and follow-up reporting for sanitary discharges of unknown origin; will require enhanced emergency response procedures and revisions of the operations and maintenance plan; and will require Baltimore to engage in improved public outreach; and

WHEREAS, the Parties acknowledge that a high degree of cooperation shall continue to be necessary to carry out the terms of this Modified Consent Decree, and it is the Parties' intent to engage in such cooperation and to act in good faith to fulfill the terms of this Modified Consent Decree; and

WHEREAS, the Parties agree, and the Court finds, that settlement of the claims alleged in the Complaint and the Complaint in Intervention without further litigation or trial of any issues, is fair, reasonable and in the public interest and that the entry of this Modified Consent Decree is the most appropriate way to continue to resolve the claims alleged in the Complaint and the Complaint in Intervention.

NOW THEREFORE, it is hereby ORDERED, ADJUDGED and DECREED as follows:

I. JURISDICTION

1. This Court has jurisdiction over the subject matter of this action and over the Parties to this action pursuant to Section 309(b) of the Clean Water Act, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1331 and 1367. The Complaint states claims upon which relief may be granted against Baltimore under Section 309 of the Clean Water Act, 33 U.S.C. § 1319, and Sections 9-339 and 9-342 of the Environment Article, Annotated Code of Maryland, for injunctive relief and civil penalties. This Consent Decree replaces and supersedes the 2002 Consent Decree and upon entry of this Consent Decree the existing 2002 Consent Decree is no longer in effect. Baltimore waives any and all objections that it might have to the Court's jurisdiction to enter and enforce this Consent Decree. Authority to bring the United States' claims in this action is vested in the United States Department of Justice pursuant to Section 506 of the Clean Water Act, 33 U.S.C. § 1366, and 28 U.S.C. §§ 516 and 519. Authority to bring the State of Maryland's claims in this action is vested in the Office of the Attorney General of Maryland pursuant to Section 9-344 of the Environment Article, Annotated Code of Maryland.

II. VENUE

2. Venue is proper in this Court pursuant to Section 309(b) of the Clean Water Act, 33 U.S.C. § 1319(b), and 28 U.S.C. §§ 1391(b) and 1395(a).

III. BINDING EFFECT

3. The provisions of this Consent Decree shall apply to and be binding on Baltimore, its officers, directors, employees, agents, servants, successors and assigns, and upon the United States and the State of Maryland.

4. Effective from the Date of Entry of this Modified Consent Decree until its termination, Baltimore shall give written notice, and provide a copy, of this Consent Decree to

any person or entity to whom Baltimore may transfer ownership or operation of any portion of the Collection System. Baltimore shall notify EPA, MDE and the United States Department of Justice in writing of any successor in interest at least twenty-one (21) days prior to any such transfer.

5. Beginning no later than thirty (30) days after the Date of Entry of this Modified Consent Decree, Baltimore shall provide a copy of all relevant and applicable portions of this Consent Decree to each engineering, consulting and contracting firm retained to perform the work or any portion thereof required by this Consent Decree once the contract relating to such work has been approved by the Baltimore City Board of Estimates. Any action taken by any contractor or consultant retained to implement Baltimore's duties under this Consent Decree shall be considered an action of Baltimore for purposes of determining compliance with this Consent Decree. In an action to enforce this Consent Decree, Baltimore shall not assert as a defense against the United States or the State of Maryland that any of its officers, directors, employees, agents, servants, contractors, successors or assigns are separately and individually responsible for Baltimore's failure to perform under this Consent Decree; however, this Consent Decree shall not limit Baltimore's right to take all appropriate action against any person or entity that causes or contributes to Baltimore's failure to perform.

IV. PURPOSE

6. The express purpose of the Parties entering into this Consent Decree is to take all measures necessary to enable Baltimore to comply with the Clean Water Act, the regulations promulgated thereunder, the Maryland water pollution control laws, the regulations promulgated under such laws, and Baltimore's National Pollutant Discharge Elimination System ("NPDES") Permits Nos. MD 21555 and MD 21601.

V. DEFINITIONS

7. Unless otherwise defined herein, the terms used in this Consent Decree will have the meaning given to those terms in the Clean Water Act, 33 U.S.C. §§ 1251 et seq., and the regulations promulgated thereunder or, if not defined in the Clean Water Act or its regulations, then as defined in Title 9, Subtitle 3 of the Environment Article, Annotated Code of Maryland, and the regulations promulgated thereunder. The following terms used in this Consent Decree, its appendices, and EPA and MDE approved studies and plans will be defined as follows:

a. “Back River Permit” shall mean NPDES Permit Number MD 21555 and State Discharge Permit Number 10-DP-581 issued to Baltimore pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, and Section 9-323 of the Environment Article, Annotated Code of Maryland, for the Back River Wastewater Treatment Plant, located at 8201 Eastern Avenue, Baltimore, MD 21224, and any future extension, modification or re-issuance of this permit.

b. “Collection System” shall mean any collection and transmission system (including all pipes, force mains, sanitary sewer lines, combined sewer lines, if any, overflow structures, regulators, lift stations, pumping stations, manholes, and appurtenances thereto) owned by Baltimore and designed to convey sewage to any treatment plant(s) or in wet weather to an overflow structure, including portions of the system added after the date of lodging of this Consent Decree.

c. “2002 Consent Decree” means the Consent Decree entered by the Court in this action on September 30, 2002.

d. “Consent Decree” or “Decree” or “Modified Consent Decree” means this Modified Consent Decree, which modifies, amends and supersedes the 2002 Consent Decree.

e. “Construction Completion” of a project under Paragraph 8 or rehabilitation or other corrective action project proposed under Paragraph 9 shall mean the point in time the new, modified, or rehabilitation corrective project is on line, in service and fully functioning to achieve its intended purpose.

f. “Date of Entry of the 2002 Consent Decree” shall mean September 30, 2002.

g. “Date of Entry of the Modified Consent Decree” or “Date of Entry of this Consent Decree” shall mean the date on which this Consent Decree is approved and entered by the Court.

h. “Day” or “Days” as used herein shall mean a calendar day or calendar days. When the day a report or other deliverable is due under this Consent Decree falls on a Saturday, Sunday or any Federal, State of Maryland or Baltimore legal holidays, Baltimore shall have until the next calendar day that is not one of the aforementioned days for submittal of such report or other deliverable, with the exception of overflow reports required by Paragraph 17 of this Consent Decree.

i. “Dry Weather Overflow” shall mean any discharge from the Collection System that is unrelated to precipitation related flows (including storm water and snow melt runoff). For purposes of this Consent Decree only, it shall be presumed that flow in the Collection System more than 72 hours after a rain event or snow melt event is unrelated to rain or snow melt.

j. “Force main” shall mean any pipe that receives and conveys wastewater from the discharge side of a pump. A force main is intended to convey wastewater under pressure.

k. “Gravity sewer line” shall mean a pipe that receives, contains and conveys wastewater under the influence of gravity. Gravity sewer lines are not normally under pressure and are intended to flow unassisted under the influence of gravity. Gravity sewer lines are not intended to flow full under normal operating conditions.

l. “Infiltration” shall mean the water entering the Collection System from the ground through means that include, but are not limited to, defective pipes and sewer walls, pipe and sewer joints, connections, and manhole walls as defined by 40 C.F.R. § 35.2005(b)(20).

m. “Inflow” shall mean water, other than wastewater, that enters the Collection System (including sewer service connections) from sources such as, but not limited to, roof leaders, cellar drains, basement sump pumps, area drains in yards and driveways, foundation drains, cooling water discharges, drains from springs and swampy areas, cracked or broken manhole covers, cross connections from separate storm sewers, catch basins, cooling towers, storm water, surface run-off, street wash waters or drainage as defined by 40 C.F.R. § 35.2005(b)(21).

n. “Infiltration/Inflow” or “I/I” shall mean infiltration and/or inflow.

o. “Level of Protection” or “LOP” shall mean all the rehabilitation projects and corrective actions necessary to limit the occurrence of sanitary sewer overflows to one event for each of the specified return periods of time (*e.g.* one overflow event in five years). LOP shall be based on peak flow recurrence.

p. “Major Gravity Line” shall mean any of the following:

(i) any gravity sewer line that is ten inches in diameter or larger;

(ii) any eight-inch line that conveys or is necessary to accurately represent

flow attributable to a service area in each of the Collection System’s sewershed service areas;

(iii) any gravity sewer line that conveys wastewater from one pumping station service area to another pumping station service area; and/or

(iv) any gravity sewer lines that have caused or contributed, or that Baltimore knows are likely to cause or contribute, to capacity-related Overflows.

q. “Paragraph” shall mean a portion of this Consent Decree or the 2002 Consent Decree identified by Arabic numerals.

r. “Parties” shall mean the United States of America, the State of Maryland, and the Mayor and City Council of Baltimore.

s. “Patapsco Permit” shall mean NPDES Permit Number MD 21601 and State Discharge Permit Number 10-DP0580, issued to Baltimore pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, and Section 9-323 of the Environment Article, Annotated Code of Maryland, for the Patapsco Wastewater Sewage Treatment Plant located at 3501 Asiatic Avenue, Baltimore, MD 21226, and any future, extension, modification or re-issuance of this permit.

t. “Peak flow” shall mean the maximum rate of flow of water passing a point of the Collection System during or after a rainfall event or snowmelt.

u. “Peak flow recurrence” shall mean the highest instantaneous peak flow that is expected to occur within the Collection System once within a specified return period of time (*e.g.*, five, ten and fifteen years).

v. “Private Service Connection Lateral” shall mean pipes and any other appurtenances not owned by Baltimore that are used to convey wastewater from a building or buildings to a portion of the Collection System owned by Baltimore.

w. “Pumping Station” shall mean facilities comprised of pumps which lift wastewater to a higher hydraulic elevation, including all related electrical, mechanical, and structural systems necessary to the operation of that pumping station. For the purposes of this document, the term “Pumping Station” shall be limited to the following pumping stations:

- (i) Eastern Avenue;
- (ii) Brooklyn;
- (iii) Dundalk;
- (iv) Jones Falls;
- (v) Locust Point;
- (vi) Quad Avenue;
- (vii) McComas Street;
- (viii) Westport; and
- (ix) Stony Run.

x. “Sanitary Discharge of Unknown Origin” or “SDUO” shall mean any discharge of sewage through Baltimore’s separate storm sewer system, where the source of the sewage is unknown. Once the source of the SDUO is confirmed, if it originates from the Collection System, it is then a Sanitary Sewer Overflow as defined in this Decree.

y. “Separate Sanitary Sewer System” shall mean a conduit designed to carry only sewage, and not stormwater, from residences, commercial buildings, industrial plants and institutions for treatment at either the Patapsco or Back River wastewater treatment plants.

z. “Sanitary Sewer Overflow” or “SSO” or “Overflow” shall mean any spill, release, or discharge of wastewater from any portion of the Collection System, except from NPDES permitted outfalls in accordance with the applicable permit.

aa. “Sanitary Sewer Overflow Structure” or “SSO Structure” shall mean any structure constructed to allow discharge from the Separate Sanitary Sewer System at a point prior to the headworks of either the Patapsco or Back River wastewater treatment plants. All currently known Sanitary Sewer Overflow Structures are identified in Appendix A.

bb. “Section” shall mean a portion of this Consent Decree identified by a Roman numeral.

cc. “Sensitive Areas” shall mean designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters where primary contact recreation is common, public drinking water intakes or their designated protection areas, shellfish beds, and areas within one hundred (100) feet from a public recreation area, a school, a day care center, a hospital or a similar establishment with potentially sensitive populations.

dd. “Sub-paragraph” shall mean a portion of a Paragraph of this Consent Decree that is identified by a sequential lower-case letter or by a lower-case Roman numeral.

VI. REMEDIAL MEASURES

8. Elimination of Sanitary Sewer Overflow Discharges

a. **General Requirements:** Baltimore shall comply at all times with the Clean Water Act and the regulations promulgated thereunder, Title 9, Subtitle 3 of the Environment Article, Annotated Code of Maryland and the regulations promulgated thereunder, and all terms and conditions of the Back River Permit and the Patapsco Permit. Baltimore shall eliminate Sanitary Sewer Overflows and Dry Weather Overflows from the Collection System through development and implementation of the measures set forth in Paragraphs 8 through 18.

b. **Sanitary Sewer Overflow Structures:**

(i) Baltimore shall eliminate the Sanitary Sewer Overflow Structures identified in Appendix A no later than the dates specified in Appendix A for the elimination of such structures. The milestone dates set forth in Appendix A are incorporated into, and enforceable under, the Consent Decree as if fully set forth herein.

(ii) Baltimore shall monitor the structures listed in Appendix A and report the overflows under paragraph 17.

(iii) If in the course of the implementation of this Decree, Baltimore discovers any other Sanitary Sewer Overflow Structure not previously identified in this Decree or its Appendices, within 90 days of the discovery of such structure Baltimore shall submit to EPA and MDE for their approval pursuant to Paragraph 19, a plan and schedule for the elimination of any such remaining structures. Baltimore shall monitor flow and rainfall for up to eighteen (18) months at all SSO Structure locations necessary to allow the characterization of flow in the portions of the Collection System and overflows impacted by such SSO Structure. Such flow and rainfall monitoring shall be performed in accordance with the requirements of sub-paragraph 9.d. of this Consent Decree. By written agreement of the Parties, the eighteen (18) month flow and rainfall monitoring period(s) may be shortened. The schedule shall provide for the elimination of such structure no later than December 31, 2030. Upon approval, the plan and schedule are incorporated into, and enforceable under, this Consent Decree. Baltimore shall monitor and report overflow information from such structure as provided in the preceding sub-paragraph of this Consent Decree.

c. **Flow and Rainfall Monitoring for SSO Structure Elimination:**

(i) Immediately following completion of any SSO Structure elimination project, Baltimore shall monitor flow and rainfall for a period of eighteen (18) months to determine the effectiveness of the project. Such flow monitoring shall be performed in accordance with the requirements of sub-paragraph 9.d of this Consent Decree.

(ii) By written agreement of the Parties, the eighteen (18) month flow and rainfall monitoring period(s) required by the preceding sub-paragraph of this Consent Decree may be shortened.

(iii) The results of any flow and rainfall monitoring conducted by Baltimore pursuant to this Paragraph prior to July 1, 2022, shall be submitted to EPA and MDE as part of the Phase II Plan required by sub-paragraph 9.b. The results of any flow and rainfall monitoring conducted by Baltimore pursuant to this Paragraph and completed after July 1, 2022 shall be submitted to EPA and MDE at the time Baltimore certifies that an SSO elimination project has been completed.

d. **Progress Reports:** Beginning with the first quarterly report following the Date of Entry of this Consent Decree, and thirty (30) days after the end of each calendar quarter thereafter, Baltimore shall report its progress towards completing the work required by this Paragraph 8.

9. **Implementation of Sewershed Plans**

a. **Sewershed Study and Phase I Plans under the 2002 Consent Decree:** Pursuant to Paragraph 9 of the 2002 Consent Decree, Baltimore submitted sewershed evaluations and plans for future rehabilitation and corrective action for each of eight sewersheds in the Collection System (“Sewershed Plans”). EPA and MDE reviewed and provided comments on the Sewershed Plans. Baltimore then prioritized rehabilitation projects and corrective actions, and prepared a Comprehensive Sewershed Study and Plan Amendment in December 2012. Baltimore proposed to continue work to meet the terms of the 2002 Consent Decree and the requirements of the Clean Water Act by implementing an adaptive management process. The adaptive management process will be completed in two phases (Phase I Plan and Phase II Plan).

EPA and MDE approved the Phase I Plan list of projects on November 2, 2013. Appendix B is a summary of the Phase I Plan projects with Construction Completion dates. The Construction Completion dates are incorporated into and enforceable under this Consent Decree. Appendix B.1 details the Phase I Plan projects for the Back River Wastewater Treatment Plant headworks modifications. Appendix B.2. details the Phase I Plan projects involving heavy cleaning, structural improvement and structural and priority meter basin rehabilitation as described in the approved sewershed evaluation plans for the respective sewersheds. All projects specified in the Phase I Plan by Appendix B, B.1 and B.2 shall be completed no later than January 1, 2021. Upon completion of the Phase I Plan projects and prior to submittal of a Phase II Plan, Baltimore shall conduct post-construction flow monitoring to determine the effectiveness of the Phase I Plan projects.

b. **Phase II Sewershed Plan:**

(i) By December 31, 2022, Baltimore shall submit a Phase II Plan for approval by EPA and MDE in accordance with Paragraph 19. Baltimore shall propose a Phase II schedule to complete rehabilitation projects and/or corrective actions as expeditiously as possible, but at a maximum the schedule for the Phase II Plan shall not extend beyond December 31, 2030. The Phase II Plan shall include specific rehabilitation projects and/or corrective actions to address the deficiencies identified by Baltimore during its evaluation of its sewersheds conducted pursuant to Paragraph 9 of the 2002 Consent Decree and confirmed or revised following the Phase I post-construction flow monitoring which have not yet been addressed. In addition, the Phase II Plan shall identify any rehabilitation projects and corrective actions necessary to achieve, at a minimum, a five-year Level of Protection (“LOP”) with additional measures necessary to achieve, at a minimum, a ten-year LOP for overflows located in Sensitive

Areas. The LOP shall be based on continuous simulation hydraulic modeling based on historical precipitation data from a twenty-year period at a minimum, to determine peak flow recurrence.

(ii) Sensitive Areas: Within 120 days of the entry of this Modified Consent Decree, Baltimore shall submit to EPA and MDE a tentative list of Sensitive Areas, including addresses and the reason why each location is classified as a Sensitive Area, together with a map indicating the location of each Sensitive Area. Baltimore will submit in the Phase II Plan a revised list of Sensitive Areas to which the 10-year LOP will apply, in accordance with subparagraph 9.c(v)(g).

c. **Phase II Plan Elements:** In the Phase II Plan, Baltimore shall, at a minimum:

(i) Evaluate the expected effectiveness of proposed projects pursuant to subparagraph 8.b. of this Consent Decree;

(ii) Evaluate the observed effectiveness of the rehabilitation projects completed pursuant to the Phase I Plan as determined by the post-construction flow monitoring conducted following completion of the Phase I projects;

(iii) Identify all remaining deficiencies which have not been addressed by the Phase I projects;

(iv) Identify all rehabilitation and other corrective actions proposed to be taken by Baltimore to address any remaining deficiencies and to meet, at a minimum, the 5-year LOP with the additional measures as specified in sub-paragraph 9.b. of this Consent Decree;

(v) Propose a plan and schedule for implementing rehabilitation and other corrective actions identified under sub-paragraph 9.c.iv. of this Consent Decree. For purposes of this Paragraph only, the term “rehabilitation” shall be interpreted in accordance with the meaning

ascribed to that term in Chapters 5 and 6 of the Handbook: Sewer System Infrastructure Analysis and Rehabilitation, EPA/625/6-91/030, Oct. 1991 (“SSES Handbook”), and in accordance with the technical procedures for sewer system rehabilitation set forth in Chapter 6 of the SSES Handbook. The proposed plan shall include:

- (a) a description of the proposed rehabilitation and other corrective actions to be implemented, including the location of the proposed actions;
- (b) the decision making-criteria used to select the rehabilitation and correction actions;
- (c) the prioritization scheme developed and applied to the rehabilitation and corrective actions to be implemented, with priority applied to rehabilitation and/or corrective measures that:

- i. address any remaining Collection System deficiencies that contribute to basement backups;
- ii. achieve the greatest reduction in remaining SSO volumes; and
- iii. address any remaining deficiencies in any areas where chronic SSOs continue to occur;

(d) an estimate of the cost necessary to complete any proposed rehabilitation and other corrective actions;

(e) a description of additional data collection that will be implemented after the completion of the Phase II rehabilitation and other corrective actions to assess the efficacy of these actions;

(f) a sewershed map identifying the location of any expected remaining overflows after the implementation of the Phase I and Phase II Plans, and a table listing the

expected volume of overflow at those locations, as predicted by the continuous simulation hydraulic modeling for peak flows for the five year and ten year recurring periods; and

(g) a revised list of the Sensitive Areas, including addresses and the reason why each particular location is a Sensitive Area, together with a map indicating the location of the Sensitive Areas.

d. **Rainfall and Flow Monitoring:** Baltimore shall conduct rainfall and flow monitoring to analyze the effectiveness of the projects required by Paragraph 9 of this Consent Decree and identify any additional rehabilitation, or other corrective action proposed by Baltimore in the Phase II Plan to reduce peak wet weather flows and/or increase capacity such that Sanitary Sewer Overflows do not occur.

(i) **Rainfall Gauges:** To monitor the contribution from rainfall to a sewershed within Baltimore's jurisdictional boundary, Baltimore shall use a network of rain gauge stations with a minimum coverage of one (1) rain gauge station per ten (10) square miles as well as data compiled by Doppler radar utilizing a minimum resolution of one (1) pixel per four (4) square kilometers. In the event that Doppler radar is not used for rainfall data collection within Baltimore, Baltimore shall use a network of rain gauge stations with a minimum coverage of one rain gauge station per two (2) square miles with no fewer than three (3) rain gauge stations per sewershed. To measure the contribution from rainfall occurring in portions of the Collection System sewersheds located outside Baltimore City limits, at a minimum, Baltimore shall use a combination of at least two rain gauges located at the Baltimore City/Baltimore County jurisdictional boundary in that sewershed and Doppler radar, to achieve a resolution as close to those described above as is practical. Baltimore shall also, where practical and appropriate, locate additional rain gauges within sewershed areas outside its jurisdiction, on

properties owned or operated by Baltimore (such as water treatment facilities), or where practical and appropriate, by agreement with third-parties.

(ii) **Flow Monitoring:**

(a) Baltimore shall use flow data collected from its system of permanent and temporary flow monitors placed throughout the Collection System to address the deficiencies identified by Baltimore during its evaluation of its sewersheds conducted pursuant to Paragraph 9 of the 2002 Consent Decree and to confirm the effectiveness of Phase I projects following the Phase I post-construction flow monitoring. Phase I post-construction flow monitoring shall start following the completion of Phase I projects and shall be completed no later than December 31, 2022.

(b) Baltimore shall use flow data collected from its system of permanent and temporary flow monitors placed throughout the Collection System to address the deficiencies identified by Baltimore during its evaluation of its sewersheds conducted pursuant to Paragraph 9 of the 2002 Consent Decree and to confirm the effectiveness of Phase II projects following the Phase II post-construction flow monitoring. Phase II post-construction flow monitoring shall start following the completion of Phase II projects and continue for a period of twenty-four months (24) months, unless shortened pursuant to sub-paragraph 8.c.(ii), and shall be completed no later than December 31, 2032.

(c) For flow measurements performed using telemetry, the Parties may agree to alternative inspection and calibration criteria.

(iii) Baltimore's flow and rainfall monitoring network shall be operated and maintained to provide representative, accurate, and precise data of sufficient quality for use in development, calibration, and verification of the Model as required by Paragraph 12 of this

Consent Decree, for at least ninety (90) percent of the scheduled operation time for each meter. Monitoring site selection, equipment selection and installation, calibration, and maintenance; and data quality assurance checks shall all be carried out to optimize monitoring accuracy, and shall all conform with the equipment manufacturers' recommendations and current, good engineering practice. Field calibration results for each meter shall be submitted, along with an evaluation of the accuracy for each meter. These shall include (for flow monitoring) monitoring site diagrams, scattergraph plots of field data sets, manual field depth and velocity measurements, and (if the site is free flowing) the appropriate pipe curve.

(iv) Baltimore shall conduct its flow and rainfall monitoring in accordance with the SSES Handbook and sound engineering practice. Rainfall and flow measurements shall be collected in accordance with good industry practice and such measurements shall be handled and analyzed consistent with appropriate quality assurance and quality control procedures that will assure that the measurements are representative of flow conditions and that the data are both accurate and precise.

e. **Long-Term Capacity/Peak Flow Management:**

(i) Baltimore shall use the data and information collected and analyzed in its evaluation of each sewershed conducted pursuant to Paragraph 9 of the 2002 Consent Decree and continued by Paragraph 9(d)(ii)(a) of this Consent Decree, to evaluate whether the projects required by Paragraph 8 of the 2002 Consent Decree and the projects it proposes and/or completes pursuant to Paragraph 9 of this Consent Decree will ensure adequate long-term transmission capacity in the Collection System. At a minimum, Baltimore shall evaluate the hydraulic capacity of all force mains, major gravity lines, and Pumping Stations and their respective related appurtenances (hereinafter referred to as "Collection System Components").

(ii) As part of this evaluation, Baltimore shall use flow data and rainfall data collected pursuant to Paragraph 9 of the 2002 Consent Decree and the model required by Paragraph 12 of the 2002 Consent Decree to estimate the impact of peak flows experienced by the Collection System on the capacity of the Collection System Components to manage peak flows. Baltimore shall evaluate the effects of completion of the projects required under Paragraph 8 of this Consent Decree and any projects that it proposes to complete pursuant to Phase I and Phase II Plans on managing five-year, and ten-year peak flow reoccurrence. Baltimore may consider the utilization of in-line storage capacity in evaluating the capacity of the Collection System and the adequacy of the Collection System Components to both accurately represent wastewater flow attributable to a service area, and to manage peak flows resulting from storm events. Future conditions shall be based on reasonable population and sewer condition deterioration projections for year 2030.

f. **Phase II Plan Approval and Implementation:**

Upon receipt of EPA's and MDE's final approval of the Phase II Plan under Paragraph 19, Baltimore shall implement the Phase II Plan, which shall be incorporated into, and become enforceable under this Consent Decree. The measures implemented pursuant to the Phase II Plan shall be performed using sound engineering practices to ensure that design, construction, management, operation and maintenance of Baltimore's Collection System complies with the Clean Water Act. Sound engineering practices may include appropriate provisions of the Handbook: Sewer System Infrastructure Analysis and Rehabilitation, EPA/625/6-91/030, 1991; Existing Sewer Evaluation and Rehabilitation, WEF MOP FD-6, 1994; Recommended Standards for Wastewater Facilities, Health Education Services (a Division of Health Research, Inc.), 2014; EPA's Climate Ready Water Utilities (CRWU) Initiative, referenced at EPA 817-F-12-005,

2012; and EPA's Climate Resilience Evaluation and Awareness Tool Version 2.0 (CREAT 2.0), referenced at EPA 817-F-12-011, 2012.

g. **Progress Reports:**

(i) Beginning with the first quarterly report following the Date of Entry of this Consent Decree, and thirty (30) days after the end of each calendar quarter thereafter, Baltimore shall certify and report to EPA and MDE Baltimore's progress towards implementing and completing the Phase I Plan projects. The progress report shall also provide the following information:

(a) A summary of rainfall and flow monitoring data for the three month period ending thirty (30) days before the end of the calendar quarter (organized by sewershed and sewershed service area where appropriate), which shall at a minimum provide daily rainfall amounts, peak hourly rainfall intensity, daily flow volumes, and peak flow rates for each location at which flow monitoring is carried out. Baltimore shall submit this information in Excel both in paper and in electronic format.

(ii) Beginning with the first quarterly report following EPA's and MDE's approval of the Phase II Plan or part of the Phase II Plan, and thirty (30) days after the end of each calendar quarter thereafter, Baltimore shall certify and report to EPA and MDE Baltimore's progress towards implementing and completing the Phase II Plan.

h. **Post-implementation compliance monitoring – Progress Reports:**

Beginning thirty (30) days after the end of the first full calendar quarter following the completion of the implementation of the Phase I and Phase II Plans, and thirty (30) days after the end of each calendar quarter thereafter for a period of at least two (2) years after the completion of the implementation of all Phase I and Phase II Plans and until termination of the Consent Decree,

Baltimore shall certify and report to EPA and MDE Baltimore's progress in achieving compliance with this Consent Decree. The progress report shall provide the following information:

(i) A summary tabulation of the data collected to assess the efficacy of the rehabilitation and corrective actions implemented as provided in the Sewershed Phase II Plan and, in accordance with the data collection activities established pursuant to sub-paragraph 9.c.(v)(e) of this Consent Decree;

(ii) A summary of rainfall and flow monitoring data for the three month period ending thirty (30) days before the end of the calendar quarter (organized by sewershed and sewershed service area where appropriate), which shall at a minimum provide daily rainfall amounts, peak hourly rainfall intensity, daily flow volumes, and peak flow rates for each location at which flow monitoring is carried out. Baltimore shall submit this information in Excel both in paper and in electronic format.

(iii) Baltimore shall submit a close-out report containing a summary of the Phase II post-construction rainfall and flow monitoring data within six (6) months of the completion of Phase II post-construction flow monitoring. The close-out report shall be submitted no later than July 31, 2033.

10. **Illegal Sewer Connections**

a. **Illegal Private Connections:** Baltimore shall continue to identify and eliminate each illegal stormwater or sewage connection to the Collection System, as required by its plan on illegal connections, the Illegal Sewer Connection Detection and Enforcement Plan, approved under the 2002 Consent Decree. Within one hundred eighty (180) days of identifying a

new illegal connection, Baltimore shall take one or more of the following actions consistent with its authority under Article 25 of the Code of the City of Baltimore:

- (i) Issue a permit as provided under Article 25, § 2-3(b) of the Code of the City of Baltimore for the discharge to individuals qualified to receive such a permit;
- (ii) Initiate an enforcement action to cause the removal of each illegal connection; or
- (iii) Initiate the discontinuation of wastewater service.

For purposes of this Paragraph of this Consent Decree, the term “enforcement action” shall mean the issuance of an order by the City to the owner of the property from which the illegal connection originates pursuant to Article 25, § 22-3 or § 22-4 citing violation of the requirements of Article 25, § 2-3(a) of the Code of the City of Baltimore, Maryland. The foregoing remedies shall be cumulative and independent and shall not be deemed to exclude the independent and/or cumulative utilization of other judicial and administrative remedies provided by law or ordinance.

b. Within one hundred twenty days (120) of the Date of Entry of this Consent Decree, and for each calendar quarter thereafter, Baltimore shall submit to EPA and MDE a report that includes:

- (i) An updated list of known illegal connections;
- (ii) The specific location of each known illegal sewer connection;
- (iii) Current status of each known illegal connection (*i.e.*, those newly identified, those still connected, those disconnected, and those newly permitted) in the previous calendar quarter;
- (iv) Alternative discharge location or method of discharge;

(v) Identity of person or entity responsible for the known illegal sewer connection; and

(vi) The date each known illegal connection was identified.

For purposes of the initial list of illegal connections provided by Baltimore under this Paragraph, sub-paragraph 10.b(vi) (“the date each known illegal connection was identified”), above, may be satisfied when Baltimore cannot establish the date it first knew of such illegal connection, by stating “unknown.”

c. **Private Service Connection Lateral:** Where a privately-owned portion of a customer service connection lateral that is neither in the public right-of-way nor in a public sanitary sewer easement is a source of I/I that causes or contributes, or is likely to cause or contribute, to an Overflow from the Collection System, Baltimore, within sixty (60) days of the date of the identification of such a lateral, shall notify the owner(s) of the customer service connection lateral(s) that the lateral(s) is a source of such I/I and shall require the owner(s) to take all appropriate steps to repair, rehabilitate, replace, or terminate that customer service connection lateral. Baltimore shall, within six months of identification of a customer service connection lateral that is a source of such I/I, either complete the repair, rehabilitation, replacement, or termination of the customer service connection lateral or initiate enforcement action to cause the repair, rehabilitation, replacement, or termination of a customer service connection lateral where the owner of a privately-owned portion of the customer service connection lateral has failed, after reasonable notice, to take all appropriate steps to repair, rehabilitate, replace, or terminate a customer service connection lateral that is a source of such I/I. For purposes of this Paragraph, the term “enforcement action” shall mean the issuance of an order to the owner by the City pursuant to Article 25, § 22-3 or § 22-4 citing violation of the

requirements of Article 25, § 2-3 of the Code of the City of Baltimore, Maryland. The foregoing remedy shall not be exclusive of other judicial and administrative remedies provided by law or ordinance.

11. **Pumping Station Inspection, Rehabilitation, and Repair**

a. **Pumping Station Inspection Procedures:**

(i) Baltimore shall continue to inspect each Pumping Station daily. Baltimore shall conduct the inspections to ensure that the Pumping Stations are in good working order according to the inspection checklists attached hereto as Appendix C. Baltimore shall verify that each Pumping Station is in good working order by completing for each inspection the checklist attached as Appendix C. Such checklists shall be maintained by Baltimore in accordance with the requirements of Section XIX (Recordkeeping) of this Consent Decree.

(ii) For each deficiency identified during an inspection conducted in accordance with requirements of Paragraph 11 of this Consent Decree, Baltimore shall either correct the deficiency within eight hours, or, alternatively, issue a work order for the correction of the deficiency, in which Baltimore shall assign a priority ranking in accordance with the ranking system attached hereto as Appendix D, and complete action necessary to correct such deficiency within the time frame corresponding to the priority ranking. All such deficiencies shall be corrected by no later than six (6) months from the date of the inspection in which that deficiency was first observed.

(iii) Baltimore shall maintain at each Pumping Station an operation and maintenance manual. Each operation and maintenance manual shall reflect current station configuration, equipment, and characteristics. Each manual shall provide operating parameter value ranges representing recommended operating levels, and a summary of historical pump run

times. Baltimore shall update the operation and maintenance manual for each Pumping Station as necessary.

b. **Pumping Station Remote Monitoring:**

(i) Baltimore has upgraded its remote monitoring for pumping stations, known as its supervisory control and data acquisition (“SCADA”) system as required by the 2002 Consent Decree. Baltimore shall maintain its SCADA system for remote monitoring of Pumping Stations.

(ii) The SCADA system shall continuously monitor, report, and transmit the following parameters for each Pumping Station:

- (a) Wet well high level and low level alarms;
- (b) Dry well flood alarms;
- (c) Dry well sump pumping failure, where available;
- (d) Flow (instantaneous and average) determined from a flow meter;
- (e) Failure of any one of the following parameters (as a single alarm):
 - (i) loss of three-phase power;
 - (ii) single phase condition;
 - (iii) phase reversal;
 - (iv) over-voltage and under-voltage;
 - (v) use of standby power;
 - (vi) failure of standby power; and
 - (vii) second power source;
- (f) Pump failure (for each pump);
- (g) Pump running times;

- (h) Pump starts; and
- (i) Remote signal failure alarms.

Set points may be established at each Pumping Station and/or the location at which Pumping Station parameters are monitored. System performance relative to such set points shall be observed by operators monitoring Pumping Stations remotely.

(iii) The SCADA system shall transmit an alarm notifying Baltimore of Sanitary Sewer Overflows at the Jones Falls Pumping Station and shall continuously monitor, report, and transmit the date, time, and estimated volume of any Sanitary Sewer Overflow.

(iv) With respect to all Pumping Stations, system monitoring data of wet well levels, force main pressures, and energy requirements (kilowatts) shall be stored in an archival data base for a period of five years. In addition, the Pumping Station operating hours for each pump shall be recorded monthly and entered into an archival data base. Baltimore shall retain for each month the 24-hour maximum and the monthly average flow data until termination of this Consent Decree.

(v) The SCADA system shall enable Baltimore to store a record of each alarm generated by the SCADA system that includes the date, time, location, and parameter of the alarm.

c. **Pumping Station Preventative Maintenance:** Baltimore has implemented a pumping station preventative maintenance program as required by the 2002 Consent Decree. Baltimore shall continue to implement this pumping station preventative maintenance program to ensure the proper operation and maintenance of its pumping stations. The program shall include the following measures:

(i) A procedure for determining the cause of equipment and/or system failures and identifying preventive maintenance measures for minimizing future failures.

(ii) Routine tracking of preventative maintenance of Pumping Stations (through MIMS or other maintenance tracking systems), including, but not be limited to, the following:

(a) Appropriate, necessary and periodic service and calibration of all instrumentation, including flow meters, liquid level sensors, alarm systems, elapsed time meters, and remote monitoring equipment;

(b) Appropriate, necessary and periodic inspection and service for each Pumping Station, including engines, motors, generators, pumps, wet wells, Pumping Station valves, and related equipment; and

(c) Appropriate, necessary and periodic inspection and testing and, if necessary, servicing of all pumps including impellers, seals and bearings, wear clearances, couplings, drives and motors.

d. **Progress Reports:**

Beginning thirty (30) days after the end of the first full calendar quarter following the Date of Entry of this Consent Decree, and thirty (30) days after the end of every calendar quarter thereafter, Baltimore shall certify and report to EPA and MDE the progress of Baltimore's Pumping Station inspection and repair program. The progress report shall:

(i) List each Pumping Station;

(ii) Identify the date of completion of the inspection of each Pumping Station;

(iii) Describe the repair or other improvement taken or to be taken with respect to each Pumping Station for which Baltimore has identified either an equipment malfunction or physical deficiencies that could lead to equipment malfunction; and

(iv) Identify whether a Pumping Station has caused or contributed to an overflow condition during the calendar quarter.

(v) Each quarterly report shall also include the results of all failure analyses performed pursuant to sub-paragraph 11.c(i) of this Consent Decree.

12. **Collection and Transmission System Model:** Baltimore shall maintain the computerized collection and transmission system model or models (the “Model”) for the Collection System, as required by Paragraph 12 of the 2002 Consent Decree and approved by EPA and MDE pursuant sub-paragraph 12.D of the 2002 Consent Decree. Baltimore shall use the Model to evaluate the impact of I/I rehabilitation projects, proposed system modifications, upgrades, and expansions to the transmission capacity and performance of the Collection System as required by this Consent Decree, as well as for the long term capacity/peak flow management evaluation required by sub-paragraph 9.e of this Consent Decree.

13. **Collection System Operation and Maintenance**

a. Baltimore shall perform a comprehensive review of its operation and maintenance (“O&M”) Plan and prepare a revised O&M Plan for the Collection System (the “revised O&M Plan”), detailing how Baltimore will evaluate and maintain an effective program to prevent and minimize dry weather overflows. The revised O&M Plan for the Collection System shall provide for the proper operation and maintenance of the Collection System in order to minimize failures, malfunctions, and line blockages due to the lack of adequate preventative care. The revised O&M Plan shall include:

- (i) A system-wide Gravity Sewer Line Cleaning and Inspection Program.

The Program shall include the use of state of the industry technologies for cleaning and/or inspection.

- (a) The Program shall include a schedule providing for the inspection and cleaning, if necessary, of all sewer lines greater than 8 inches at least once every seven (7) years.

- (b) Targeted Small Diameter Gravity Sewer Line Cleaning and Inspection. The Program shall include a cleaning and inspection protocol that targets the areas of reoccurring blockages and/or reoccurring dry weather SSOs for cleaning/inspection at a greater frequency than provided in the subparagraph above. Cleaning/inspection frequency in the targeted areas shall be based on choke history (due to excessive sediment, grit, trash and/or debris accumulation), dry weather SSO history, FOG program findings, root control program findings, previous routine cleaning work order history and overall criticality of the pipe based on traffic condition of nearby roadways, population served and/or pipe size. The Program shall include the criteria for including or removing an area from the targeted areas list. A list and a map of the targeted areas, the cleaning/inspection frequency for each area, and the number and volume of dry weather SSOs associated with each targeted area will be included and updated annually in the revised O&M Plan;

- (ii) Sealing (where appropriate) and maintenance of manholes;

- (iii) Identification and remediation of poor construction;

- (iv) A grease control program that, at a minimum, maps identified grease blockages, notifies pretreatment staff of recurring grease blockages, requires the installation of grease traps and/or the implementation of a trap cleaning and inspection program, provides for

scheduled inspections of known problem areas, and develops and implements a protocol for inspections and enforcement activities;

(v) A root control program that addresses, at minimum, scheduling and performing corrective measures including both short-term mitigation of root intrusion (*i.e.*, routine maintenance) and rehabilitation of the areas in which root intrusion has caused recurring blockages (*i.e.*, sewer replacement or relining), and a proposal that includes scheduled inspection of known problem areas;

(vi) Procedures for updating and maintaining the list of locations where Baltimore does not have ready physical and/or legal access to the Collection System, the causes for lack of access, and its strategy for obtaining and maintaining access to such location;

(vii) A description of the method for documenting complaints, work orders, updates to equipment inventory, and changes to Collection System components, as well as entry of such data into databases comprising the information management system required under Paragraph 14 of this Consent Decree;

(viii) Corrective maintenance response and reporting procedures;

(ix) Mapping of recurring problems such as grease or root blockages, and effective use of that information in preventing problems that can cause dry weather overflows;
and

(x) Public education and outreach efforts necessary to inform the public of the need to minimize introduction of debris, grease and other items into the Collection System.

b. Within one hundred and twenty days (120) of the Date of Entry of this Consent Decree, Baltimore shall submit the revised O&M Plan for approval by EPA and MDE in accordance with Paragraph 19.

c. Within 30 days of receipt of EPA's and MDE's approval of the revised O&M Plan in accordance with Paragraph 19, Baltimore shall implement the revised O&M Plan. Pending the revisions to the O&M Plan, Baltimore shall continue to implement the O&M Plan in effect on the Date of Entry of this Consent Decree.

d. Baltimore shall review the O&M Plan on an annual basis and revise such plan as necessary. The City may propose to revise the cleaning/inspection frequency based on improved technology, SSO experience, and/or overall system performance. Each annual revision of the O&M Plan shall be subject to EPA and MDE approval as specified in Paragraph 19, and upon EPA and MDE approval shall be incorporated into, and become enforceable under, this Consent Decree.

e. **Annual Progress Reports:** Baltimore shall submit to EPA and MDE in October of every year, a report covering the period from July back to June of the prior year. The Annual Progress Report shall assess the effectiveness of the O&M Plan in preventing and minimizing dry weather overflows, and shall include:

(i) A list of complaints received during the preceding calendar year related to the Collection System;

(ii) A list of completed work orders for the Collection System for the preceding calendar year;

(iii) A list of outstanding work orders for the Collection System;

(iv) Current preventive maintenance schedules (task description, location, frequency), and a description of any changes made to the schedules during the preceding calendar year;

(v) A list of tests performed on new sewer installations and rehabilitations (location, date, description of new installation and/or rehabilitation);

(vi) An evaluation of the efficacy of the grease control program (summary of grease-related blockages identified, corrective action taken, preventive action taken, monthly rate of grease-related blockages and (if available) comparison of current and previous year performance, list of referrals to pretreatment staff, identification of remaining persistent and chronic blockage areas);

(vii) A list of the inspections conducted during the reporting year of establishments subject to the grease control program, specifying any reinspections and enforcement actions taken after the initial inspection;

(viii) An evaluation of the efficacy of the root control program (summary of root-related blockages identified, corrective action taken, preventive action taken, monthly rate of root-related blockages and (if available) comparison of current and previous year performance, identification of remaining persistent and chronic blockage areas); and

(ix) An updated list of known locations where Baltimore does not have ready physical and/or legal access to the Collection System and the strategies Baltimore is employing to improve and secure such access to the Collection System.

14. **Information Management System Program**

a. Baltimore implemented an information management system program as required by the 2002 Consent Decree to establish, update, and coordinate data systems used to collect information regarding the operation, maintenance and performance of the Collection System, including Collection System component inventory information, complaints, work orders, geographic data, and the status of work to be implemented and completed under the 2002

Consent Decree. Baltimore shall maintain this information management system to continue to support all aspects of the Operation and Maintenance Plan and this Consent Decree. Baltimore shall supplement the information management system to assist Baltimore in analyzing data necessary to prepare the progress reports required under sub-paragraph 13.e of this Consent Decree.

b. **Geographic Information System:**

(i) As part of its information management system program Baltimore shall continue to use a computerized geographic information system (“GIS”) to map the Collection System that it implemented pursuant to the 2002 Consent Decree. The GIS shall be able to:

(a) Display all Collection System components;

(b) Use embedded objects (or other alternative, equivalent methods) to link to schematic diagrams and attribute data (including inventory information) for Collection System components;

(c) Display by color coding the portions of the Collection System that have been inspected and rehabilitated; and

(d) Display the location(s) at which samples from flow meters and rain gauges have been collected for development of the model required under Paragraph 12 hereof. Baltimore shall install all hardware and software necessary for the GIS system and ensure that the system continues to be fully operational and capable of displaying the information described in this sub-paragraph.

(ii) Baltimore shall continue to correct and/or update component information in the GIS, including the location of new private sewer connections.

(iii) Baltimore shall continue to document the location of tree roots and/or grease obstructions in the Collection System and record the location information in the GIS.

c. **Inventory of Collection System Components:** Baltimore shall maintain an inventory management system that includes an inventory of the Collection System components. The inventory management system shall be capable of displaying the information identified in this sub-paragraph for each component. The inventory database shall store, for each component, a unique identification number and a corresponding data file that stores the following information:

- (i) Identification number;
- (ii) Capacity (*e.g.*, for pipes: diameter, for valves: flow rate);
- (iii) Date of installation;
- (iv) Location of installation (address and/or latitude and longitude);
- (v) Useful life and scheduled date for replacement;
- (vi) Repair history;
- (vii) Make and model, if applicable;
- (viii) Type (*e.g.*, material of construction, configuration of valve, etc.); and
- (ix) Service status (*i.e.*, whether or not component is in service).

d. **Update Inventory of Collection System Components:** Within ninety (90) days of completion of the rehabilitation of a Collection System component required pursuant to the terms of the Consent Decree, Baltimore shall update the Collection System inventory such that the updated inventory includes, for the rehabilitated component, the information listed in the preceding sub-paragraph.

15. **Addressing Sanitary Discharges of Unknown Origin**

a. No later than sixty (60) days after the Date of Entry of this Consent Decree, Baltimore shall submit to EPA and MDE, for approval pursuant to Paragraph 19, a plan for the investigation and the elimination of SDUOs (“SDUO Plan”). The SDUO Plan shall include timelines for the investigation of SDUOs and correction of Collection System deficiencies once the source is identified. The SDUO Plan shall identify the personnel and offices responsible for investigations relating to SDUOs. The SDUO Plan shall assign the roles and responsibilities necessary among Baltimore personnel responsible for operating the Collection System and the separate storm water sewer system to assure effective implementation of the SDUO Plan. The Plan shall specify tracking mechanisms, and provide for testing of storm outfalls or receiving waters to verify that an SDUO has been abated. The SDUO Plan shall include the Sewer Discharges of Unknown Origin Quantification Protocol dated November 12, 2010, and submitted by Baltimore to EPA on November 18, 2010.

b. Upon receipt of EPA’s and MDE’s final approval, Baltimore shall implement the plan, which shall be incorporated into, and become enforceable under this Consent Decree.

c. If at any time during the implementation of this Consent Decree, including during an SDUO investigation pursuant to this Paragraph, Baltimore confirms a cross-connection between the Collection System and its stormwater collection system not previously identified and addressed in the Phase I or Phase II Plans, Baltimore shall propose, within sixty (60) days of confirming such cross-connection, an expeditious schedule for the elimination of each such connection and submit for approval under Paragraph 19. Upon final approval of EPA and MDE of such schedule, the schedule shall be incorporated and be enforceable under this Consent

Decree. This approved schedule supersedes any timelines provided in the approved SDUO investigation and elimination plan submitted pursuant to this Paragraph.

d. If Baltimore's SDUO investigation confirms that the SDUO originated from the Collection System, the discharge shall be reported as an SSO in accordance with sub-paragraph 17.e.

e. Baltimore shall be subject to stipulated penalties under paragraph 30 for any SDUO that is a confirmed SSO after the effective date of this Consent Decree.

f. Baltimore, in the Calendar Quarterly Progress Report submitted pursuant to sub-paragraph 20.h., shall report SDUOs that occurred and were identified in the previous calendar quarter, including the information required by sub-paragraph 20.h. The report will also indicate the progress of Baltimore's SDUO investigations and abatements.

g. In calculating the volume of the overflow, Baltimore shall apply the Sewer Discharges of Unknown Origin Quantification Protocol dated November 12, 2010, and submitted by Baltimore to EPA on November 18, 2010, and Paragraph 17.a.ii.

16. **Revised Emergency Response Plan**

a. Within sixty (60) days of the Date of Entry of this Consent Decree, Baltimore shall revise and submit to EPA and MDE for approval under Paragraph 19, its Emergency Response Plan to adequately protect the health and welfare of persons in the event of the unpermitted release, spill or discharge of pollutants from the Collection System to surface waters (including its storm water system). The revised Emergency Response Plan shall include but not be limited to:

(i) A detailed description of the actions Baltimore will undertake to immediately provide notice to the public (through the local news media, online and/or through

other means) of the unpermitted discharge of pollutants from the wastewater treatment and Collection System, including a plan for notifying the public that such discharge has caused an adverse impact on water quality measured by turbidity, dissolved oxygen, fecal coliform, total coliform, or other bacteriological standards required by State law related to the discharge of domestic wastewater. For purposes of Paragraphs 16 and 17, the phrase “adverse impact” shall mean any decrease in the levels of dissolved oxygen and any increase in the levels of the above-listed pollutants in the water body over background – i.e., the levels in the water body of such pollutants prior to, and immediately upstream of, the discharge;

(ii) A detailed description of the actions Baltimore will undertake to provide notice to the public of SDUOs, including information on location, volumes, water bodies affected, and the impact on water quality.

(iii) A detailed description of the actions Baltimore will undertake to provide notice to EPA, MDE, state and local public health services, and other appropriate federal, state and local agencies;

(iv) A detailed plan (including the development of response standard operating procedures) to minimize the volume of untreated wastewater discharged to surface waters and to minimize overflow volumes;

(v) Identification of the personnel and resources that will be made available by Baltimore to correct or repair the condition causing or contributing to the unpermitted discharge to surface waters;

(vi) A plan to ensure the preparedness, including responsiveness training of Baltimore employees, contractors, and personnel of other affected Baltimore agencies necessary

for the effective implementation of the Emergency Response Plan in the event of an unpermitted discharge of wastewater to surface waters;

(vii) A detailed monitoring, sampling, analysis and reporting plan to determine if receiving water bodies have been adversely impacted by the discharge of wastewater associated with an overflow event and are meeting state and local water quality standards for, and are experiencing adverse impacts from, turbidity, dissolved oxygen, fecal coliform, total coliform, or other bacteriological standards required by State law related to the discharge of domestic wastewater. The plan shall include, at a minimum, a program for the collection of overflow wastewater samples (5-day biochemical oxygen demand, fecal coliform, total suspended solids, enterococci, E-coli, turbidity, and dissolved oxygen) and surface water samples (which shall specify the frequency and duration of samples to be taken, the parameters to be sampled, and the location of such sampling events), a plan to perform laboratory analysis consistent with 40 C.F.R. Part 136, quality assurance/quality control procedures and protocols, and a plan for the reporting of all such data and information to EPA, MDE, and other appropriate federal, state and local agencies. In addition to the sampling that Baltimore shall undertake in accordance with the sampling plan to be approved under this Paragraph, EPA or MDE may request, and Baltimore shall conduct, additional sampling and analysis as deemed necessary to evaluate the impact of an overflow event;

(viii) A plan for the implementation of institutional controls and actions to advise the public of, and limit access to and contact with, waterways, ground surfaces and resources affected by overflows from Baltimore's Collection System. The plan shall require the taking of photographs upon the arrival and departure of Baltimore's emergency response personnel to confirm that actions prescribed by the Emergency Response Plan have been

implemented. The geographic extent and duration of public access limitations shall be determined in consultation with the appropriate State and local health organizations;

(ix) Identification of overflow locations within the sewershed served by each Pumping Station and those locations at which a Sanitary Sewer Overflow is likely to occur first in the event of Pumping Station failure for each Pumping Station. The plan shall identify existing Pumping Station wet well capacity and any in-line storage capacity. In addition, the annual updates to the plan shall reflect the findings of, and improvements made pursuant to the Phase I and Phase II Plans required by Paragraph 9 of this Consent Decree. The Emergency Response plan shall include station-specific emergency procedures and bypass strategies and estimated storage capacity (i.e., maximum volume of sewage that can be stored in the event of a Pumping Station failure without causing a Sanitary Sewer Overflow and estimated time, at minimum, average, and maximum flow rates, during which sewage can be stored before a Sanitary Sewer Overflow will occur); and

(x) A list of locations that overflow regularly during wet weather events and of chronic SDUOs, and procedures for posting of signs to advise the public of such overflows and discharges. Such signs shall be located in locations determined by Baltimore in consultation with the Health Department to best inform the public of the potential overflows and to maximize protection of public health.

b. EPA and MDE will review and approve or disapprove the revised Emergency Response Plan in accordance with Paragraph 19. Upon its approval by EPA and MDE, the revised Emergency Response Plan shall be incorporated into, and become enforceable under, this Consent Decree. Within thirty (30) days of EPA and MDE approval, Baltimore shall

begin implementing the plan. The Parties agree to meet and confer, as needed, to discuss the development and implementation of Baltimore's revised Emergency Response Plan.

c. Baltimore shall review the revised Emergency Response Plan on an annual basis and update such plan as necessary. Each annual update of the revised Emergency Response Plan shall be subject to EPA and MDE approval as specified in Paragraph 19, and upon EPA and MDE approval shall be incorporated into, and become enforceable under, this Consent Decree. Baltimore shall maintain a copy of the revised Emergency Response Plan required by this Paragraph at each of its Pumping Stations.

d. Any dispute with respect to any portion of the revised Emergency Response Plan required by this Paragraph shall not delay the development or implementation of the undisputed portions of the revised Emergency Response Plan.

17. **Reporting of Overflows and Recordkeeping**

a. Baltimore shall report to MDE by telephone any overflow that results in the direct or potential discharge of wastewater from the portions of the Collection System within the geographic boundaries of Baltimore to any waters of the United States and waters of the State of Maryland within twenty-four (24) hours of the time Baltimore becomes aware of the overflow event. A written report shall also be provided to EPA and MDE within five (5) days of the time Baltimore becomes aware of the overflow event. Any written report shall be made to Water Protection Division, United States Environmental Protection Agency, Region III and to the Compliance Program, Water Management Administration, MDE. The written report shall contain the following:

(i) The cause or suspected cause of the overflow, including whether the overflow was a wet weather overflow or dry weather overflow; and whether the overflow was capacity related; and

(ii) Duration and volume (estimate if unknown);

(a) In determining the volume of an overflow, if Baltimore personnel responsible for addressing overflows arrive at the site of an overflow after an hour of receiving a complaint, the start time and calculation of volume must take into account the elapsed time from the time of the complaint and any photographic or video evidence documenting the existence of the overflow prior to the arrival of Baltimore personnel if such evidence has been provided to Baltimore prior to its submission of the 5-day report, and, taken together with date, time and location information provided by the submitter, is helpful in determining duration and volume. Any report of unknown volume must be accompanied with photographic documentation of the evidence of the overflow.

(b) Where the overflow is still ongoing, Baltimore shall file an amended written report five (5) days after the overflow is abated. The amended report shall include up-to-date information on the duration and volume of the overflow.

(iii) Description of the source (e.g., manhole cover, Pumping Station);

(iv) Type of collection system that overflowed (i.e., combined or separate);

(v) Location by street address, or any other appropriate method (i.e., by latitude and longitude);

(vi) Date of event;

(vii) Description of weather conditions at the time of the overflow;

(viii) Date and time that the overflow was first reported to Baltimore or first discovered by Baltimore;

(ix) The ultimate destination of the flow (e.g., surface waterbody, land use location), via municipal separate storm sewer system to a surface waterbody (show location on a map), and whether the overflow occurred in a sensitive area;

(x) Corrective actions or plans to eliminate future overflows;

(xi) Description of the corrective actions taken to clear any and all debris, and/or to restrict access to the area of the overflow, including posting of any signage; and

(xii) Preliminary assessment of the overflow's actual or potential impact upon waters of the United States and waters of the State. The assessment must include the results of any monitoring conducted pursuant to monitoring required under the initial or revised Emergency Response Plan specified in Paragraph 16. If Baltimore has not yet received results at the time the report is due, the report must include a description of the testing conducted and the tests that are being conducted.

b. Baltimore shall develop a detailed monitoring, sampling, analysis and reporting plan to determine if receiving water bodies are meeting state and local water quality standards for, and are experiencing adverse impacts from, turbidity, dissolved oxygen, fecal coliform, total coliform, enterococci, E-coli, or other bacteriological standards required by State law related to the discharge of domestic wastewater. Alternatively, Baltimore may demonstrate to EPA and MDE that existing data and information regarding ambient water quality for the above-referenced pollutants in surface waters that could be potentially impacted by overflows from the Collection System is adequate for determining if such surface waters have been impacted by overflows from the Collection System.

c. Baltimore shall maintain records until termination of the Consent Decree of the following information for each Sanitary Sewer Overflow from the Collection System:

(i) The location of the overflow and receiving water, if any;

(ii) An estimate of the volume of the overflow;

(iii) A description of the sewer system component from which the overflow occurred (e.g., manhole, constructed overflow pipe, crack in pipe, etc.);

(iv) The estimated date and time when the overflow began and when it stopped;

(v) The cause or suspected cause of the overflow;

(vi) Response actions taken;

(vii) Steps that have been and will be taken to prevent the overflow from recurring and a schedule for those steps including:

(a) Work order records associated with investigation and repair of system problems related to sanitary sewer overflows; and

(b) Documentation of performance and implementation measures; and

(c) A list and description of complaints from customers or others regarding overflows.

d. Baltimore shall maintain for five (5) years a copy of any written reports prepared pursuant to this Paragraph 17.

e. If an SDUO is confirmed as originating from the Collection System, Baltimore shall provide the report required under sub-paragraph 17.a. for such discharge within five (5) days after confirming that the discharge originates from the Collection System.

18. **Additional Remedial Measures**

a. During the post-implementation compliance monitoring period following the completion of the implementation of the Phase I and Phase II Plans provided in Paragraph 9, if the EPA and MDE determine that the rehabilitation projects and corrective measures implemented by Baltimore through the Phase I and Phase II Plans are not achieving the Level of Protection with additional measures as specified in Paragraph 9.b, the EPA and MDE can require Baltimore to submit a newly revised Sewershed Plan, for approval under Paragraph 19, identifying additional corrective actions to achieve compliance. Baltimore shall submit the plan with the additional corrective actions sixty (60) days after receiving a written request from EPA and MDE.

b. Upon receipt of EPA's and MDE's final acceptance of the revised Sewershed Plan with additional corrective actions, the revised Sewershed Plan with additional corrective actions plans shall be incorporated into, and become enforceable under this Consent Decree. No later than sixty (60) days after receipt of EPA's and MDE's acceptance of the revised Sewershed Plan with additional corrective actions, Baltimore shall implement the revised plan in accordance with the plan's schedule for implementation.

19. **Approval of Deliverables.** After review of any plan, report, or other document that is required to be submitted pursuant to this Consent Decree, EPA and MDE shall in writing: (a) approve the submission; (b) provide comments on the submission; or (c) disapprove the submission. Where parts of the submission are severable, EPA and MDE can separately approve, comment or disapprove parts of the submission.

a. If the submission is approved, Baltimore shall take all actions required by the plan, report, or other document, in accordance with the schedules and requirements of the plan, report, or other document, as approved. If the submission is approved only in part,

Baltimore shall, upon written direction from EPA and MDE, take all actions required by the part(s) of the plan, report, or other document that EPA and MDE specified as being approved, subject to the City's right to invoke Dispute Resolution.

b. If EPA and MDE provide comments on the submission or part of the submission, Baltimore shall, within 60 days or such other time as the Parties agree in writing, modify and resubmit the plan, report or other document with the recommended additional corrective actions to EPA and MDE for final review.

c. If the submission is disapproved in whole or in part, Baltimore shall, within 60 days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other document, or disapproved portion thereof, for approval, in accordance with the preceding sub-paragraphs. If the resubmission is approved in whole or in part, Baltimore shall proceed in accordance with the preceding sub-paragraph, subject to the City's right to invoke dispute resolution as provided in Section XIII (Dispute Resolution).

d. Any stipulated penalties applicable to the original submission, as provided in Section IX (Stipulated Penalties), shall accrue during the 60 day period or other specified period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Baltimore's obligations under this Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.

e. If a resubmitted plan, report, or other document, or portion thereof, is disapproved in whole or in part, EPA and MDE may again require Baltimore to correct any deficiencies, in accordance with the preceding sub-paragraphs, subject to Baltimore's right to

invoke dispute resolution under Section XIII, and the right of EPA and the State to seek stipulated penalties as provided in the preceding sub-paragraphs.

f. EPA and MDE agree to use their best efforts to expeditiously review and comment on submissions that Baltimore is required to submit for approval pursuant to this Consent Decree.

VII. REPORTING

20. Beginning with the first full calendar quarter after the Date of Entry of this 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:

a. Progress reports on the implementation of the requirements of Section VI (Remedial Measures) as described in Paragraphs 8 through 18, which include;

(i) Progress reports on the elimination of sanitary sewer overflow structures pursuant to sub-paragraph 8.d;

(ii) Progress reports on the Phase I Plan Projects pursuant to sub-paragraph 9.g(i);

(iii) Progress reports on the Phase II Plan Projects pursuant to sub-paragraph 9.g(ii);

(iv) Progress reports on the Post-Implementation compliance monitoring pursuant to sub-paragraph 9.h;

(v) Progress reports for pumping station inspection and repair pursuant to sub-paragraph 11.d;

- b. A description of illegal connections to the Collection System pursuant to sub-paragraph 10.b;
- c. A description of any problems anticipated with respect to meeting the requirements of Section VI (Remedial Measures) of this Consent Decree;
- d. Any such additional matters as Baltimore believes should be brought to the attention of EPA and MDE;
- e. A table listing all overflows subject to the reporting requirement of Paragraph 17 that occurred during the quarter reporting period, including date, location, and volume, in Excel both in paper and electronic format;
- f. A compact disk (CD), thumb drive or equivalent electronic file containing all of the five-day reports required under sub-paragraph 17.a for the reporting quarter period;
- g. A table listing all discharges subject to the reporting requirement of Paragraph 8.b(ii) that occurred during the quarter reporting period, including date, location, and volume, and other information required under Paragraph 8.b(ii), in Excel both in paper and electronic format;
- h. A table of all SDUOs that occurred and were identified in the reporting quarter. The table shall summarize the following information for each listed SDUO: date of occurrence, location including zip code, water body affected, measures taken to investigate source, any future work planned to address the SDUO, date of resolution (if resolved), duration, and estimated volume of discharge in gallons. Where the source of the SDUO has been confirmed as originating from the Collection System, the table shall indicate the date of the written report required by sub-paragraph 17.e;

i. A table of previously reported SDUOs confirmed during the reporting quarter as overflows subject to this Consent Decree, including volume per overflow as calculated pursuant to the Sewer Discharges of Unknown Origin Quantification Protocol submitted by Baltimore on November 18, 2010 and to subparagraph 17.a.(ii).

21. Whenever any violation of this Consent Decree or of any applicable permits or any other event affecting Defendant's performance under this Decree, may pose an immediate threat to the public health or welfare or the environment, Defendant shall notify EPA and the State orally or by electronic or facsimile transmission as soon as possible, but no later than 24 hours after Defendant first knew of the violation or event. This procedure is in addition to the requirements set forth in the preceding Paragraph, but it does not apply to overflows which Baltimore has reported under Paragraph 17.

22. All reports shall be submitted to the persons designated in Section XX (Form of Notice).

23. The Calendar Quarterly Report shall be certified, consistent with the requirements of 40 C.F.R. 122.22(a)(3), by the person responsible for compliance or by a person responsible for overseeing implementation of this Consent Decree, which shall state:

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

24. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.

25. The reporting requirements of this Consent Decree do not relieve Defendant of any reporting obligations required by the Act or implementing regulations, or by any other federal, state, or local law, regulation, permit, or other requirement.

26. Any information provided pursuant to this Consent Decree may be used by the United States in any proceeding to enforce the provisions of this Consent Decree and as otherwise permitted by law.

27. **Public Information.**

a. Public Forums: Beginning 120 days from the Date of Entry of this Consent Decree and every 12 months thereafter, Baltimore shall hold a public information session to inform the public of work achieved under the Consent Decree in the prior 12-month period.

b. Public Posting of Calendar Quarterly Reports: The City shall make the Calendar Quarterly Reports available to the public through the Clean Water Baltimore website. The Calendar Quarterly Reports shall be uploaded to the Clean Water Baltimore website within ten (10) working days of the submission of the reports to EPA and MDE.

VIII. CIVIL PENALTY

28. Baltimore paid a civil penalty to the United States and the State of Maryland in the amount of six hundred thousand dollars (\$600,000) for violations as alleged by the United States in the Complaint and the State of Maryland in the Complaint in Intervention, pursuant to the 2002 Consent Decree.

IX. STIPULATED PENALTIES

29. Baltimore shall pay stipulated penalties to the United States and the State of Maryland as specified in Paragraph 30 for its failure to comply with the requirements of

Paragraphs 8 through 18 of the Consent Decree. Stipulated penalties due and owing under this Paragraph shall be paid in the manner specified in Paragraph 37.

30. **Compliance Measures.**

a. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to meet any of the dates specified in Appendix A for the SSO elimination projects identified therein, as required by sub-paragraph 8.b, or any milestone in the approved plan and schedule required by sub-paragraph 8.b(iii). The stipulated penalties collectively payable to the United States and the State of Maryland per day for each failure to meet each milestone date are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Milestone Date per Day of Violation</u>
1 st to 30 th day	\$ 1,000
31 st to 60 th day	\$ 2,500
After 60 days	\$ 6,000

b. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to implement and complete any of the projects listed in Appendices B, B.1 and B.2 according to the schedules in those Appendices. The stipulated penalties collectively payable to the United States and the State of Maryland per day for failing to implement and complete any element of these projects, or to implement any project in accordance with an approved schedule are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 30 th day	\$ 1,000
31 st to 60 th day	\$ 1,500
After 60 days	\$ 2,250

c. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to submit a complete Phase II Plan as required by sub-paragraphs 9.b and 9.c or for each day it fails to submit a plan and schedule as required by sub-

paragraph 8.b(iii), or fails to submit a revised Sewershed Plan if required under sub-paragraph 18.a. The stipulated penalties collectively payable to the United States and the State of Maryland per day for each failure to meet each milestone date are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 30 th day	\$ 1,000
31 st to 60 th day	\$ 1,500
After 60 days	\$ 2,250

d. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to implement any Phase II project in accordance with an approved schedule. The stipulated penalties collectively payable to the United States and the State of Maryland per day for failing to implement any Phase II project in accordance with an approved schedule are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 30 th day	\$ 1,000
31 st to 60 th day	\$ 1,500
After 60 days	\$ 2,250

e. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to submit a plan for the investigation and elimination of SDUOs and correction of Collection System deficiencies as required by sub-paragraph 15.a, or failure to submit a plan for the elimination of a cross-connection as required by sub-paragraph 15.c by the date required in the Consent Decree for the submittal of such plan. The stipulated penalties collectively payable to the United States and the State of Maryland per day for its failure to submit a plan identified in this Paragraph are \$1,500 per day per plan.

f. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to implement a plan approved under sub-paragraph 15.c to address cross-connections. The stipulated penalties collectively payable to the United States and

the State of Maryland per day for failing to implement plans approved under sub-paragraphs 15.b or 15.c are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 30 th day	\$ 1,000
31 st to 60 th day	\$ 1,500
After 60 days	\$ 2,250

g. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to implement or complete a plan for Additional Remedial Measures approved under Paragraph 18, according to the schedules proposed and approved. The stipulated penalties collectively payable to the United States and the State of Maryland per day for failing to implement any plan and schedule approved under Paragraph 18 are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 30 th day	\$ 1,000
31 st to 60 th day	\$ 1,500
After 60 days	\$ 2,250

h. Baltimore will pay stipulated penalties to the United States and the State of Maryland for its failure to implement the illegal connections program as specified in sub-paragraphs 10.a and 10.c. The stipulated penalties collectively payable to the United States and the State of Maryland per day for its failure to implement the program are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 30 th day	\$ 1,000
31 st to 60 th day	\$ 1,500
After 60 days	\$ 2,250

i. Baltimore will pay stipulated penalties to the United States and the State of Maryland for its failure to implement and/or complete any of the elements of the Pumping Station program set forth in sub-paragraphs 11.a (Pumping Station Inspection Procedures), 11.b (Pumping Station Remote Monitoring), and 11.c (Pumping Station Preventative Maintenance). The stipulated penalties collectively payable to the United States and the State of Maryland per

day for its failure to implement and/or complete any of the elements identified in these sub-paragraphs are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 30 th day	\$ 500
31 st to 60 th day	\$ 750
After 60 days	\$ 1,150

j. Baltimore will pay stipulated penalties to the United States and the State of Maryland for its failure to implement and/or complete any of the elements of the Operation and Maintenance Plan set forth in Paragraphs 13, including failure to submit a revised O&M Plan as set forth in sub-paragraphs 13.b and 13.d, or of the Information Management System Program set forth in sub-paragraphs 14.a. through 14.d. The stipulated penalties collectively payable to the United States and the State of Maryland per day for its failure to implement and/or complete any of the elements identified in these Paragraphs are as follows:

<u>Period of Noncompliance</u>	<u>Penalty per Element per Day of Violation</u>
1 st to 30 th day	\$ 1,000
31 st to 60 th day	\$ 1,500
After 60 days	\$ 2,250

31. **Reports.**

a. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to submit the reports identified in this Paragraph by the milestone dates in the Consent Decree for the submittal of such reports: Illegal Connection Reports (10.b), Collection System Operation and Maintenance Report (13.e), Progress Reports, and the Quarterly Reports under Section VII (Reporting).

<u>Period of Noncompliance</u>	<u>Penalty per Day</u>
1 st to 60 th day	\$750
After 60 days	\$2,000

b. Baltimore will pay stipulated penalties to the United States and the State of Maryland for each day it fails to submit a revised Emergency Response Plan (Paragraph 16) and Discharge Event Reports (sub-paragraph 17.a) by the dates required in the Consent Decree for the submittal of such plan/reports. The stipulated penalties collectively payable to the United States and the State of Maryland per day for its failure to submit the reports identified in this Paragraph are \$3,000 per day.

32. **Overflows.**

a. Baltimore will pay stipulated penalties to the United States and the State of Maryland for all Overflows in the amount set forth in this Paragraph, with the exception of capacity-related, wet weather Overflows from the constructed SSO outfalls Nos. 67 and 72 prior to the elimination deadline specified in Appendix A. To demonstrate that a capacity-related Overflow was caused by a wet weather event, Baltimore shall demonstrate with flow monitoring records or other engineering data that wet weather conditions caused the Overflow. The stipulated penalties collectively payable to the United States and the State of Maryland per Overflow event are as follows:

Less than 100 gallons	\$100
100 to 2,499 gallons	\$500
2,500 to 9,999 gallons	\$1,000
10,000 to 99,999 gallons	\$3,750
100,000 to 999,999 gallons	\$10,000
1 million gallons or more	\$15,000

b. The stipulated penalty for each overflow of unknown volume which cannot be quantified by Baltimore despite best efforts shall be \$500 per overflow, collectively payable to the United States and the State of Maryland.

33. **Implementation of the Emergency Response Plan.** Baltimore shall pay stipulated penalties to the United States and the State of Maryland for each failure to respond to an overflow or SDUO in the manner prescribed in the approved Emergency Response Plan, including failure to provide appropriate public notification, and failure to clean up overflow debris. The stipulated penalties collectively payable to the United States and the State of Maryland for failure to implement the Emergency Response Plan is \$500 per overflow or SDUO.

34. **Substantial Completion.** Baltimore may petition EPA and MDE to waive the assessment of stipulated penalties under sub-paragraphs, 30.a. through 30.j. Baltimore shall submit such petition prior to the compliance deadline provided in the Paragraph to which the waiver is related and shall in its submission:

a. notify EPA and MDE that all program elements or tasks required in that Paragraph will not be completed before the deadline; and

b. demonstrate to EPA and MDE that it has completed at least 95% of the program elements or tasks required in that Paragraph; and

c. either propose an extended deadline for completion of the remaining program elements or tasks; or

d. identify any deficiencies that cannot be cured because no future opportunity exists for doing so.

EPA and MDE shall not disapprove a petition that meets the foregoing criteria but may establish a different reasonable deadline. Baltimore shall pay stipulated penalties to EPA and MDE for failure to meet the extended deadline.

35. If a date by which Baltimore must meet any obligation of this Consent Decree falls on a holiday or week-end, the due date shall be the following business day, with the exception of the obligations set forth in Paragraph 17 of this Consent Decree. Stipulated civil penalties shall automatically begin to accrue on the first day Baltimore fails to satisfy any obligation or requirement of this Consent Decree and shall continue to accrue until the violation or deficiency is corrected. Stipulated penalties shall continue to accrue throughout any dispute resolution process, except that stipulated penalties shall not accrue beginning thirty (30) days after Baltimore seeks judicial review of a dispute pursuant to the Dispute Resolution provisions of this Decree.

36. Payment of stipulated civil penalties as set forth above shall be in addition to any other rights or remedies which may be available to the United States and the State of Maryland or their agencies by reason of Baltimore's failure to comply with the requirements of this Consent Decree and all applicable federal, state or local laws, regulations, wastewater discharge permit(s) and all other applicable permits.

37. Baltimore shall pay fifty percent (50%) of any demanded stipulated penalties to the United States and pay the other fifty percent (50%) of the demanded stipulated penalties to the State of Maryland. Payment of the penalties shall be made by Electronic Funds Transfer ("EFT") to the U.S. Department of Justice ("DOJ") lockbox bank, referencing DOJ No. 90-5-1-1-4402/1. Payment to the United States shall be made in accordance with instructions provided by the United States to Baltimore following execution of this Consent Decree. Any EFT

received at the DOJ lockbox bank after 11:00 A.M. Eastern Time will be credited on the next business day. Notice of the EFT shall simultaneously be mailed to the following:

Docket Clerk (3RC00)
U.S. EPA - Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Nina Rivera (3RC20)
U.S. EPA - Region III
1650 Arch Street
Philadelphia, PA 19103-2029; and

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, D.C. 20044-7611
Reference DOJ Case No. 90-5-1-1-4402/1

The transmittal letter forwarding such notice shall include the caption, civil action number and judicial district of this action. Payments to the State of Maryland shall be made by tendering to the Maryland Department of the Environment, P.O. Box 2057, Baltimore, MD 21203-2057 checks made payable to: "Maryland Clean Water Fund."

38. Stipulated civil penalties shall be paid no later than thirty (30) days following the first day in which EPA and MDE send to Baltimore a demand for payment of the stipulated penalties which have accrued to date together with an explanation for the basis(es) for the demand. Payment of stipulated civil penalties shall be paid as provided in Paragraph 37.

39. In the event that a stipulated civil penalty is not paid when due, the stipulated civil penalty owed to the United States shall be payable with interest from the original due date to the date of payment at the statutory judgment rate set forth at 28 U.S.C. § 1961(a).

40. EPA and MDE may, in their sole and unreviewable discretion, waive any stipulated penalties that have accrued against Baltimore pursuant to this Consent Decree.

X. EFFECT OF SETTLEMENT / RESERVATION OF RIGHTS

41. In consideration of the civil and stipulated penalty payments that Baltimore made, and the injunctive relief that Baltimore performed under the 2002 Consent Decree and will perform under the terms of this Consent Decree, except as expressly set forth in Paragraph 42 (Reservation of Rights), the United States covenants not to bring any administrative or civil judicial action for violations of Sections 301 and 402 of the Clean Water Act as alleged in the Complaint filed in this matter up to and including the lodging of this Consent Decree, and the State of Maryland covenants not to sue Baltimore for violations of Sections 301 and 402 of the Clean Water Act and Sections 9-322 and 9-323 of the Maryland Environment Article as alleged in the State of Maryland's complaint in intervention up to and including the lodging of this Consent Decree.

42. Notwithstanding any other provision of this Consent Decree, the United States and the State of Maryland reserve, and this Consent Decree is without prejudice to, all rights against Baltimore with respect to all matters other than those expressly included in the Complaint including the following:

a. Claims based on a failure by Baltimore to meet a requirement of this Consent Decree;

- b. Claims for stipulated penalties, if any, under the terms of this Consent Decree;
- c. Any criminal liability; and
- d. Claims that a discharge or overflow from the Collection System may pose an imminent and substantial endangerment to health or the environment in accordance with Section 504 of the Clean Water Act, 33 U.S.C. § 504.

XI. FORCE MAJEURE

43. “Force majeure” for the purposes of this Consent Decree is defined as an event arising from causes beyond the control of Baltimore or the control of any entity controlled by Baltimore, including its agents, consultants and contractors, which delays or prevents the performance of any obligation under this Consent Decree. Unanticipated or increased costs or expenses associated with implementation of this Consent Decree and changed financial circumstances shall not, in any event, be considered force majeure events. In addition, failure to apply for a required permit or approval or to provide in a timely manner all information required to obtain a permit or approval that is necessary to meet the requirements of this Consent Decree, or failure of Baltimore to approve contracts, shall not, in any event, be considered force majeure events.

44. When Baltimore knows of an event that might delay completion of any requirement of this Consent Decree, whether or not the event is a force majeure event, Baltimore shall notify EPA and MDE, in writing, within thirty (30) days after Baltimore first knew of such event. The notice shall indicate whether Baltimore claims that the delay should be excused due to a force majeure event. The notice shall describe in detail the basis for Baltimore’s contention that it experienced a force majeure delay, the anticipated length of the delay, the precise cause or

causes of the delay, the measures taken or to be taken to prevent or minimize the delay, and the timetable by which those measures will be implemented. Baltimore shall adopt all reasonable measures to avoid or minimize such delay. Failure to so notify EPA and MDE shall render this Section void and of no effect as to the event in question, and shall be a waiver of Baltimore's right to obtain an extension of time for its obligations based on such event.

45. If EPA and MDE find that a delay in performance is, or was, caused by a force majeure event, it shall extend the time for performance, in writing, for a period to compensate for the delay resulting from such event and stipulated penalties shall not be due for such period. In proceedings on any dispute regarding a delay in performance, the dispute resolution provisions of Section XIII (Dispute Resolution) shall apply, and Baltimore shall have the burden of proving that the delay is, or was, caused by a force majeure event, and that the amount of additional time requested is necessary to compensate for that event.

46. An extension of one compliance date based on a particular event shall not automatically extend any other compliance date. Baltimore shall make an individual showing of proof regarding the cause of each delayed incremental step or other requirement for which an extension is sought.

XII. RETENTION OF JURISDICTION

47. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of this Consent Decree and for the purpose of adjudicating all disputes among the Parties that may arise under the provisions of this Consent Decree, to the extent that this Consent Decree provides for resolution of disputes by the Court.

XIII. DISPUTE RESOLUTION

48. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Decree. However, the procedures set forth in this Section shall not apply to actions by the United States and the State of Maryland to enforce obligations of Baltimore that have not been disputed in accordance with this Section.

49. Any dispute which arises under or with respect to this Consent Decree shall in the first instance be the subject of informal negotiations between Baltimore, EPA and MDE. The period for informal negotiations shall not exceed twenty (20) days from the time the dispute arises, unless it is modified by written agreement of Baltimore, EPA and MDE. The dispute shall be considered to have arisen when one party sends the other Parties a written Notice of Dispute.

50. If either Baltimore on the one hand, or EPA or MDE on the other hand, believes it has a dispute with respect to this Consent Decree with the other party it shall, within fourteen (14) days of the circumstances giving rise to the dispute, serve upon the other party a notice, in writing, setting forth the matter(s) in dispute. The Parties shall then attempt to resolve such dispute through informal negotiations. If the dispute cannot be resolved by the Parties within twenty (20) days from receipt of such notice, Baltimore shall comply with the position of the EPA and MDE unless, within forty-five (45) days of receipt of such notice of dispute, Baltimore invokes the formal dispute resolution procedures of this Section by serving on EPA and MDE a written Statement of Position. Baltimore's Statement of Position shall set forth the nature of the dispute with a proposal for its resolution as well as any factual data, analysis or opinion supporting that position and any supporting documentation relied upon. EPA and MDE may,

within thirty (30) days of receipt of this petition, serve upon Baltimore their Joint Statement of Position with an alternative proposal for resolution as well as any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by EPA and MDE. In any such dispute invoked by Baltimore, Baltimore shall have the burden of proof. Within twenty (20) days after receipt of EPA's and MDE's Joint Statement of Position, Baltimore may serve a Reply upon EPA and MDE.

51. Following the EPA's and MDE's receipt of Baltimore's Statement of Position submitted pursuant to Paragraph 50, any Joint Statement of Position by EPA and MDE, and any Reply by Baltimore, EPA and MDE will issue a Joint Final Decision resolving the dispute. EPA and MDE will use reasonable efforts to issue a Joint Final Decision no later than sixty (60) days after receipt of Baltimore's Reply. Failure by EPA and MDE to issue a Joint Final Decision within the sixty (60) days specified above shall not be interpreted to mean that EPA and MDE have adopted Baltimore's position in the subject of the dispute. EPA's and MDE's Joint Final Decision shall be binding on Baltimore unless, within thirty (30) days of receipt of the decision, Baltimore files with the Court and serves on EPA and MDE, a motion for judicial review of the decision setting forth the matter in dispute, the efforts made by the Parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of the Consent Decree. The United States on behalf of EPA and MDE may file a response to Baltimore's motion.

52. All documents required by this Section to be served upon either party shall be served upon the addressees and in the manner identified in Paragraph 76 (Form of Notice).

53. Standard of Review: Disputes Concerning Matters Accorded Record Review. Except as otherwise provided in this Consent Decree, in any dispute brought under Paragraph 50

pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules or any other items requiring approval by EPA under this Consent Decree; the adequacy of the performance of work undertaken pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, Defendant shall bear the burden of demonstrating that its position complies with this Consent Decree. Judicial review of any dispute shall be governed by applicable principles of law.

54. Submission of any matter to the Court for resolution shall not extend any of the deadlines set forth in this Consent Decree unless the Parties agree to such extension in writing or the Court grants an order extending such deadline. Stipulated penalties with respect to the disputed matter shall continue to accrue but payment shall be stayed pending resolution of the dispute as provided in Paragraph 51. Notwithstanding the stay of payment, stipulated penalties shall accrue from the first day of noncompliance with any applicable provision of this Consent Decree. In the event that Baltimore does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IX (Stipulated Penalties).

XIV. RIGHT OF ENTRY

55. EPA and MDE, together with their authorized representatives and contractors shall each have authority at all times, upon the presentation of credentials, to enter the premises of Baltimore to:

- a. Monitor the progress of activities required by this Consent Decree;
- b. Verify any data or information submitted to the United States;
- c. Obtain samples, and, upon request, obtain splits of any samples collected by Baltimore or its consultants and contractors;
- d. Observe performance tests;

- e. Inspect and evaluate any portion of the Collection System; and
- f. Inspect and review any record required to be kept under the terms and

conditions of this Consent Decree.

These inspection rights are in addition to, and in no way limit or otherwise affect, the EPA and MDE's statutory authorities to conduct inspections, to require monitoring and to obtain information from Baltimore as authorized by law.

XV. NOT A PERMIT/COMPLIANCE WITH OTHER STATUTES/REGULATIONS

56. This Consent Decree is not and shall not be construed as a permit issued pursuant to Section 402 of the Clean Water Act, 33 U.S.C. § 1342, nor as a modification of any existing permit so issued, nor shall it in any way relieve Baltimore of its obligations to obtain a permit for its POTWs, the Collection System or any other part of its sewage treatment and collection system or facilities, and to comply with the requirements of any NPDES permit or with any other applicable federal or state law or regulation. Baltimore must comply with any new permit, or modification of existing permits in accordance with applicable federal and state laws and regulations.

57. Nothing herein shall be construed as relieving Baltimore of the duty to comply with the Clean Water Act, the Maryland water pollution control laws, the regulations promulgated under those acts, and all applicable permits issued under those acts and regulations.

XVI. FAILURE OF COMPLIANCE

58. The United States and State of Maryland, do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that Baltimore's complete compliance with this Consent Decree will result in compliance with the provisions of the Clean Water Act, 33 U.S.C. §§ 1251 et seq. or with Baltimore's NPDES permits. Notwithstanding EPA and MDE's

review or approval of any plans, reports, policies, or procedures formulated pursuant to this Consent Decree, Baltimore shall remain solely responsible for any non-compliance with the terms of this Consent Decree, all applicable permits, the Clean Water Act and regulations promulgated under that Act. The pendency or outcome of any proceeding concerning issuance, reissuance, or modification of any permit shall neither affect nor postpone Baltimore's duties and obligations as set forth in this Consent Decree.

59. Baltimore agrees that it may not assert as a defense to a claim that it is non-compliant with, or in violation of, the Consent Decree, that it has been unable to hire or retain qualified staff.

60. The Parties agree that from time-to-time they shall consult and meet regarding progress made under the Consent Decree. Nothing in this Consent Decree shall prevent Baltimore from seeking, or EPA and MDE from approving, interim recommendations made by the City that relate to approvals to be obtained under the Consent Decree.

61. **Commercial Unavailability:** Baltimore shall be solely responsible for compliance with any deadline or the performance of any work as described in Section VI (Remedial Measures) of this Consent Decree that requires the acquisition and installation of equipment or contracting with a vendor. If it appears that the commercial unavailability of equipment or vendor may delay Baltimore's performance of work according to an applicable implementation schedule, Baltimore shall notify EPA and MDE in accordance with the requirements of Section XIII (Dispute Resolution) of any such delays as soon as Baltimore reasonably concludes that the delay could affect its ability to comply with the implementation schedules set forth in this Consent Decree. Baltimore shall propose a modification to the applicable schedule of implementation. Prior to the notice required by this Paragraph, Baltimore

must have undertaken reasonable efforts to obtain such equipment and/or contacted a reasonable number of vendors and obtained a written representation that the equipment(s) and/or the vendor(s) are in fact commercially unavailable. In the notice, Baltimore shall reference this Paragraph of this Consent Decree, identify the milestone date(s) it contends it will not be able to meet, provide EPA and MDE with written correspondence to the vendor identifying efforts made to secure the equipment and/or services of the vendor, and describe the specific efforts Baltimore has taken and will continue to take to find such equipment or vendor. Baltimore may propose a modified schedule or modification of other requirements of this Consent Decree to address such commercial unavailability. Section XIII (Dispute Resolution) shall govern the resolution of any claim of commercial unavailability. EPA and MDE shall not unreasonably withhold its consent to requests for modifications of schedules of implementation if the requirements of this Paragraph are met. The failure by Baltimore to secure control equipment and vendor shall not constitute a force majeure event triggering the requirements of Section XI (Force Majeure); this Paragraph shall apply.

XVII. NON-WAIVER PROVISIONS

62. This Consent Decree in no way affects or relieves Baltimore of any responsibility to comply with any federal, state or local law or regulation.

63. The Parties agree that Baltimore is responsible for achieving and maintaining complete compliance with all applicable federal and state laws, regulations, and permits, and that compliance with this Consent Decree shall be no defense to any actions commenced pursuant to said laws, regulations, or permits, except as otherwise expressly specified in the Consent Decree.

64. The United States and MDE reserve any and all legal and equitable remedies available to enforce the provisions of this Consent Decree.

65. This Consent Decree shall not limit any authority of EPA and MDE under the Clean Water Act or any applicable statute, including the authority to seek information from Baltimore or to seek access to the property of Baltimore.

66. Performance of the terms of this Consent Decree by Baltimore is not conditioned on the receipt of any federal, state or local funds. Application for construction grants, state revolving loan funds, or any other grants or loans, or delays caused by inadequate facility planning or plans and specifications on the part of Baltimore shall not be cause for extension of any required compliance date in this Consent Decree.

67. It is the intent of the Parties hereto that the clauses hereof are severable, and should any clause(s) be declared by a court of competent jurisdiction to be invalid and unenforceable, the remaining clauses shall remain in full force and effect.

68. The United States reserves all remedies available to it for violations of the Clean Water Act by Baltimore that are not alleged in the Complaint and for violations of the Clean Water Act by Baltimore that occur after the Date of Lodging of this Consent Decree. The State of Maryland reserves all remedies available to it for violations of the Clean Water Act and the State water pollution control laws by Baltimore that are not alleged in the Complaint in Intervention and for violations of the Clean Water Act and the State water pollution control laws by Baltimore that occur after the Date of Lodging of this Consent Decree.

69. This Consent Decree does not resolve criminal liability, if any, that any person might have for violations of the Clean Water Act.

70. The Complaint, the Complaint in Intervention, and this Consent Decree shall constitute and establish diligent prosecution by the United States and the State of Maryland, under Section 505(b)(1)(B) of the Clean Water Act, 33 U.S.C. § 1365(b)(1)(B), and any other

applicable federal or state law, of all matters alleged in the Complaint and in the Complaint in Intervention arising from the beginning of the applicable statutes of limitation through the Date of Lodging of the Consent Decree.

71. Execution of this Consent Decree does not preclude Baltimore from asserting any legal or factual position in any action brought against Baltimore by any person or entity not a party to the Consent Decree.

72. Nothing in this Consent Decree shall be construed to limit the authority of the United States or the State of Maryland to undertake any action against any person, including Baltimore, in response to conditions that may present an imminent and substantial endangerment to the environment or to the public health or welfare.

XVIII. COSTS OF SUIT

73. Each party shall bear its own costs and attorney's fees with respect to matters resolved by this Consent Decree.

XIX. RECORDKEEPING

74. Baltimore shall maintain copies of any reports, plans, permits and documents submitted to EPA and MDE pursuant to this Consent Decree, including any underlying research and data, for a period of five (5) years from date of submission. Baltimore shall require any independent contractor operating any portion of the Collection System or implementing any portion of this Consent Decree to also retain such materials for a period of five (5) years from date of submission.

75. In addition to the reports and documentation required to be provided by Baltimore under the terms of this Consent Decree, Baltimore shall also provide, upon demand, any analytical data or any other documents requested by the United States or State of Maryland to

review work done, or to be done, by Baltimore or to determine Baltimore's compliance with the terms of this Consent Decree.

76. Baltimore shall notify EPA and MDE thirty (30) days prior to the disposal or destruction of such records at the end of this five year period and shall, upon EPA and MDE's request, make such records available to EPA and MDE prior to such disposal or destruction.

XX. FORM OF NOTICE

77. Unless otherwise specified, all reports, notices, or any other written communications required to be submitted under this Consent Decree shall be sent to the respective Parties at the following addresses:

As to the United States:

Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611
Washington, DC 20044-7611
Reference DOJ Case No. 90-5-1-1-4402/1

As to EPA:

Nina Rivera (3RC20) (Cover letter only)
Senior Assistant Regional Counsel
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103

Allison Graham (3WP42)
Water Protection Division
United States Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103

As to State of Maryland:

Principal Counsel
Maryland Department of the Environment

Office of the Attorney General
1800 Washington Blvd.
Baltimore, MD 21230

Chief
Enforcement Division, Compliance Program
Water Management Administration
Maryland Department of Environment
1800 Washington Blvd.
Baltimore, MD 21230

As to Baltimore:

Director of Public Works
600 Abel Wolman Municipal Building
200 North Holliday Street
Baltimore, MD 21202

City Solicitor
City Hall
100 North Holliday Street
Baltimore, MD 21202

Thomas M. Ligan
Venable LLP
750 E. Pratt Street, Suite 900
Baltimore, MD 21202

Peter E. Keith
Gallagher Evelius & Jones LLP
218 N. Charles Street, Suite 400
Baltimore, MD 21201

Notifications to or communications with EPA, MDE and the United States Department of Justice (“DOJ”) shall be deemed submitted on the date they are posted.

XXI. MODIFICATION

78. This Consent Decree contains the entire agreement of the Parties. Prior drafts of this Consent Decree or the 2002 Consent Decree shall not be used in any action involving the interpretation or enforcement of the Consent Decree. With the exception of modifications pertaining to scheduling and other matters deemed minor by written mutual agreement of EPA,

MDE and Baltimore, any modification of this Consent Decree by the Parties shall be in writing and filed with the Court before it will be deemed effective. Any unilateral attempt by a party to seek modification of the terms of the Consent Decree shall be subject to and consistent with the dispute resolution requirements in Section XIII (Dispute Resolution). Nothing in this Consent Decree shall be interpreted as modifying the scope and standard of review that the Court will exercise in reviewing a petition for modification.

XXII. PUBLIC COMMENT AND ENTRY OF CONSENT DECREE

79. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and consideration by the United States of any comments. This Paragraph does not create any rights exercisable by Baltimore.

XXIII. TERMINATION

80. After the completion of the implementation of the projects required by Paragraph 8 hereof, of the implementation of the Phase I and Phase II Plans, of the post implementation compliance monitoring period as required by Paragraph 9.h hereof, and of any Additional Remedial Measures required by Paragraph 18 hereof, if any, Baltimore shall certify to the United States, the State of Maryland and the Court that Baltimore has complied with all of its obligations under this Consent Decree.

81. If the United States and the State of Maryland agree with the certification, the parties will file a joint motion to terminate the Consent Decree.

82. If the United States and Maryland do not agree with the certification and Baltimore disputes the United States and Maryland's assessment of Baltimore's compliance, the

United States and the State of Maryland will assert in writing that full compliance has not been achieved. If the United States and the State of Maryland dispute Baltimore's full compliance, this Consent Decree shall remain in effect pending resolution of the dispute by the Parties or the Court in accordance with the Dispute Resolution provisions of this Decree.

XXIV. SIGNATORIES

83. The Assistant Attorney General on behalf of the United States and the undersigned representatives of the Mayor and City Council of Baltimore and the State of Maryland certify that they are fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such party to this document.

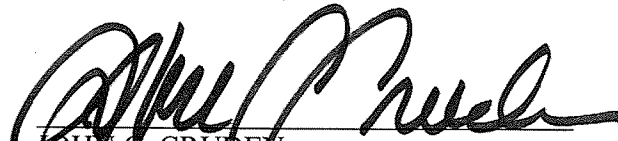
Dated and entered this _____ day of _____ 20__.

United States District Judge

WE HEREBY CONSENT to the entry of the Modified Consent Decree in the United States v. Mayor and City Council of Baltimore, Civil Action No. JFM-02-1524, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.


FOR PLAINTIFF, THE UNITED STATES OF AMERICA:

DATE:



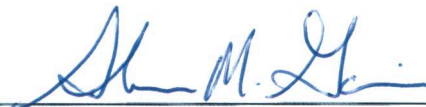
JOHN C. CRUDEN
Assistant Attorney General
Environment and Natural Resources Division
United States Department of Justice

DATE:




CARA MROCZEK
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
601 D. Street NW
Washington, DC 20004
cara.mroczek@usdoj.gov
(202) 514-1447


DATE: 5/25/16


SHAWN M. GARVIN
Regional Administrator
U.S. Environmental Protection Agency, Region III


DATE: 5/9/16


MARY B. COE
Regional Counsel
U.S. Environmental Protection Agency, Region III


DATE:
5-9-16


NINA RIVERA
Senior Assistant Regional Counsel
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103
Rivera.nina@epa.gov
(215) 814-2667

DATE: 5.4.16


MARK POLLINS
Division Directors
Water Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

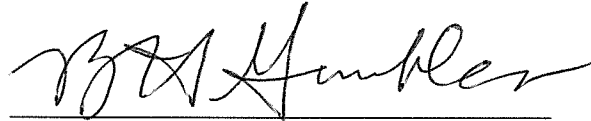
DATE: 5/4/16


JAMES VINCH
Attorney Advisor
Water Enforcement Division
Office of Civil Enforcement
Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

WE HEREBY CONSENT to the entry of the Modified Consent Decree in the United States v. Mayor and City Council of Baltimore, Civil Action No. JFM-02-1524, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

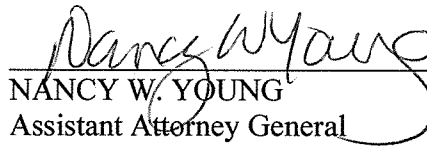
FOR PLAINTIFF, THE STATE OF MARYLAND:

DATE: *May 24, 2016*



BENJAMIN H. GRUMBLES
Secretary
Maryland Department of the Environment

DATE: *May 24, 2016*



NANCY W. YOUNG
Assistant Attorney General
Bar No. 08531
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230
nancy.young@maryland.gov
(410) 537-3042

WE HEREBY CONSENT to the entry of the Modified Consent Decree in the United States v. Mayor and City Council of Baltimore, Civil Action No. JFM-02-1524, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR DEFENDANT, THE MAYOR AND CITY COUNCIL OF BALTIMORE:

DATE: _____

STEPHANIE RAWLINGS-BLAKE
Mayor, City of Baltimore
250 City Hall
Baltimore, MD 21202
(410) 396-3835

DATE: 4/12/16

GEORGE A. NILSON
City Solicitor, City of Baltimore
100 N. Holliday Street
Baltimore, MD 21202
(410) 396-3297

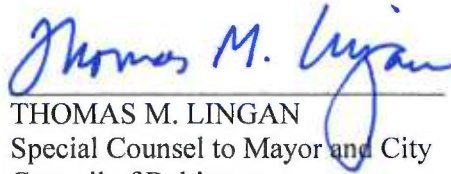
DATE: 4/12/16

RUDOLPH S. CHOW, P.E.
Director of Public Works
City of Baltimore
Abel Wolman Municipal Building
200 N. Holliday Street
Baltimore, MD 21202
(410) 396-3500

DATE: 5/17/16

PETER E. KEITH
Special Counsel to Mayor and City
Council of Baltimore
Gallagher, Evelius and Jones
218 North Charles Street, #400
Baltimore, MD 21201
(410) 727-7702

DATE: 5/17/16



THOMAS M. LINGAN
Special Counsel to Mayor and City
Council of Baltimore
Venable LLP
750 E. Pratt Street, Suite 900
Baltimore, MD 21202
(410) 244-7400

APPROVED FOR FORM AND LEGAL SUFFICIENCY

DATE: _____

Deputy City Solicitor

LIST OF APPENDICES

Appendix A	Sanitary Sewer Overflow Structures
Appendix B	Phase I Project Summary with Construction Completion Dates
Appendix B.1	Project Details: Back River WWTP Headworks Modifications
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Appendix D	Pumping Station Repair Priority Ranking System

APPENDIX A - SANITARY SEWER OVERFLOW STRUCTURES

SSO #	Sewershed	Manhole ID	Location	Date of Substantial Completion of Construction	Date of Elimination
67	Jones Falls	S31MM_013MH	Falls Road, approximately 1,100 feet northwest of US-1 bridge intersection	Jan. 1, 2021	July 1, 2022
72	Jones Falls	S37GG_007MH	Rear of 428 East Preston St	Jan. 1, 2021	July 1, 2022
132	High Level	S09UU_010MH	North Hilton & Springdale Avenue	Jan 1, 2016	July 1, 2017
134	High Level	S11UU_016MH	3200 Liberty Heights Avenue	Jan 1, 2016	July 1, 2017
135	High Level	S11UU_008MH	3104 Liberty Heights Avenue	Jan 1, 2021	July 1, 2022
137	Herring Run	S57UU_007MH	Shannon Drive & Brehms Lane	Jan 1, 2019	July 1, 2020
138	High Level	S07EE 1023MH	W. Cold Spring Lane & Ayrdale Ave	Jan. 1, 2021	July 1, 2022
139	High Level	S11QQ 1002MH	West Garrison Avenue & Queensberry Avenue	Jan. 1, 2021	July 1, 2022
150	Jones Falls	S35CC1008MH	N. Calvert Street & Chancery Road	Jan. 1, 2017	July 1, 2018
151	Patapsco	S47G2_016MH	4210 Curtis Avenue	Jan. 1, 2017	July 1, 2018
152	Jones Falls	S33II_004MH	N. Charles Street & W. Lanvale Street	Jan. 1, 2019	July 1, 2020
153	Gwynns Falls	S01GG1011MH	Fernhill Avenue & Hillsdale Road	Jan. 1, 2018	July 1, 2019
154	Jones Falls	S33KK_033MH	N. Charles Street & W. Lafayette Avenue	Jan. 1, 2019	July 1, 2020

APPENDIX B - Phase I Project Summary

ID #	Project	Baltimore City Contract Number (for reference)	Revised Construction Completion Date
WWTP Improvement Project*			
1	Back River WWTP Headworks Modifications and Flow Equalization Project	SC918	1/1/2021
Heavy Cleaning Projects**			
2	Lower Jones Falls Cleaning - Large diameter pipe cleaning of the Lower Jones Falls Sewer	SC 876	Completed October 2011
3	Outfall Interceptor Cleaning - Large diameter pipe cleaning of the Outfall Interceptor – Phase I	SC 894	Completed April 2014
4	Low Level Interceptor Cleaning - Large diameter pipe cleaning of the Low Level Interceptor	SC 922R	1/1/2019
5	High Level Interceptor Cleaning - Large diameter pipe cleaning of the High Level Interceptor	SC 933	1/1/2019
6	Outfall Interceptor Cleaning – City and County Portions - Large diameter pipe cleaning of the Outfall Interceptor – Phase II	SC 934	1/1/2019
Structural Improvement Projects**			
7	Gwynns Run D-Branch Sewer Improvements - Improvements to the Gwynns Run D-branch interceptor in the high level sewershed by means of replacement of pipe	SC 879	Completed January 2016
8	Maryland Avenue Sewer Rehab in Jones Falls Sewershed - Rehabilitation and replacement of sanitary sewer lines by cured-in-place pipe (CIPP) lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 895	Completed January 2016
9	Sewer Rehab in Greenmount & Bolton Hill Areas of Jones Falls Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 897R	1/1/2019
10	Stony Run Sewer Rehab in Jones Falls Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 898	1/1/2019
11	Sewer Rehab in Western Run Area of Jones Falls Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 899	1/1/2019
12	Upper Jones Falls and Maryland Avenue Sewer Rehab in Jones Falls Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 900	1/1/2019
13	Sewer Rehab in Upper Gwynns Run Area of High Level Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 905	Completed January 2016
14	Sewer Rehab in Northern Portion of High Level Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 906	1/1/2019
15	Sewer Rehab in Eastern Portion High Level Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 907	1/1/2019

* Refer to Appendix B.1 for Project Details

** Refer to Appendix B.2 for Project Details

APPENDIX B - Phase I Project Summary

ID #	Project	Baltimore City Contract Number (for reference)	Revised Construction Completion Date
16	Sewer Rehab in Herring Run Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 908	1/1/2019
17	Sewer Rehab in Eastern Portion of Herring Run Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 909	1/1/2021
18	Sewer Rehab in Central Portion of Herring Run Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 911	1/1/2019
19	Sewer Rehab in Western Portion of Low Level Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 912	1/1/2019
20	Sewer Rehab in Eastern Portion of Low Level Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 913	1/1/2019
21	Sewer Rehab in Southern Portion of Gwynns Falls Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 920	1/1/2019
22	Gwynns Run Interceptor Phase II - Improvements to Lower Gwynns Run Interceptor – Phase II	SC 932	1/1/2019
23	Maidens Choice Pressure Sewer Inspection and Uplands Sewer Rehab - Maidens Choice Pressure Sewer Inspection and Uplands Sewer Replacement. This project will address the cleaning and inspection and replacement of pipe	SC 939	1/1/2019

Structural and Priority Meter Basin Rehabilitation Projects**

24	Sewer Rehab in Dundalk Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 902	1/1/2021
25	Sewer Rehab in Patapsco Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 903	1/1/2021
26	Sewer Rehab in Chinquapin Run Area of Herring Run Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 910 / SC 956	1/1/2021
27	Sewer Rehab in Western Portion of Low Level Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to laterals and manholes	SC 914	1/1/2021
28	Sewer Rehab in Outfall Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 919	1/1/2021

* Refer to Appendix B.1 for Project Details

** Refer to Appendix B.2 for Project Details

APPENDIX B - Phase I Project Summary

ID #	Project	Baltimore City Contract Number (for reference)	Revised Construction Completion Date
29	Sewer Rehab in Northern Portion of Gwynns Falls Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to point repairs, laterals, and manholes	SC 921 / SC 955	1/1/2021
30	Sewer Rehab in Herring Run Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to laterals	SC 937	1/1/2019
31	Sewer Rehab in Upper Gwynns Run Area of High Level Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to manholes	SC 940 / SC 953	1/1/2021
32	Sewer Rehab in Western Run, Greenmount, Hampden & Bolton Hill Areas of Jones Falls Sewershed - Rehabilitation and replacement of sanitary sewer lines by CIPP lining and open cut methods of pipe in addition to manholes	SC 941	1/1/2021

* Refer to Appendix B.1 for Project Details

** Refer to Appendix B.2 for Project Details

APPENDIX B.1
Project Details: Back River WWTP Headworks Modifications
<i>WWTP Improvement Project Details - SC 918</i>
36 million gallons of storage (equalization facilities) at BRWWTP
Equalization Facilities Pump Station, capacity unknown
New fine screening facility at plant headworks
New grit removal system

APPENDIX B.2

Project Details: Heavy Cleaning, Structural Improvement and Structural and Priority Meter Basin Rehabilitation

Phase I Projects - Heavy Cleaning, Structural Improvement and Structural and Priority Meter Basin Rehabilitation Project Details*											
Sewershed	Baltimore City Contract Number (for reference)	Cured-In-Place Pipe (CIPP) Linear Feet (LF)	Point Repair Each (EA)	Point Repair (LF)	Same Diameter Pipe Replacement (LF)	Manholes (EA)	Sewer House Connections (EA)	Cleaning (LF)	New Pipe (LF)	Pipe Upsizing (LF)	Conveyance Upgrade (New Pipe + Upsizing)
Jones Falls	876							8,400			
	895	19,784	34	408		120	351	3,013			
	897	166,193	100		4,820	396	3,412	38,342			
	898	71,250	28	230		410	887	1,500			
	899	116,931	225			387	1,268	761			
	900	100,781			3,128		633	2,719	4,480		
	941	54,473	25	108	232	583	75			1,384	1,384
	total	529,412	412	3,874	5,052	2,529	8,712	56,496		1,384	1,384
High Level	879				413		20			2,030	2,030
	905	35,863	119		1,307	165	392	4,695			
	906	57,500	226		1,350	134	1,375	4,100			
	907	18,790	71	1,552	597	150	853	240			
	932								2,550		2,550
	933							14,418			
	940					90			7,829	12,478	20,307
	total	207,544	476	1,554	3,707	1,138	3,590	23,453	10,379	14,692	25,071
Herring Run	908	40,000	201		2,500	180	500				
	909	76,000	36	350		261	905				
	910	4,890				58				13,511	13,511
	956	2,060	186	194	4,774	116	345	2,940			
	911	39,200	83		2,075	49	2,975	1,250			
	937	11,860			1,460	83	270		1,400		1,400
	total	174,010	506	544	10,809	747	4,995	4,190	1,400	13,511	14,911
Low Level	912	34,959	16		686	215	1,643	192			
	913	15,495			1,747	13	96	2,360			
	914	93,000			2,700	625	800				
	922R							22,971			
	total	143,454	16		5,133	853	2,539	25,523			
Gwynns Falls	920	110,000	253		4,130	200	2,128	6,600			
	921	57,266	195	431	7,286	530	462	13,088		5,004	5,004
	955	500			400	15				4,352	4,352
	939R				464			4,800			
	total	167,766	448	431	12,280	745	2,590	24,488		9,356	9,356
Outfall	894							20,325			
	919	107,000			4,000	300	2,400	9,000			
	934							27,000			
	total	107,000			4,000	300	2,400	56,325			
Dundalk	902	83,110	28			395	938	21,229			
		total	83,110	28			395	938	21,229		
Patapsco	903	118,105			1,431	307	834	5,800		296	296
		total	118,105			1,431	307	5,800		296	296
Total		1,530,401	1,886	6,403	42,412	7,014	26,598	217,504	11,779	39,239	51,018

*Based on best professional judgment and assumed field conditions

Appendix C

Wastewater Pumping Stations Equipment Checklist

Station: _____ Date: _____ Time: _____

Area		Task	Equipment Operable?	Job Request Needed?	Remarks
Entry	<input checked="" type="checkbox"/>	Check incoming power source	YES NO	YES NO	
Controls	<input type="checkbox"/>	Check alarm lights	YES NO	YES NO	
Control Room	<input type="checkbox"/>	Record pumping times			
Control Room	<input type="checkbox"/>	Check/replace recording charts	YES NO	YES NO	
Control Room	<input type="checkbox"/>	Check pump control configuration	YES NO	YES NO	
Control Room	<input type="checkbox"/>	Switch pump leads sequence			
Control Room	<input type="checkbox"/>	Check wet well operating level			
Dry Well	<input type="checkbox"/>	Drain Process Air Line Condensation			
Dry Well	<input type="checkbox"/>	Check Air Compressor Operating Pressure			
Dry Well	<input type="checkbox"/>	Check Air Compressor Oil Level			
Dry Well	<input type="checkbox"/>	Check Hydropneumatic System Reservoir Level			
Dry Well	<input type="checkbox"/>	Check Hydropneumatic System Air Pressure			
Exit	<input type="checkbox"/>	Make sure equipment is back on normal operation			
Exit	<input type="checkbox"/>	Secure building			
<u>Verify operation of the following equipment:</u>					
Dry Well	<input type="checkbox"/>	No. 1 Main Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 2 Main Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 3 Main Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 4 Main Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 5 Main Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 6 Main Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 1 Waterseal Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 2 Waterseal Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 3 Waterseal Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 1 Vacuum Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 2 Vacuum Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 3 Vacuum Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 4 Vacuum Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 5 Vacuum Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 6 Vacuum Pump	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 1 Air Compressor	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 2 Air Compressor	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 3 Air Compressor	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 1 Bar Screen	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 2 Bar Screen	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	Hydropneumatic System	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	Wet Well Exhaust Fans	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	Dry Well Exhaust Fans	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 1 Main Pump Cone Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 2 Main Pump Cone Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 3 Main Pump Cone Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 4 Main Pump Cone Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 5 Main Pump Cone Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 1 Main Pump Plug Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 2 Main Pump Plug Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 3 Main Pump Plug Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	No. 4 Main Pump Plug Valve	YES NO	YES NO	
Dry Well	<input type="checkbox"/>	Dry Well Sump Pump	YES NO	YES NO	
Wet Well	<input type="checkbox"/>	Bubbler System	YES NO	YES NO	
Barscreen	<input type="checkbox"/>	Barscreen area fans	YES NO	YES NO	
Barscreen	<input type="checkbox"/>	Barscreen rakes	YES NO	YES NO	
Backup Power	<input type="checkbox"/>	Emergency Generator	YES NO	YES NO	

Supervisor I: _____
 Supervisor II: _____
 Operations Supervisor: _____

Date: _____
 Date: _____
 Date: _____

WASTE WATER PUMPING STATIONS																																										
STANDARD OPERATING PROCEDURE																																										
TO: ALL EMPLOYEES	FROM: B.G. IVINS																																									
ATTN: SUPERVISORS	SUBJECT: TRUCK CREW STATION INSPECTION																																									
<p>All Stations shall be inspected twice each day and a checklist will be completed for each inspection.</p> <p>ALL PERSONNEL ARE TO PERFORM A GENERAL INSPECTION WHEN ENTERING A STATION:</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 60%;"></th> <th style="text-align: center; padding-left: 20px;">Purpose</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">1. LISTEN FOR ANY AUDIBLE ALARMS BEFORE ENTERING STATION. ALSO CHECK ALARM PANEL INDICATOR LIGHTS FOR ALARMS AFTER ENTERING. NOTE ANY PROBLEMS IN STATION LOGBOOK.</td> <td style="padding: 5px; vertical-align: top;">Verify equipment failures, create historical record for trouble shooting and facility management.</td> </tr> <tr> <td style="padding: 5px;">2. CHECK INCOMING POWER TO VERIFY PRIMARY POWER SOURCE.</td> <td style="padding: 5px; vertical-align: top;">Verify primary power source.</td> </tr> <tr> <td style="padding: 5px;">3. RECORD DATE AND TIME OF VISIT.</td> <td style="padding: 5px; vertical-align: top;">Maintain authorized entry record.</td> </tr> <tr> <td style="padding: 5px;">4. CHECK OR CHANGE RECORDING CHARTS. (MARK DATE & TIME).</td> <td style="padding: 5px; vertical-align: top;">Ensure recording of operation data.</td> </tr> <tr> <td style="padding: 5px;">5. CHECK ALL ALARM LIGHTS AND TEST LAMPS.</td> <td style="padding: 5px; vertical-align: top;">Verify that alarms are working.</td> </tr> <tr> <td style="padding: 5px;">6. NOTE PUMPING TIME FOR EACH PUMP UNIT.</td> <td style="padding: 5px; vertical-align: top;">Verify proper pump operation.</td> </tr> <tr> <td style="padding: 5px;">7. CHECK CONFIGURATION OF PUMP CONTROLS.</td> <td style="padding: 5px; vertical-align: top;">Alternating sequence management.</td> </tr> <tr> <td style="padding: 5px;">8. SWITCH PUMP LEAD SEQUENCE.</td> <td style="padding: 5px; vertical-align: top;">Maintain equal pump wear.</td> </tr> <tr> <td style="padding: 5px;">9. CHECK WETWELL OPERATING LEVEL.</td> <td></td> </tr> <tr> <td style="padding: 5px;">10. CHECK OPERATION OF PUMPS AND CHECK VALVES.</td> <td></td> </tr> <tr> <td style="padding: 5px;">11. DRAIN PROCESS AIR CONDENSATION.</td> <td style="padding: 5px; vertical-align: top;">Prevent moisture from entering process equipment.</td> </tr> <tr> <td style="padding: 5px;">12. CHECK DRYWELL PUMP PUMP.</td> <td style="padding: 5px; vertical-align: top;">Prevent dry well flooding.</td> </tr> <tr> <td style="padding: 5px;">13. CHECK AIR COMPRESSOR PRESSURE.</td> <td style="padding: 5px; vertical-align: top;">Ensure sufficient air pressure to actuate equipment.</td> </tr> <tr> <td style="padding: 5px;">14. CHECK AIR COMPRESSOR OIL LEVEL.</td> <td style="padding: 5px; vertical-align: top;">Ensure proper amount of oil in compressor to prevent seizing.</td> </tr> <tr> <td style="padding: 5px;">15. CHECK HYDROPNEUMATIC SYSTEM RESERVOIR LEVEL.</td> <td style="padding: 5px; vertical-align: top;">Ensure sufficient water level to actuate equipment.</td> </tr> <tr> <td style="padding: 5px;">16. VERIFY HYDROPNEUMATIC SYSTEM AIR PRESSURE.</td> <td style="padding: 5px; vertical-align: top;">Ensure normal operating pressure.</td> </tr> <tr> <td style="padding: 5px;">17. VERIFY OPERATION OF WET WELL, DRY WELL, AND BAR SCREEN EXHAUST FANS.</td> <td style="padding: 5px; vertical-align: top;">Prevent low oxygen levels and/or accumulation of gases in area.</td> </tr> <tr> <td style="padding: 5px;">18. VERIFY OPERATION OF BARSCREEN RAKES</td> <td style="padding: 5px; vertical-align: top;">Prevent accumulation of solids on screens.</td> </tr> <tr> <td style="padding: 5px;">19. BEFORE LEAVING THE FACILITY MAKE SURE THAT ALL EQUIPMENT IS RETURNED BACK TO NORMAL OPERATION AND THE BUILDING AND GROUNDS ARE PROPERLY SECURED.</td> <td></td> </tr> </tbody> </table> <p>The Supervisor I on the truck crew or the designated lead operator shall be responsible for completing the checklist during each station visit. A signature is required on each sheet.</p>				Purpose	1. LISTEN FOR ANY AUDIBLE ALARMS BEFORE ENTERING STATION. ALSO CHECK ALARM PANEL INDICATOR LIGHTS FOR ALARMS AFTER ENTERING. NOTE ANY PROBLEMS IN STATION LOGBOOK.	Verify equipment failures, create historical record for trouble shooting and facility management.	2. CHECK INCOMING POWER TO VERIFY PRIMARY POWER SOURCE.	Verify primary power source.	3. RECORD DATE AND TIME OF VISIT.	Maintain authorized entry record.	4. CHECK OR CHANGE RECORDING CHARTS. (MARK DATE & TIME).	Ensure recording of operation data.	5. CHECK ALL ALARM LIGHTS AND TEST LAMPS.	Verify that alarms are working.	6. 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SIGNATURE:	TITLE: MANAGER	DATE:																																								
CODE: PS.-	SUPERSEDES: NA	REMOVAL DATE:																																								

**APPENDIX D
PUMPING STATION REPAIR PRIORITY RANKING SYSTEM**

MAINTENANCE PRIORITY CODES

Reissue 3/1/00

Job priority codes are used by maintenance to schedule work orders in order of their importance to operations. Operations will specify a priority for each work request based upon the following guidelines:

<u>Priority</u>	<u>Class</u>	<u>Description</u>
1	Emergency	Immediate corrective maintenance is required to avoid imminent danger to life or essential facilities or major violations of the City's discharge permits. Takes preference over all other maintenance work (including jobs in progress) and must be worked around the clock until condition is stabilized.
2	Urgent	Jobs that must be accomplished as soon possible. Generally applied to repair of key process units which lack suitable back up or when call-ins off shift are required.
3	Special	Jobs that normally are considered routine, but because of special circumstances, such as dependence upon scheduled area shutdowns or precedence to other jobs requests in system should be considered a higher priority than routine. Most due-dated (promised) work will fall into this category.
4	Routine	Jobs that must be completed as soon as practical. Majority of work will be in this category including most preventive maintenance, overhauls, and repairs to back-up process units.
5	Convenient	Jobs that are desirable but may be completed when normal work is slack. Normally consists of backlog of work, which can be used to smooth out peaks and valleys in manpower loads.

Within any non-emergency priority, work orders will be generally assigned on the basis of the following:

- . Due dates (if specified); otherwise
- . First-in, First-out;
- . Common location to minimize travel; and
- . Common equipment system to minimize down time.

Priorities of work orders in backlog will be reviewed with Operations at regular coordination meetings and revised as appropriate.