

APPENDIX C

Force Main Spill Contingency Plans

CCH shall prepare and implement spill contingency plans for the Beachwalk, Ala Moana #2, Hart Street, Kaneohe-Kailua, Waimalu, and Kahala force mains (collectively, the “Spill Contingency Plans” or “Plans”). A separate Spill Contingency Plan shall be prepared that is tailored to each force main. The purpose of the Spill Contingency Plans is to establish measures and procedures to respond to a force main spill event in order to minimize discharges to surface waters, to prevent public exposure to the spilled wastewater, and to return the force main to full service as rapidly as possible. The Spill Contingency Plans must be: (1) specific to the location; (2) prepared in accordance with good engineering practices; and (3) readily accessible so that it is a source of usable information for employees or response personnel during an actual emergency.

The contents of the Spill Contingency Plans shall include: Force Main Information; Response Procedures; Equipment, Parts, and Supplies; and Plan Updates. The contents are described as follows:

Force Main Information

This section of the Spill Contingency Plans shall contain salient information about the force main, including location, diameter, length, material, elevations, design flows and pressures, fittings, parallel force mains, location of storm drain inlets and waterways, and a vicinity map of the force main, including nearby gravity sewers and pump stations that may be used for diversion of flows in the event the force main is damaged.

Schematic diagrams shall be included, depicting all valves, access points, and fittings that may be used in an emergency response to contain or divert sewage from the damaged force main.

This section of the Plans shall also describe monitoring and/or alarms at the force main (or its associated pump station) including, but not limited to, SCADA that could serve to notify CCH of a potential spill.

Spill Response

This section of the Spill Contingency Plans shall include a list of the actions that CCH anticipates taking in the event of a force main spill -- including tankering and diversion of flows within the system using parallel force mains or other facilities. This section shall describe the personnel CCH will have available to deploy in the event of a force main spill, the staff notification procedures, and anticipated response times.

This section of the Plans shall include a list of steps that CCH anticipates taking to

minimize discharges from force mains to surface waters including, but not limited to, procedures for shutting down pumps, diversion of sewage to parallel force mains or nearby gravity sewers, spill containment, tankering, emergency discharge locations (to be used only if no other practicable contingencies exist), and notification to industrial/ commercial dischargers and residential customers in the service area to minimize water usage.

This section of the Plans shall include the steps that CCH anticipates taking to notify impacted agencies and the public of the location and size of the force main spill. It shall also include plans for warning members of the public in order to prevent public exposure to spilled wastewater, including, but not limited to, posting procedures.

This section of the Plans shall include the methods CCH anticipates using to clean up and mitigate the impacts of the spill. Procedures for the decontamination of spill sites and disposal of contaminated water, soil, equipment, and supplies shall be included.

In the event of a force main spill, CCH shall implement the Spill Response section of the Spill Contingency Plan applicable to the force main from which the spill occurred.

Equipment, Parts and Supplies

This section of each Spill Contingency Plan shall include a list of the equipment, parts and supplies needed to support the Spill Contingency Plan including response and repair equipment, spare parts, and supplies that can be used in the event of a force main failure. The response equipment shall include portable pumps, hose or piping, sand bags (or equivalent barrier/diversion devices) and pipe plugs. The supplies shall include replacement pipe, valves, and repair kits. The list shall identify the location of all such equipment, parts, and supplies.

Practice Drills

For each Plan, CCH shall practice the Spill Contingency Plan procedures, including response and notification drills, and make adjustments to the Plan as needed based on the results of the practice events. The practice drills shall be conducted at least annually for each Plan. The location of the practice drill and the scenario will be selected by CCH on a rotating basis.

Plan Updates

CCH shall review the Spill Contingency Plans following the annual practice drill and Plan evaluations, and shall revise the Spill Contingency Plans as necessary to address any pertinent changed conditions and to ensure the functionality of the key components of the Plans; provided however, such revisions shall not eliminate any element of the Spill Contingency Plan required by this Appendix.

CCH shall provide a copy of any revised spill contingency plans to EPA and DOH.