

ii. Within one year after the Effective Date of this Consent Decree, CCH shall submit to EPA and DOH, for review and approval in accordance with Section IX (Review and Approval of Deliverables) of this Decree, a report on all force main valves or other force main appurtenances that could discharge or release sewage to the environment.

iii. Within one year after the report is approved, CCH shall seal force main valves and other appurtenances whose function by design was to discharge or release sewage to the environment, unless the approved report indicates that such valves or appurtenances are necessary to minimize risk to public health and safety.

iv. CCH shall integrate all other force main valves and other appurtenances that could release sewage to the environment into the Force Main Operation and Maintenance Program attached as Appendix E to this Decree.

c. Cathodic Protection Systems. As a compliance milestone, within three years after the Effective Date of this Consent Decree, CCH shall complete the assessment, repair, and upgrading of its three existing force main cathodic protection systems at Pearl City, Waipahu, and Ala Moana. As an interim compliance milestone, CCH shall submit to EPA and DOH, by no later than six months after the Effective Date of this Consent Decree, a report that identifies the needed repair work on these three cathodic protection systems.

d. Kaneohe Bay WWPS #2 Force Main. CCH shall design and Complete Construction of a new Kaneohe Bay WWPS #2 force main by the compliance milestone of December 31, 2016. The new force main shall replace the existing force main, and CCH may take the existing force main out of service. CCH shall meet the following interim compliance milestones:

i. CCH shall execute a design contract and issue a notice to proceed with design by December 31, 2013; and

ii. CCH shall execute a construction contract and issue a

notice to proceed with construction by December 31, 2015.

14. Beachwalk Force Main Projects.

a. Construction of Permanent Force Main. CCH shall design and Complete Construction of a new and permanent Beachwalk force main by the compliance milestone of December 31, 2012.

b. Maintenance of Existing Force Main. CCH presently intends to use the existing Beachwalk force main as a backup force main after it has completed construction of a new and permanent Beachwalk Force Main. When the new, permanent force main is constructed, CCH shall retain, connect, and maintain the existing force main in good operating condition for use as a backup force main unless: (i) CCH has achieved Complete Construction of an alternate backup force main; or (ii) the Governments have approved a proposal by CCH to continue the use of the existing Temporary Force Main as the backup force main for the new and permanent Beachwalk Force Main.

15. Ala Moana Force Main Projects.

a. Construction of Ala Moana Force Main No. 3. CCH shall design and Complete Construction of a new Ala Moana Force Main No. 3 by the compliance milestone of December 31, 2014. As an interim compliance milestone, CCH shall execute a construction contract and issue a notice to proceed with construction by July 31, 2012.

b. Maintenance of Ala Moana Force Main No. 2 as Backup Line. CCH presently intends to use Ala Moana Force Main No. 2 as a backup force main after it has completed construction of Ala Moana Force Main No. 3. When Ala Moana Force Main No. 3 is constructed, CCH shall retain, connect, and maintain Ala Moana Force Main No. 2 in good operating condition for use as a backup force main unless and until CCH has achieved Complete Construction of an alternate backup force main.

c. Additional Condition Assessment of Ala Moana Force Main No. 2. CCH shall conduct an additional Condition Assessment, including a follow-up action plan, of Ala Moana Force Main No. 2, which shall be submitted to EPA and DOH for review and approval by June 30, 2011. The additional Condition Assessment shall be conducted in the same manner as required by Paragraph 12 and Appendix D to this Decree, except that it will focus only on problem areas identified during the first Condition Assessment of Ala Moana Force Main No. 2 that was submitted to EPA and DOH.

16. Old Hart Street Force Main - Maintenance and Improvements. CCH completed construction of a new Hart Street Force Main in May 2001 and left the old Hart Street Force Main in place. Pursuant to the 2007 Stipulated Order, CCH connected the old Force Main, in its current condition, to the new Hart Street Pump Station for use as a backup force main to handle emergency flows to the extent possible. CCH shall retain, connect, and maintain the old Hart Street Force Main in good operating condition for use as a backup force main to handle emergency flows to the extent possible. As a compliance milestone, CCH shall, by no later than December 31, 2013, replace the force main connection (between the Hart Street Pump Station and the old Hart Street Force Main) and install valving to allow CCH to switch flow to the old Hart Street Force Main more quickly, as provided in the Old Hart Street WWPS FM Condition Assessment Report dated November 13, 2009 (Table 19, Item 4).

17. Kaneohe/Kailua Force Main Project.

a. Construction of New Force Main. CCH shall design and Complete Construction of a new Kaneohe/Kailua Force Main by the compliance milestone of December 31, 2014. As an interim compliance milestone, CCH shall execute a construction contract and issue a notice to proceed with construction by July 31, 2012.

b. Maintenance of Old Force Main as Backup Line. CCH

presently intends to use the old Kaneohe/Kailua Force Main as a backup force main after it has completed construction of the new force main. When the new force main is constructed, CCH shall retain, connect, and maintain the old force main in good operating condition for use as a backup force main, unless, in constructing the replacement Force Main, CCH also constructs a backup Force Main.

18. 1999 Final Sewer I/I Plan Projects.

a. The projects listed in this Paragraph were conceptually developed in the 1999 Final Sewer I/I Plan and some of these projects will be further developed during the planning and design phases. Appendix F includes a description of the current scope of the projects listed in subparagraphs b. through f. below. For the projects in Appendix F, the development of a project may include consolidation with other projects, further clarification of the scope of a project, and/or division of the proposed work among different work contracts. For any project in Appendix F, if the development of the project results in a proposed substantial modification to its scope, CCH shall meet and confer with EPA and DOH to reach agreement on the proposed modifications to the extent possible given CCH's construction deadlines, but, in any event, CCH shall notify EPA and DOH in writing of any such substantial modifications. For the projects included in subparagraphs f. and g. below, CCH's evaluation of a project may result in a recommendation that the project be eliminated.

b. As compliance milestones, CCH shall Complete Construction of the following projects by no later than December 31, 2011:

SI-CS-05 Kalihi Valley Reconstructed Sewer (aka Kalihi Valley Relief Sewer)

SI-CS-36 Kalihi/Nuuanu Area Sewer Rehabilitation (aka Lanakila Ave. Relief Sewer), portion

SI-CS-63A Sand Island Basin Misc. Sewer Rehabilitation (aka Sand Island Structural Rehabilitation-Phase 1)

c. As compliance milestones, CCH shall Complete Construction of the following projects by no later than December 31, 2013:

HN-CS-10B Waimalu Sewer Rehabilitation/Reconstruction - 7D01C (aka Honouliuli Sewer Rehabilitation - 7D01C)

HN-CS-13 Waimalu Sewer Rehabilitation/Reconstruction - 7D01C (aka Waimalu Sewer Replacement)

HN-TP-01 Honouliuli WWTP Upgrade

KK-PS-01 Enchanted Lakes Wastewater Pump Station Upgrade

SI-CS-51A Sewer Manhole and Pipe Rehabilitation at Various Locations (aka Republican St.-Nimitz Hwy-Awa Structural Rehabilitation - Phase 1)

SI-CS-53 Ala Moana Blvd./Auahi St. Sewer Rehabilitation (aka Auahi St. Structural Rehabilitation)

SI-CS-54 Ala Moana Blvd./Auahi St. Sewer Rehabilitation (aka Ala Moana Blvd.-24 Structural Rehabilitation)

SI-CS-55 Ala Moana Blvd./Auahi St. Sewer Rehabilitation (aka Ala Moana Blvd.-36 Structural Rehabilitation)

SI-CS-57 Ala Moana Blvd. Sewer Reconstruction (aka Ala Moana Blvd.-16 Structural Rehabilitation)

SI-CS-59 Waikiki Sewer Rehabilitation/Reconstruction

SI-PS-14 Kuliouou Sewer Rehabilitation and WWPS Modification (aka Kuliouou WWPS Modification)

WH-TP-01 Wahiawa Wastewater Treatment Plant Influent Pump Station Upgrade and Equalization Facility (aka Modify IPS and New Storage at Wahiawa WWTP)

WM-CS-02 Waimanalo Sewer Rehabilitation

d. As compliance milestones, CCH shall Complete Construction of the following projects by no later than December 31, 2014:

HN-TP-02 Mililani WWPTF Storage and Headworks Upgrade (aka Mililani WWPTF Upgrade)

SI-CS-09 Kahanu St., School St., and Umi St. Relief Sewers (aka School St. Relief Sewer)

SI-CS-18 Kalanianaʻole Highway Sewer

SI-CS-37 Kahanu St., School St., and Umi St. Relief Sewers (aka Umi St. Relief Sewer)

SI-CS-38 Kahanu St., School St., and Umi St. Relief Sewers (aka Kahanu St. Relief Sewer)

SI-CS-62 Kalanianaʻole Highway Sewer (aka Kalanianaʻole Hwy Structural Rehabilitation)

SI-PS-16 Aliamanu Nos. 1 & 2 WWPS Upgrade and Relief Sewer (aka Aliamanu No. 1 WWPS Upgrade - Phase 1)

SI-PS-17 Aliamanu Nos. 1 & 2 WWPS Upgrade and Relief Sewer (aka Aliamanu No. 2 WWPS Upgrade - Phase 1)

e. As compliance milestones, CCH shall Complete Construction of the following projects by no later than December 31, 2016:

HN-CS-04 Renton Road Sewer and Manhole Rehabilitation (portion: Eastern/Makakilo trunk)

HN-CS-05B Leeward Area Sewer and Manhole Rehabilitation (aka Waipahu Manhole and Pipe Rehabilitation)

HN-CS-05C Leeward Area Sewer and Manhole Rehabilitation (aka Ewa Manhole Rehabilitation)

HN-CS-10A Waiiau Area Sewer Rehabilitation/Reconstruction (aka Honouliuli Sewer Rehabilitation - 7D01A)

HN-CS-10C Foster Village Sewer Rehabilitation/Reconstruction (aka Honouliuli Sewer Rehabilitation - 7F05)

KK-CS-04 Kailua/Kaneohe Sewer Manhole and Pipe Structural Rehabilitation (aka Oneawa St. Structural Rehabilitation)

KK-CS-06 Kailua/Kaneohe Sewer Manhole and Pipe Structural Rehabilitation (aka

Kailua Beach Park Structural Rehabilitation)

KK-CS-09 Kailua/Kaneohe Sewer Manhole and Pipe Structural Rehabilitation (aka Kaneohe Bay Drive Structural Rehabilitation)

KK-CS-12B Kailua/Kaneohe Sewer Manhole and Pipe Structural Rehabilitation (aka Kailua/Kaneohe Manhole and Pipe Structural Rehabilitation - Phase 2)

SI-CS-30 Moiliili-Kapahulu Sewer Rehabilitation/Reconstruction (aka Date St. Relief Sewer)

SI-CS-43 Iwilei/Kalihi Kai Sewer Rehabilitation/Reconstruction (aka North King St. Relief Sewer)

SI-CS-50 Airport Sewer Rehabilitation/Reconstruction (aka Airport Structural Rehabilitation)

SI-CS-51B Iwilei/Kalihi Kai Sewer Rehabilitation/Reconstruction & Kalihi/Nuuanu Area Sewer Rehabilitation (aka Republican St.-Nimitz Hwy-Awa Structural Rehabilitation-Phase 2)

SI-CS-52 Iwilei/Kalihi Kai Sewer Rehabilitation/Reconstruction (aka Dillingham Blvd.-Iwilei Structural Rehabilitation)

SI-CS-58 Moiliili-Kapahulu Sewer Rehabilitation/Reconstruction (aka Moiliili-Kapahulu Structural Rehabilitation)

SI-CS-60 Old Sewer Tunnel Rehabilitation (aka Old Tunnel Structural Rehabilitation)

f. CCH shall conduct an evaluation and develop recommendations for the projects listed in this subparagraph. As a compliance milestone, CCH shall, within four years after the Effective Date of this Consent Decree, submit a report to EPA and DOH for review and approval in accordance with Section IX (Review and Approval of Deliverables) of this Decree, setting forth the results of its evaluation and recommendations for the projects listed below in this subparagraph. In addition, for the projects in this subparagraph marked with an asterisk, CCH shall also submit to EPA and DOH, as part of the report, the proposed scope or a

design alternatives report for each project.

SI-CS-01 Aliamanu Nos. 1 & 2 WWPS Upgrade and Relief Sewer (aka Airport Relief Sewer)

*SI-CS-08 Iwilei/Kalihi Kai Sewer Rehabilitation/Reconstruction (aka Dillingham Blvd-Iwillei Relief Sewer), portion

*SI-CS-10 Chinatown Sewer Rehabilitation (aka College Walk-30 Replacement Sewer)

*SI-CS-15 Manoa Sewer Relief/Rehabilitation (aka Manoa Relief Sewer)

*SI-CS-17 Palolo Valley Sewer Rehabilitation (aka Palolo Relief Sewer)

*SI-CS-22 Chinatown Sewer Rehabilitation (aka River St. Relief Sewer)

*SI-CS-27 Palolo Valley Sewer Rehabilitation (aka Waiomao Stream Relief Sewer)

SI-CS-28 Kalihi/Nuuanu Area Sewer Rehabilitation (aka Auwaiolimu St. Relief Sewer)

SI-CS-29 Kalihi/Nuuanu Area Sewer Rehabilitation (southern makai portion) (aka Nuuanu Relief Sewer)

SI-CS-36 Kalihi/Nuuanu Area Sewer Rehabilitation (aka Lanakila Ave. Relief Sewer), portion

SI-CS-39 Kalihi/Nuuanu Area Sewer Rehabilitation (aka Kalani St. Relief Sewer), portion

*SI-CS-42 Dowsett Highlands Relief Sewer

WH-PS-02 Uwalu WWPS Upgrade

*SI-PS-01 Kamehameha Hwy WWPS Upgrade

*SI-PS-04 Awa Street WWPS Upgrade

*SI-PS-06 Sand Island WWTP and Sewer Basin Facilities (aka Ala Moana WWPS and Force Main; upgrade of WWPS to 2020 flows will be further evaluated; note: the force main work is included in Paragraph 15)

*SI-PS-16 Aliamanu Nos. 1 & 2 WWPS Upgrade and Relief Sewer (aka Aliamanu

No. 1 WWPS Upgrade - Phase 2)

*SI-PS-17 Aliamanu Nos. 1 & 2 WWPS Upgrade and Relief Sewer (aka Aliamanu

No. 2 WWPS Upgrade - Phase 2)

*HN-CS-07 Honouliuli/Waipahu/Pearl City Wastewater Facilities (aka Waimalu Wastewater System Relief)

*HN-CS-08 Honouliuli/Waipahu/Pearl City Wastewater Facilities (aka Pearl City Trunk Sewer Relief)

*HN-CS-09 Pacific Palisades Diversion Sewer Line (aka Pacific Palisades Relief Sewer)

HN-CS-14 Waipahu Sewer Replacement/Relief Sewer (aka Waipahu Sewer Replacement)

HN-PS-01 Waipio WWPS Upgrade

*HN-PS-04 Honouliuli/Waipahu/Pearl City Wastewater Facilities (aka Pearl City WWPS Relief)

*KK-CS-01 Kalaheo Ave. Relief Sewer

*KK-CS-13 Kaneohe Sewer Relief/Rehabilitation, C2 Projects (aka Alii Shores Relief Sewer)

*KK-CS-15 Hele St. Sewer Relief/Rehabilitation (aka Hele St. Relief Sewer)

*KK-CS-20 Kaneohe Sewer Relief/Rehabilitation, C2 Projects (aka Kaha St. Relief Sewer)

*KK-CS-21 Kaneohe Sewer Relief/Rehabilitation, C2 Projects (aka Kahuhipa St. Relief Sewer)

*KK-CS-22 Kaneohe Sewer Relief/Rehabilitation, C2 Projects (aka Namoku St. Relief Sewer)

*KK-CS-23 Kaneohe Sewer Relief/Rehabilitation, C2 Projects (aka Puohala Relief Sewer)

*KK-CS-25 Kaneohe Sewer Relief/Rehabilitation, C2 Projects (aka Makahio St. Relief Sewer)

*KK-PS-02 Waikalua WWPS Upgrade

KK-PS-10 Kahanahou Pump Station Upgrade

KK-PS-12 Waikapoki WWPS Upgrade

*KK-TP-01 Kaneohe/Kailua Wastewater Facilities (aka Kailua RWWTP Upgrade)

*KK-TP-02 Kaneohe/Kailua Wastewater Facilities (aka Kailua Area Storage)

KK-TP-03 Kaneohe WWPTF Improvements and Equalization Facility (aka Kaneohe WWPTF Storage)

The report shall recommend one of the following three options for each of the listed projects in this subparagraph f.: (1) the project should be required and CCH should Complete Construction by June 30, 2020; (2) the project should be required but its construction can be completed after June 30, 2020; or (3) the project should be eliminated. If the report, as approved, concludes that the first option applies, CCH shall Complete Construction of the project by June 30, 2020, and the project's design interim compliance milestones and construction compliance milestones shall be incorporated by reference into this Consent Decree and shall become enforceable pursuant to this Consent Decree. If the report, as approved, concludes that the second option applies, the project's design interim compliance milestones and construction compliance milestones that are no later than June 30, 2020, shall be incorporated by reference into this Consent Decree, and those milestones shall become enforceable pursuant to this Consent Decree. If the report, as approved, concludes that the third option applies, CCH may eliminate the project. If EPA does not agree with the report's conclusion that a project should be eliminated, CCH may invoke the procedures of Section XII (Dispute Resolution).

g. Wet Weather I/I Assessment Update.

i. CCH shall continue its ongoing development of a Wet Weather I/I Assessment Update. The Wet Weather I/I Assessment Update shall provide an updated estimate of the hydraulic performance of CCH's Wastewater Collection System, and, in particular, shall address current and predicted future

infiltration and inflow (“I/I”) rates in the Wastewater Collection System, pump station capacity issues, and the projected peak influent flow at each wastewater plant. The Wet Weather I/I Assessment Update shall assess whether the projects identified in Appendix G (“the Deferred Projects”) are needed to address existing or reasonably foreseeable capacity constraints in the Wastewater Collection System, and the appropriate time frame for implementation of the projects that are needed. In addition, the Wet Weather I/I Assessment Update shall assess whether any additional projects not identified in Appendix G are needed to address existing or reasonably foreseeable capacity constraints in the Wastewater Collection System, and the appropriate time frame for implementation of the projects that are needed.

ii. The Wet Weather I/I Assessment Update shall include, but not be limited to, the following tasks:

- Flow and precipitation monitoring for a minimum of two wet weather seasons (October to June) and one dry weather season (July to September).
- Data analysis to determine current I/I rates and reasonably foreseeable I/I rates under a range of storm conditions.
- Peak flow cost-effective analysis.
- Updated flow data for CCH’s hydraulic model.
- Field verification of existing and reasonably foreseeable hydraulic deficiencies in the Wastewater Collection System and at pump stations. Field verification shall be made by measuring flows in the Wastewater Collection System and/or water levels in sewer manholes.
- Analysis of records of capacity-related SSOs since, at a minimum, 1999.
- Hydraulic model flow projections for the Wastewater Collection System (including pump stations) and WWTP influent.
- Model projections to predict locations of capacity-related SSOs.
- Identification of necessary Wastewater Collection System improvements

(including pump station improvements) to control wet weather SSOs. This shall include both Deferred Projects as well as any projects not identified in the 1999 Final Sewer I/I Plan that the Wet Weather I/I Assessment Update identifies as necessary to address existing and reasonably foreseeable hydraulic deficiencies in the Wastewater Collection System and at pump stations (“New Projects”).

- Identification of any currently planned Wastewater Collection System improvements (including, but not necessarily limited to, the Deferred Projects) that are either not needed or should be redesigned to properly address system needs.

iii. CCH shall consult with EPA and DOH on the technical issues associated with the design and implementation of the Wet Weather I/I Assessment Update consistent with the following schedule:

- No later than September 30, 2010, CCH shall meet with EPA and DOH to discuss the results of the first wet season monitoring results. This discussion shall include, but is not necessarily limited to, an evaluation of whether sufficient precipitation occurred to generate useful data, results from any field verification work conducted to date, any initial analysis of wet weather capacity issues in the Wastewater Collection System (including pump stations), and any appropriate corrections in monitoring locations and/or methodologies.
- No later than September 30, 2011, CCH shall meet with EPA and DOH to discuss the results of the first dry season and second wet season monitoring results. This discussion shall include, but is not necessarily limited to, an evaluation of whether sufficient precipitation occurred to generate useful data, whether an additional wet season of monitoring may be appropriate, results from any field verification work conducted to date, any initial analysis of wet weather capacity issues in the Wastewater Collection System

(including pump stations) and, if more monitoring may be necessary, any appropriate corrections in monitoring locations and/or methodologies. In addition, at this meeting, CCH shall discuss how it will use the collected data in its model, what model CCH intends to use, and any further field verification activities that CCH intends to conduct.

- No later than April 1, 2012; CCH shall meet with EPA and DOH to discuss the results of CCH's modeling work. At this meeting, the parties shall discuss which projects (both Deferred Projects and New Projects) are needed to address existing and reasonably foreseeable hydraulic deficiencies in the Wastewater Collection System and at pump stations under various proposed design storms. The parties shall also discuss the recommended time frames for implementing these projects to ensure that hydraulic deficiencies are addressed in a timely manner.

iv. EPA and DOH may in their discretion provide written comments on the progress of the Wet Weather I/I Assessment Update within 60 Days following the meetings set out in Paragraph 18.g.iii. If the written comments state that alterations to the Wet Weather I/I Assessment Update are necessary if the Wet Weather I/I Assessment Update is to satisfactorily accomplish the goals set out in Paragraph 18.g.i., the comments will describe in detail the needed alterations and the justification supporting those alterations. CCH shall implement the alterations detailed by EPA or shall invoke the Dispute Resolution procedures set forth in Section XII.

v. CCH shall implement the Wet Weather I/I Assessment Update consistent with the following schedule.

- No later than August 1, 2011, CCH shall complete the collection of precipitation and flow monitoring data required for the Wet Weather I/I Assessment Update unless a request for extension of time has been granted pursuant to subparagraph viii. below.

- No later than December 31, 2012, CCH shall finalize a Peak Flow Cost-Effective Analysis Report.

vi. Except as provided in subparagraph viii. below, CCH shall submit to EPA and DOH, by no later than December 31, 2012, a Preliminary Deferred Projects Report, and, by no later than November 30, 2013, a Final Deferred Projects Report. Both the Preliminary Deferred Projects Report and the Final Deferred Projects Report shall include, with regard to each of the Deferred Projects, a proposed project scope and a proposal as to whether:

(a) The project is appropriate to construct by no later than June 30, 2020;

(b) The project is reasonably necessary to prevent capacity-related spills from its Wastewater Collection System during wet weather through the year 2030, but not appropriate to construct by a deadline of June 30, 2020; or

(c) The project is not reasonably necessary to prevent capacity-related SSOs from its Wastewater Collection System during wet weather through the year 2030.

To the extent CCH takes the position that any of the Deferred Projects are not appropriate to construct by June 30, 2020, CCH shall provide its technical justification for not proceeding with that project. This justification shall address, for each affected sewer line, the record of capacity-related SSOs since 1999, sewer manhole water level readings and/or flow data, and hydraulic flow model projections to provide a basis for discussion of the capacity projections as a result of not constructing the project. EPA and DOH may provide written comments to CCH on the Preliminary Deferred Projects Report within 90 Days following submission. CCH shall address EPA and DOH comments in the Final Deferred Projects Report. CCH's submittal of the Final Deferred Projects Report to EPA and DOH shall be for review and approval in accordance with Section IX (Review and Approval of Deliverables) of this Decree.

vii. Except as provided in subparagraph viii. below, CCH shall submit, by no later than December 31, 2013, a Wet Weather I/I Assessment Update to EPA and DOH. The Wet Weather I/I Assessment Update shall include the following elements:

- (a) CCH shall document that it has completed all of the tasks provided for in Paragraph 18.g.i. through 18.g.vi.;
- (b) CCH shall discuss the results of the monitoring and modeling effort (including discussion of any limitations on the reliability of the conclusions drawn from the monitoring effort). The report shall include the results of flow and rainfall monitoring, sewer manhole level readings, records of capacity-related spills and analysis, and model projections of Wastewater Collection System flows, capacity-related SSO locations, and peak influent flows to each WWTP; and
- (c) CCH shall identify New Projects CCH proposes as reasonably necessary to prevent capacity-related spills from its Wastewater Collection System during wet weather through the year 2030 and the appropriate schedule for implementing those projects.

viii. If insufficient rainfall has occurred to generate reliable data for the Wet Weather I/I Assessment Update, CCH may, by no later than December 1, 2011, submit a proposal to extend for one year the deadline for submission of the Final Deferred Projects Report and the Wet Weather I/I Assessment Update to EPA and DOH for review and approval in accordance with Section IX (Review and Approval of Deliverables) of this Decree. As part of this proposal, CCH shall identify proposed modifications to the Work Plan that will, to the extent feasible, improve the reliability of the data generated in the additional year so no further time extensions will be necessary. The proposal for the one-year extension shall be deemed approved unless EPA disapproves the proposal by

February 15, 2012. If disapproved, EPA shall provide technical justification for the disapproval, and if CCH does not agree with the technical justification provided by EPA, CCH may invoke the procedures of Section XII (Dispute Resolution) of this Decree.

ix. As compliance milestones, CCH shall Complete Construction of the Deferred Projects identified as necessary in the Final Deferred Projects Report as approved and prioritized for completion by no later than June 30, 2020, and shall comply with the following interim requirements:

- (a) As interim compliance milestones, by no later than December 31, 2016, CCH shall award the detailed design contract for each of the projects.
- (b) As interim compliance milestones, by no later than July 31, 2018, CCH shall award the contract to construct each of the projects.

x. As a compliance milestone, within 12 months of the approval of the Final Deferred Projects Report provided for by Paragraph 18.g.vi., CCH shall update its Capital Improvement Plan to include:

- (a) Deferred Projects determined to be reasonably necessary to prevent capacity-related spills from its Wastewater Collection System during wet weather through the year 2030, but not appropriate to construct by a deadline of June 30, 2020; and
- (b) New Projects (identified pursuant to Paragraph 18.g.vii.(c)) determined to be reasonably necessary to prevent capacity-related spills from its Wastewater Collection System during wet weather through the year 2030.

In updating the Capital Improvement Plan to include these projects, CCH shall include a description of the project and a projected schedule for completion of the project consistent with the findings of the Wet Weather I/I Assessment Update.

19. Gravity Main Condition Assessment.

a. General Requirements. CCH shall conduct a comprehensive inspection and assessment of selected gravity mains in accordance with this Paragraph. The Condition Assessment shall be directed at identifying gravity main defects or conditions that may cause or contribute to SSOs, including, but not limited to, design and construction defects, structural defects, debris, root intrusion, or grease accumulation. The Condition Assessment shall be directed at gravity mains in asset classes that CCH determines to be associated with an elevated risk of SSOs. CCH shall classify its gravity sewer assets based on the decade of installation, the pipe material, the pipe diameter, the pipes' relationship to the groundwater table, and other factors determined to be appropriate by CCH. In addition to the selection of gravity mains to inspect and assess based on asset classes, CCH shall consider site-specific information regarding particular gravity mains that may justify inspection and assessment of certain gravity mains outside of the selected asset classes including, but not limited to, maintenance history, patterns of infiltration and inflow, spatial distribution of problematic line segments, and historical spill data. The inspection and assessment shall be conducted in accordance with the following requirements:

(i) CCH shall use closed circuit television ("CCTV") to inspect and assess all selected gravity mains, unless CCH can demonstrate that an alternative inspection method will provide comparable or equivalent information about gravity main defects and conditions for that sewer line segment;

(ii) CCTV inspections and assessments required by this Paragraph shall be performed in accordance with NASSCO Pipeline Assessment and Certification Program standards; and

(iii) CCH shall ensure that the CCTV operators and technicians conducting the condition assessment are properly trained and certified in the NASSCO Pipeline Assessment and Certification Program.

b. Implementation of Condition Assessment for Gravity Mains. As

performance requirements, CCH shall inspect and assess: (i) 300 miles of gravity mains from January 1, 2009, to no later than three years after the Effective Date of this Consent Decree; and (ii) a total of 650 miles of gravity mains, beginning from January 1, 2009, by no later than June 30, 2020.

20. Gravity Main Rehabilitation and Replacement Program.

a. General Requirements. CCH will undertake a ten-year Rehabilitation and Replacement Program for its gravity mains pursuant to this Paragraph in order to take corrective action necessary to address deficiencies in its system, reduce the risk of SSOs, and lead to a long-term sustainable renewal of its infrastructure. Pursuant to this Program, CCH shall complete a total of 144 miles of Rehabilitation and Replacement projects by no later than June 30, 2020. As set forth in subparagraph c. below, CCH shall complete no less than 63 miles of Rehabilitation and Replacement projects by the end of Year Three.

b. Rehabilitation and Replacement Plan.

i. By no later than three years after the Effective Date of this Consent Decree, CCH shall submit a Rehabilitation and Replacement Plan (“RR Plan”) to EPA and DOH for review and approval in accordance with Section IX (Review and Approval of Deliverables) of this Decree. In order to prioritize necessary projects, the RR Plan shall utilize the results of the Condition Assessment conducted pursuant to Paragraph 19 and other systematic inspection and assessment methodologies used by CCH to identify gravity mains that require Rehabilitation or Replacement. The RR Plan may also select gravity mains based on overflow history, age, material of construction, maintenance history, and other factors determined to be appropriate by CCH based on sound engineering practice.

ii. The RR Plan shall project the necessary Rehabilitation and Replacement work for Years Four through Ten, specifying the number of miles of gravity mains to be rehabilitated or replaced on an annual basis. The RR Plan shall propose a minimum of 11.5 miles per year of Rehabilitation and

Replacement projects for Years Four through Nine and 12 miles of Rehabilitation and Replacement projects for Year Ten.

c. Rehabilitation and Replacement Program for Years One through Three. CCH shall Complete Construction of the gravity main Rehabilitation and Replacement projects identified in Appendix H to this Decree in Years One through Three. CCH's responsibility to complete these projects by the end of Year Three is a performance requirement for purposes of this Consent Decree. Gravity main projects identified in Appendix H to this Decree qualify for purposes of achieving the 63-mile requirement for Years One through Three, even if the projects are completed prior to Year One.

d. Implementation of RR Plan for Gravity Mains. CCH shall implement the RR Plan as approved, provided, however, that: (i) CCH shall retain the discretion to prioritize work based upon data as it becomes available; and (ii) CCH shall not be required under this Paragraph to complete more than 144 miles in Years One through Ten. In no event shall the projects set forth in Appendix H be counted in achieving compliance with the mileage requirements for Years Four through Ten in the approved RR Plan. Completing a minimum of 11.5 miles of Repair and Rehabilitation work in each year during Years Four through Nine and completing a minimum of 12 miles of Repair and Rehabilitation work in Year Ten are annual performance requirements for purposes of this Consent Decree.

e. "Banking" of Excess Miles of Pipe. If, from January 1, 2009, through Year Three, CCH completes the projects set forth in Appendix H and Rehabilitates or Replaces additional miles of gravity main sewer pipe, or if, in any Year during Years Four through Ten, CCH Rehabilitates or Replaces more than the annual number of miles of gravity main sewer pipe required pursuant to the approved RR Plan, CCH may "bank" the excess miles of pipe. In any Year beginning in Year Four, CCH may demonstrate compliance with the annual

mileage requirement of the RR Plan through a combination of miles rehabilitated or replaced in that Year and “banked” miles of Rehabilitation and Replacement from any previous Years; provided, however, that once a banked mile of Rehabilitation and Replacement has been used in one Year, it may not be used in any subsequent Year.

21. Modification of Construction Deadlines. If CCH and EPA, after consultation with DOH, agree, the enforceable construction deadlines prior to June 30, 2020 applicable to projects pursuant to Paragraph 18 and the deadlines applicable to the gravity main rehabilitation and replacement projects identified in Paragraph 20.c and Appendix H to this Decree may be adjusted to address unforeseen project contingencies affecting construction schedules. CCH and the Governments agree to work in good faith to adjust these schedules as necessary to address such contingencies. The revised schedule submitted by CCH shall provide for the expeditious completion of the work in Paragraphs 18 and 20.c. consistent with sound engineering practices and shall extend no later than December 31, 2016, for Paragraph 20.c. projects and no later than June 30, 2020, for Paragraph 18 projects. CCH shall provide Intervenors with timely notice of a CCH proposal to modify a deadline pursuant to this Paragraph, and Intervenors may provide Governments with comments on CCH’s proposal. Any dispute with regard to any schedule adjustment proposed pursuant to this Paragraph shall be subject to dispute resolution pursuant to Section XII (Dispute Resolution) of this Decree.

22. Gravity Main Cleaning and Maintenance Program.

a. CCH shall implement a cleaning cycle that requires CCH to clean each gravity main sewer in CCH’s Wastewater Collection System on a minimum five-year frequency. As an annual performance requirement, CCH shall clean a minimum of 500 miles of gravity main sewers per year, including the repeated cleaning of individual pipe segments, and, as an annual performance requirement, CCH shall clean a minimum of 300 “unique miles” of gravity main