UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, California 94105

IN THE MATTER OF:	)	DOCKET NO. CWA-309(a)-24-003
	)	
County of Hawai'i	)	**ADMINISTRATIVE ORDER ON CONSENT**
25 Aupuni Street	)	
Hilo, HI 96720	)	
Respondent.	)	*Proceeding under Section 309(a) of the*
	)	*Clean Water Act, 33 U.S.C. § 1319(a)*
	)	

I. INTRODUCTION

1. This Administrative Order on Consent (Order) is entered into voluntarily by the United States Environmental Protection Agency (EPA) and the County of Hawai'i (Respondent).

II. STATUTORY AUTHORITY

2. Section 309(a) of the Clean Water Act (CWA), 33 U.S.C. § 1319(a), provides that, whenever the EPA finds that any person is in violation of any condition or limitation which implements, *inter alia*, Sections 301(a) and 402 of the CWA, 33 U.S.C. §§ 1311(a) and 1342, the EPA may issue an order requiring such person to comply with such condition or limitation, and shall specify a time for compliance that the EPA determines to be reasonable.

3. The following Findings of Fact and Determinations of Law are made and this Order is issued pursuant to the authority vested in the EPA by Section 309(a) of the CWA, 33 U.S.C. § 1319(a), as amended. This authority has been delegated to the Regional Administrator of the EPA, Region IX, and further delegated by the Regional Administrator to the Director of the Enforcement and Compliance Assurance Division of the EPA, Region IX.

4. Respondent neither admits nor denies the factual allegations and legal conclusions set forth in Section IV of this Order, except to the extent that those allegations provide the EPA with a jurisdictional basis to enforce this Order.

III. STATUTORY AND REGULATORY FRAMEWORK

5. CWA Section 301(a), 33 U.S.C. § 1311(a), makes it unlawful for a person to discharge pollutants from a point source into waters of the United States, except as authorized by a National Pollutant Discharge Elimination System (NPDES) permit issued pursuant to CWA Section 402, 33 U.S.C. § 1342.

6. CWA Section 402, 33 U.S.C. § 1342, establishes the NPDES program and authorizes the EPA and authorized states to issue permits governing the discharge of pollutants from point sources into waters of the United States.

7. CWA Section 502(12), 33 U.S.C. §1362(12), defines "discharge of a pollutant(s)" to mean any addition of any pollutant to navigable waters from any point source or any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.

8. CWA Section 502(6), 33 U.S.C. § 1362(6), defines "pollutant" to include, among other things, "municipal waste discharged into water."

9. CWA Section 502(14), 33 U.S.C. § 1362(14) defines "point source" to include "any discernable, confined and discrete conveyance ... from which pollutants are or may be discharged."

10. The State of Hawaii is authorized under the CWA to issue individual NPDES permits.

IV. FINDINGS OF FACT AND DETERMINATIONS OF LAW

11. The County of Hawai'i (Respondent) is a "municipality" and therefore is a "person" within the meaning of CWA § 502(5), 33 U.S.C. § 1362(5).

12. Respondent owns and operates the wastewater collection, treatment, and discharge facilities specified herein, which include approximately 105 miles of gravity sewer lines, 14 miles of sewer force mains, 16 sewer pump stations, three wastewater treatment plants (WWTP) with National Pollutant Discharge Elimination System (NPDES) permits (Hilo, Pāpa'ikou, and Kula'imano), one wastewater treatment facility with an Underground Injection Control (UIC) permit (Honokaa WWTP), and two wastewater treatment facilities that utilize subsurface disposal (Kapehu and Kealakehe WWTP). The county owns and operates two wastewater systems that terminate in cesspools.[1] The Respondent operates the Kaloko WWTP for the County Office of Housing and Community Development that has a UIC permit.

13. Wastewater discharges from Respondent's facilities include municipal waste, biological oxygen demand, total suspended solids, enterococcus, and therefore contain "pollutants," as defined by CWA Section 502(6), 33 U.S.C. § 1362(6).

14. As detailed herein, Respondent's discharge of pollutants in wastewater into navigable waters constitutes a "discharge of pollutants" within the meaning of CWA Section 502(12), 33 U.S.C. § 1362(12).

15. Respondent's Hilo, Pāpa'ikou, and Kula'imano wastewater treatment facilities discharge into the Pacific Ocean at outfall locations authorized through NPDES permits. The Pacific Ocean

[1] These two WWTPs are the subject of a separate Order, SDWA-UIC-AOC-2017-0002.

is a "navigable water" and a "water of the United States, including the territorial seas" within the meaning of CWA Section 502(7), 33 U.S.C. § 1362(7), and implementing regulations.

16. The Hawaii State Department of Health (DOH) issued NPDES Permit No. HI0021377 for the Hilo Wastewater Treatment Plant (Hilo Permit) to Respondent effective on May 1, 2020. The Permit authorizes Respondent to discharge secondary treated wastewater through Outfall Serial No. 001 to the Pacific Ocean through a diffuser at Puhi Bay. The Hilo WWTP serves Hilo, Hawaii and surrounding areas and treats domestic and commercial wastewater generated by approximately 30,000 residents.

17. The DOH issued NPDES Permit No. HI0021113 for the Pāpa'ikou Wastewater Treatment Plant (Pāpa'ikou Permit) to Respondent effective June 1, 2021. The Permit authorizes Respondent to discharge secondary treated wastewater through Outfall Serial No. 001 to the Pacific Ocean at Waipahi Point. The Pāpa'ikou WWTP serves the communities of Pāpa'ikou and Paukaa and treats domestic wastewater generated by approximately 3,500 residents.

18. The DOH issued NPDES Permit No. HI0020770 for the Kula'imano Wastewater Treatment Plant (Kula'imano Permit) to Respondent effective on April 1, 2017. The Permit authorizes Respondent to discharge secondary treated wastewater through Outfall Serial No. 001 to the Pacific Ocean. The Kula'imano WWTP serves Pepeekeo, Hawaii and treats domestic wastewater generated by approximately 1,500 residents.

19. The Hilo Permit, Pāpa'ikou Permit, and Kula'imano Permit (collectively the "NPDES Permits") each provide authorization for discharges "in accordance with effluent limitations, monitoring requirements and other conditions set forth herein," and in the "Standard NPDES Permit Conditions" (http://health.hawaii.gov/cwb/site-map/home/standard-npdes-permit-conditions/). These permit requirements, which are identical except where indicated, include:

a. DOH "Standard NPDES Permit Conditions" Section 8 (version 15), "Duty to mitigate," requires "The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit or applicable law." See Permit, p. 1.

b. DOH "Standard NPDES Permit Conditions" Section 9 (version 15), "Proper operation and maintenance," requires "The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the Permittee only when the operation is necessary to achieve compliance with the conditions of this permit." See Permit, p. 1.

c. Part A.1 of the NPDES Permits, "Effluent Limitations and Monitoring Requirements," authorize only the discharge of treated wastewater through Outfall Serial No. 001 for

the Hilo, Pāpa'ikou, and Kula'imano WWTPs, and prohibit the discharge of pollutants in locations that were not authorized in the NPDES Permits.

d. Part A.1 of the NPDES Permits, "Effluent Limitations and Monitoring Requirements," provides that the Permittee's authorizations to discharge treated wastewater is subject to a monthly average effluent limitation and a maximum daily effluent limit for enterococci that is specific to each permit for the Hilo WWTP, Kula'imano WWTP and Pāpa'ikou WWTP.

e. Part A.1 of the Kula'imano Permit, "Effluent Limitations and Monitoring Requirements," provides that the Permittee's authorization to discharge treated wastewater is subject to a monthly average effluent limitation and a maximum daily effluent limit for Total Ammonia (as Nitrogen).

20. Representatives of the EPA and/or the DOH conducted a number of compliance inspections of Respondent's facilities, including the following:

a. March 7, 2022 inspection: Pāpa'ikou WWTP, report transmitted to Respondent on April 14, 2022.

b. March 7, 2022 inspection: Kula'imano WWTP, report transmitted to Respondent on April 14, 2022.

c. October 7, 2021 inspection: Kealakehe WWTP (no NPDES permit) and collection system, report transmitted to Respondent on December 21, 2022.

d. October 6, 2021 inspection: Hilo WWTP and collection system, report transmitted to Respondent on December 21, 2022.

e. October 6, 2021 inspection: Pāpa'ikou WWTP and collection system, report transmitted to Respondent on December 21, 2022.

f. October 6, 2021 inspection: Kula'imano WWTP and collection system, report transmitted to Respondent on December 21, 2022.

g. May 24, 2021 inspection: Hilo WWTP, report transmitted to Respondent on July 12, 2021.

h. February 11, 2021 desk audit: county wide collection system, report transmitted to Respondent on May 20, 2021.

i. January 22, 2019 inspection: Hilo WWTP, report transmitted to Respondent on April 23, 2019.

j. December 16, 2016 inspection: Pāpa'ikou WWTP, report transmitted to Respondent on March 23, 2017.

k. December 16, 2016 inspection: Kula'imano WWTP, report transmitted to Respondent on March 23, 2017.

l. December 15, 2016 inspection: Hilo WWTP, report transmitted to Respondent on March 23, 2017.

21. **Effluent Limit Exceedances**: Records provided by Respondent show that effluent concentrations in the discharges from Respondent's WWTPs exceeded NPDES permit effluent limits, from 2017 to the present, as follows:

a. At Hilo WWTP for October 2021, Respondent reported a maximum Enterococci concentration of 39,000 CFU/100 mL, exceeding the daily maximum effluent limitation of 11,700 CFU/100 mL.

b. At Pāpa'ikou WWTP for July 2021, Respondent reported a maximum Enterococci concentration of 740 CFU/100 mL, exceeding the daily maximum effluent limitation of 104 CFU/100 mL.

c. At Pāpa'ikou WWTP for July 2021, Respondent reported a monthly geomean concentration of 14 CFU/100 mL, exceeding the monthly effluent limitation of 7 CFU/100 mL for the month of July 2021.

d. At Kula'imano WWTP for September 2019, Respondent reported a maximum Enterococci concentration of 230 CFU/100 mL, exceeding the daily maximum effluent limitation of 104 CFU/100 mL.

e. At Kula'imano WWTP for March 2022, Respondent reported a maximum Total Ammonia (as Nitrogen) concentration of 1,417 µg/L, exceeding the single sample maximum effluent limitation of 320 µg/L.

22. **Operation and Maintenance of Treatment Units at the WWTPs**: From a review of the records provided by Respondent and observations made during inspections, the EPA and DOH inspectors have identified multiple treatment units that have been out of service and or inadequately operated and maintained at the Hilo, Pāpa'ikou, and Kula'imano WWTPs. In addition, Respondent does not have a program in place to systematically repair, rehabilitate, or replace the aging treatment units prior to failure. These deficiencies have affected the efficiency and operations of the treatment systems. The EPA has documented significant operation and maintenance deficiencies from 2017 to December 1, 2022, which include:

a. At Hilo WWTP, one of the two aerated grit screening tanks is severely corroded and has been out of service since at least 2016. The second grit screening tank is operable but also exhibits significant corrosion.

b. At Hilo WWTP, one of the two pre-aeration tanks is severely corroded and has been out of service since at least 2016. The second grit screening tank is operable but exhibits corrosion.

c. At Hilo WWTP, multiple gate valves at the headworks are severely corroded and inoperable.

d. At Hilo WWTP, the rotating distributor arms at the two biotowers were significantly corroded with blocked outlets and leaks that were observed during the 2019 inspection. Respondent did not correct this problem until November 2021, when Respondent replaced the distributor arms.

e. At Hilo WWTP, two of the four recirculating pumps at the biotowers were inoperable and were replaced with temporary trailer pumps from approximately 2015 to 2021. Respondent did not correct this problem until 2021, when Respondent replaced all biotower pumps.

f. At Hilo WWTP, the isolation valve at the biotowers waste activated sludge (WAS) pumps is no longer operational, therefore the recirculation rate of waste activated sludge is unknown and cannot be controlled.

g. At Hilo WWTP, sludge clumping was observed floating in the clarifiers during multiple inspections from approximately 2013 to 2021, indicating improper operation of the clarifiers.

h. At Hilo WWTP, the sludge digesters are severely corroded and the gate valve is inoperable. The inoperable gate valve prevents isolation of the two digesters, and therefore the digesters cannot be cleaned and maintained.

i. At Hilo WWTP, the floating roof of one of the two sludge digester tanks became stuck when an overtopping of the sludge occurred, preventing the roof from operating properly and preventing maintenance of the digester.

j. At Hilo WWTP, the roofs of both digester tanks are significantly corroded, which prevents maintenance of the tanks due to unsafe conditions.

k. At Hilo WWTP, the boiler for heating the sludge digester tanks has been inoperable since at least 2016.

l. At Pāpa'ikou WWTP, the influent grinder screen has been inoperable since at least 2016, causing Respondent to rely on a secondary bar screen, allowing small materials such as sanitary wipes and small plastics to pass through the bar screen and cause maintenance problems.

m. At Pāpa'ikou WWTP, sludge clumping was observed floating in the clarifiers during multiple inspections, indicating poor operation of the clarifiers.

n. At Pāpa'ikou WWTP, the sludge dewatering centrifuge equipment has been inoperable since at least 2016. As a result, Respondent hauls the sludge solids to the Hilo WWTP for processing.

o. At Kula'imano WWTP, the influent grinder screen has been inoperable for several years, causing Respondent to rely on a secondary bar screen. Materials passing through the influent screens including floatables, plastics, wipes and fats oils and greases, cause maintenance problems within the facility.

p. At Kula'imano WWTP, sludge clumping was observed floating in the clarifiers from approximately 2013 to 2021, indicating poor operation of the clarifiers.

q. At Kula'imano WWTP, the sludge dewatering centrifuge equipment has been inoperable since at least 2016. As a result, Respondent hauls the sludge solids to the Hilo WWTP for processing.

r. At Hilo WWTP on November 22-23, 2022, approximately 2.2 million gallons of primary treated and partially disinfected sewage did not receive biological treatment due to a broken air feed to the solids contactor unit and discharged through the outfall diffuser pipe to Puhi Bay.

s. At Kula'imano WWTP on February 21, 2022, approximately 1,055 gallons of secondary treated but not disinfected sewage discharged into the coastal waters near Kula'imano Homestead Road, via a drainage swale, when the disinfection treatment system failed due to an electrical problem.

t. At Hilo WWTP on January 27, 2022, approximately 8,600 gallons of partially treated and disinfected sewage discharged to Puhi Bay through the outfall diffuser pipe due to a failure of the trickling filter pumps caused by the temporary loss of electricity.

u. At Kula'imano WWTP on December 4, 2021, approximately 14,340 gallons of partially treated sewage discharged through the outfall to the coastal waters fronting Pepeekeo town due to a power outage.

v. At Kula'imano WWTP on December 2, 2021, approximately 14,340 gallons of primary treated sewage discharged through the outfall to coastal waters fronting Pepeekeo town when the aeration basin and disinfection treatment systems failed due to power loss and a generator failure.

w. At Kula'imano WWTP on September 19-20, 2021, an in-plant spill of approximately 6,240 gallons of untreated sewage occurred at the headworks due to a plugged grit screw and was contained on-site.

x. At Hilo WWTP on April 15, 2020, approximately 3,403 gallons of waste activated sludge was spilled to ground due to a disconnected flexible hose during maintenance activities and was contained on-site.

y. At Kula'imano WWTP on December 28-29, 2018, approximately 66,000 gallons of secondary treated sewage discharged through the outfall to coastal waters fronting Pepeekeo town when a pump failure caused the disinfection treatment system to fail.

z. At Kula'imano WWTP on November 27-28, 2017, approximately 94,666 gallons of primary treated sewage discharged through the outfall to coastal waters fronting Pepeekeo town when the aeration basin treatment system failed due to a power interruption.

23. **Operations and Maintenance Affecting Health and Safety**: From a review of the records provided by Respondent and observations made during inspections, inspectors have identified potential health and safety concerns due to failure to properly operate and maintain equipment. At Hilo WWTP, significant corrosion of the floating roof at the sludge digester tank prevents operator access due to unsafe conditions. At Hilo WWTP, lightning rod wiring at the top of the sludge digesters had corroded to the point where there was no connection to ground, in an area where there may be potential presence of methane in the digesters, which may create a hazardous condition. At the non-NPDES Kealakehe WWTP facility the EPA inspectors observed hypodermic needles in the primary lagoon due to inadequate influent screening, which pose a risk to operators.

24. **Sewer Collection Systems Spills and Operations and Maintenance**: Based on a review of the records provided by Respondent, including spill reports and observations made during inspections, inspectors have determined that Respondent is not operating and maintaining its sewer collections systems to prevent sewage spills. Respondent also has not sufficiently assessed the condition of its sewer systems and does not have a program in place to systematically repair, rehabilitate, or replace its aging force mains prior to failure. Based on age, many force mains appear to be reaching their end of life and failure may result in significant spill volumes. Most force mains do not have back-up redundancy in case of failure. A review of sewage spills from the sewer collection systems since 2016 indicates that large spills have occurred primarily due to debris blockage, overflows at pump stations (especially during large storm events), ruptures in force mains, and corrosion. Inspectors have documented the following significant sewage spills (greater than 1000 gallons) from 2017 to December 1, 2022, from the collection systems:

a. On May 16, 2021, approximately 67,800 gallons of sewage spilled from the gravity line along Hawaii Belt Road in Pāpa'ikou, reaching Kapue Stream and ultimately reaching

the Pacific Ocean. The spill was due to a blockage in the sewer. During response efforts, operators also found holes due to corrosion at the top of the sewer pipe alongside the bridge at the Kapue Stream location.

b. On March 9, 2021, approximately 400,000 gallons of sewage was discharged via a drainage swale to the coastal waters fronting Pāpa'ikou Wastewater Treatment plant, caused by heavy rain.

c. On November 30, 2020, approximately 28,000 gallons of sewage spilled from the force main along Banyan Drive in Hilo near the Banyan pump station, reaching the Pacific Ocean. The spill occurred when a contractor working on the sidewalk accidently punched a hole into the force main.

d. On July 10-11, 2020, approximately 20,000 gallons of sewage spilled from the force main at the Keopu pump station along Ali'i Drive in Kailua-Kona, reaching the Pacific Ocean. The spill was due to a failure in the cast iron force main caused by corrosion.

e. On September 28, 2017, approximately 5,000 gallons of sewage spilled from the gravity sewer line in Naalehu, discharging to the ground without reaching surface waters. The spill was due to a badly corroded sewer line.

f. On June 13, 2017, approximately 2,000 gallons of sewage spilled from the force main along Ali'i Drive in Kailua-Kona near the Lanihau sewage pump station, reaching the Pacific Ocean. The spill was due to a rupture in the cast iron force main caused by corrosion.

g. On June 5, 2017, a pipe failure caused secondary treated and disinfected wastewater to discharge to coastal waters near the Pua sewage pump station.

h. On April 3, 2017, approximately 41,000 gallons of sewage spilled from the manhole at Waianuenue and Laimana Street intersection in Hilo, reaching Wailuku River and the Pacific Ocean. The spill was due to debris blockage in the gravity sewer line.

i. On January 27, 2017, approximately 5,000 gallons of sewage spilled from the Paukaa pump station along Paukaa Drive in Hilo, reaching the Pacific Ocean. The spill was due to rainfall overwhelming the capacity of the pump station which led to the wet well overflowing.

25. Based on review of the records provided by Respondent and observations during inspections, Respondent does not have a program in place to systematically repair, rehabilitate, and replace aging infrastructure prior to failure.

26. Based on a review of the records provided by Respondent and observations during inspections, Respondent does not have a comprehensive capital improvement planning (CIP) program to evaluate criticality of infrastructure and to plan for anticipated failures. Respondent does not have an adequate financial plan with a sustainable funding mechanism to plan costs and financing for necessary system capital improvement projects and repairs.

27. Respondent's discharge of effluent from the Hilo, Pāpa'ikou and Kula'imano WWTPs in excess of one or more effluent limits contained in these WWTP's NPDES Permits, as set forth in Paragraph 21, are not in compliance with permit part A.1 and violate section 301(a) of the CWA, 33 U.S.C. §§ 1311(a).

28. Respondent's systemic failure to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of the NPDES Permits, as set forth in Paragraphs 22-23, violates "Standard NPDES Permit Conditions" Sections 8 and 9 of the NPDES Permits for the Hilo, Pāpa'ikou, and Kula'imano WWTPs.

29. Respondent's discharges of pollutants from its sewer collection systems to waters of the United States, as set forth in Paragraph 24, were not authorized by an NPDES permit, and therefore violate CWA Section 301(a), 33 U.S.C. § 1311(a).

30. For the violations identified in this Section, the EPA is authorized to issue an order requiring compliance. CWA Section 309(a)(3), 33 U.S.C. § 1319(a)(3).

V. ORDER FOR COMPLIANCE ON CONSENT

31. Based on the foregoing Findings of Fact and Determinations of Law and pursuant to the authority of section 309(a) of the CWA, 33 U.S.C. § 1319(a), IT IS HEREBY ORDERED and AGREED that Respondent shall do the following:

32. Fully implement the actions specified in **Appendix 1,** in accordance with the schedule set forth in Appendix 1. Appendix 1 is incorporated herein by reference and is an enforceable provision of this Order.

a. For each design, plan and evaluation in Appendix 1 that Respondent is required to submit to the EPA, the EPA will review the submittal to evaluate whether the requirements of this Order have been met. The EPA may also provide comments on the content of any submittal to assist Respondent in effectively achieving compliance with this Order.

b. All final submittals specified in Appendix 1 (including, but not limited to plans, programs, designs, assessments and schedules) shall be deemed incorporated into, and enforceable pursuant to, this Order.

c. The schedule set forth in Appendix 1 assumes that the EPA and DOH will take thirty (30) calendar days to review each submittal. The EPA and DOH may take more than thirty calendar days to review certain submittals, in which case, the EPA will address any adjustments to this review time, and the effect of any such adjustments on Respondent's subsequent due dates, on a case-by-case basis.

d. Nothing in Section V or Appendix 1 waives, alters, or affects Respondent's obligations to timely take all measures necessary to address any exceedance, equipment failure, or other event which causes, or threatens to cause, a CWA violation (including any

CWA permit violations), which arises prior to a deadline contained in this Section or Appendix 1, or milestone contained in a Project Tracking Schedule.

e. For any project in Appendix 1 which has a specific deadline for issuing an invitation for bid and for start of construction, should the bids submitted for the project not meet all requirements of the bid specifications, or exceed the engineer's estimate for the project by a significant amount, Respondent may confer with the EPA about steps that Respondent proposes to take, such as rebidding the project or negotiating modifications to the submitted bid(s). If appropriate, the EPA will modify the construction start date for the project to accommodate these additional steps.

33. Within ninety (90) calendar days of the effective date, Respondent shall submit Project Tracking Schedules to the EPA and DOH, and semi-annually thereafter. The Project Tracking Schedules shall establish detailed project timelines for each action set forth in Appendix 1, including start dates, end dates, and milestones and other interim dates for each significant task. The Project Tracking Schedules shall establish the sequential component phases and individual tasks for each action to ensure that all projects will meet compliance requirements on schedule, developed with a consistent methodology to produce semi-annual compliance tracking reports.

34. Semi-annually, beginning on the anniversary of the Effective Date, and continuing each year until the Order is terminated, Respondent shall submit to the EPA and DOH a Semi-annual Compliance Report, which shall describe: (a) all of Respondent's compliance activities during the prior six months; (b) any delays or failures to timely implement any of the compliance actions during the prior six months; and (c) the schedule of activities for the coming year and any issues or events that might affect timely implementation of any future compliance activities. Respondent shall review the Project Tracking Schedules and identify any interim date, milestones or project timeframes that are delayed or are anticipated to be delayed. Annually, respondent shall convene a meeting with the EPA to meet in person or virtually to discuss anticipated progress.

35. If Respondent becomes aware of any event which may delay the timely performance of any obligation under this Order, Respondent shall notify the EPA and DOH contacts listed in Paragraph 42 as soon as possible. Respondent shall provide the reasons for the delay, the anticipated duration of the delay, and the measures to be taken to prevent or minimize the delay. If Respondent is unable to provide any of this information at the time of initial notice, Respondent shall provide this information within fourteen (14) days of the initial notice, except as otherwise directed by the EPA. If Respondent revises its Project Tracking Schedules in response to such an event, Respondent shall provide the updated Project Tracking Schedules to the EPA and DOH. Compliance with this paragraph does not modify any deadline or other requirement in this Order, nor does it constitute compliance with any deadline or other requirement in this Order.

36. If the DOH issues any order(s) to Respondent under state authorities which address any of the facilities or matters covered by this Order, Respondent shall comply with the DOH order(s), in addition to this Order.

37. If Respondent believes there to be a conflict between the requirements of this Order and a DOH order, or any specific directions provided by the EPA or DOH to Respondent regarding implementation of any order, Respondent shall immediately notify the EPA and DOH of the apparent conflict and, as appropriate, request clarification from the agencies or suggest steps to address the requirements of the orders. Respondent shall comply with the EPA's directions for resolving the potential conflict between this Order and any DOH order.

38. The EPA will use its best efforts to provide technical assistance to Respondent in order to support Respondent in fulfilling the obligations required by this Order.

VI. FINAL REPORT AND TERMINATION OF THE ORDER

39. Within ninety (90) calendar days after Respondent has fully completed and implemented the actions required by Section V of this Order, Respondent shall submit for the EPA's review and approval a final report (Final Report) that includes a description and timeline of all of actions which have been taken toward achieving compliance with this Order.

40. If the EPA determines that all the requirements of this Order have been completed and implemented in accordance with this Order, the EPA will provide notice to Respondent and this Order shall be deemed terminated.

41. If the EPA determines that any requirement has not been completed and implemented in accordance with this Order, the EPA will notify Respondent, provide a list of deficiencies, and require Respondent to modify its actions as appropriate to correct such deficiencies. If so required, Respondent shall implement the modified requirement(s) and submit a modified Final Report. Should Respondent disagree with the EPA's list of deficiencies or required corrections, the parties shall engage in informal negotiations. If Respondent continues to disagree with the EPA, Respondent may invoke the Dispute Resolution process set forth in Section VIII of this Order.

VII. SUBMISSIONS AND RECORD RETENTION

42. Respondent shall submit all written communications, including the Final Report, electronically in a format that allows them to be searchable by key word. Respondent shall send all submittals to the following e-mail addresses. The EPA will inform Respondent of any changes to the designated notice recipients. Submissions will be deemed made on the date they are sent electronically.

As to the EPA:

John Tinger, Enforcement and Compliance Assurance Division, US EPA.
Tinger.John@epa.gov

Brett Moffatt, Office of Regional Counsel, US EPA.
Moffatt.Brett@epa.gov

As to the DOH:

Bobbie Teixeira, Clean Water Branch, Hawaii Department of Health
Bobbie.Teixeira@doh.hawaii.gov

Dale Sakata, Hawaii Deputy Attorney General, Health Division
dale.k.sakata@hawaii.gov

All reports, notifications, documentation, and submittals required by this Order shall be signed by a duly authorized representative of Respondent as specified by 40 C.F.R. § 122.22 and shall include the following statement:

> "I certify under the penalty of law that this document and all attachments were 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 inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

43. Respondent shall preserve and retain all records and documents now in its possession or control, or which come into its possession or control, that relate in any manner to the performance of the tasks in this Order, until five (5) years after termination of this Order. Respondent shall also instruct its agents to preserve all documents, records, and information of whatever kind, nature or description relating to the performance of the tasks in this Order.

VIII. DISPUTE RESOLUTION

44. Informal Negotiations: Any dispute under this Order shall first be the subject of informal negotiations. If informal negotiations are unsuccessful, the EPA's determination(s) shall control, unless Respondent invokes dispute resolution pursuant to this Section by submitting a written Notice of Dispute and Statement of Position to the EPA at the addresses set forth in Section VII (Submissions and Record Retention).

45. Respondent's Notice of Dispute and Statement of Position: The Notice of Dispute shall reference this provision of this Order and clearly state the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Respondent's position and any supporting documentation relied upon by Respondent.

46. The EPA's Statement of Position: After the EPA has considered the information contained in Respondent's Statement of Position and consulted with the DOH when appropriate, the EPA shall provide Respondent with its Statement of Position. The EPA's

Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The determination(s) set forth in the EPA's Statement of Position shall be binding on Defendants.

47. The parties may continue to engage in discussions regarding the dispute, and may resolve all or part of the dispute, prior to the EPA's issuance of its Statement of Position. The dispute resolution process does not modify the scope of any work or any deadlines set forth in this Order, except as specified in writing by the EPA.

IX. MODIFICATION

48. Any request for modification by Respondent shall include the reason(s) for the request and a timeline for completion. Modification of this Order shall be in writing and shall take effect only upon approval by the EPA. Failure by Respondent to implement any modified requirement(s) shall be a violation of this Order.

X. GENERAL PROVISIONS

49. This Order is binding on Respondent and its officials, officers, directors, partners, agents, employees, successors and assigns, and on all persons, independent contractors, consultants and contractors acting in concert with Respondent.

50. Respondent shall provide a copy of this Order to any successor in interest to its control, operation, or any other interest in any portion of its Facility at least thirty (30) calendar days prior to the transfer, and shall simultaneously notify the EPA in writing, via e-mail, that such notice has been given. Within fourteen (14) calendar days after the effective date of this Order or the date of contracting, whichever is later, Respondent shall provide a copy of this Order to all contractors and/or consultants to perform any of the work described in Section V. Respondent shall condition the transfer of control, operation or any other interest in any portion of its Facility and any contract related to the performance of the work described in Section V upon successful execution of this Order.

51. This Order is not and shall not be construed to be a permit under the CWA, nor shall it in any way relieve or affect Respondent's obligations under the CWA, or any other applicable federal or state laws, regulations, and/or permits. Compliance with this Order shall be no defense to any actions commenced pursuant to such applicable laws, regulations, or permits, nor does it constitute a release.

52. This Order shall in no way affect the rights of the EPA or the United States against any person not a party hereto.

53. This Order shall in no way limit or affect the EPA's authority to obtain information, and to enter, inspect, sample or monitor compliance under any law, permit, court order or agreement.

54. The provisions of this Order shall be severable. If any provision is declared by a court of competent jurisdiction to be unenforceable, then the remaining provisions shall remain in full force and effect. Notwithstanding the foregoing, this Order shall become null and void should a court of competent jurisdiction, in the final decision of a case, determines that Paragraph 32 is unenforceable.

55. Respondent consents to and agrees not to contest the EPA's authority or jurisdiction to issue and enforce this Order. Respondent waives any and all remedies, claims for relief and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Order, including any right of judicial review under Chapter 7 of the Administrative Procedure Act, 5 U.S.C. §§ 701-706.

56. Failure to comply with the terms of this Order may result in liability for statutory civil penalties under section 309(d) of the CWA, 33 U.S.C. § 1319(d), as modified by 40 C.F.R. Part 19. Upon suit by the EPA, a United States District Court may impose such penalties if the court determines that Respondent has violated the CWA as described above and failed to comply with the terms of this Order. In determining the amount of any penalty the court will consider the seriousness of the violations, the economic benefit (if any) resulting from the violations, any history that Respondent may have of such violations, any good faith efforts that Respondent has made to comply with legal requirements, the economic impact a penalty may have upon Respondent, and such other matters as justice may require.

57. Issuance of this Order is not an election by the EPA to forego any remedies available to it under the law, including without limit any administrative, civil or criminal action to seek penalties, fines, or other appropriate relief under the CWA. The EPA reserves all available legal and equitable rights and remedies to enforce any violations cited in this Order, and the right to seek recovery of any costs and attorney fees incurred by the EPA in any actions against Respondent for non-compliance with this Order. Should the EPA pursue such action, Respondent reserves any defenses and affirmative claims it may have with respect to the violations cited in this Order, except that pursuant to Paragraph 55, Respondent may not contest EPA's authority or jurisdiction to issue and enforce this Order.

58. In accordance with section 309(a)(4) of the CWA, 33 U.S.C. § 1319(a)(4), the EPA will provide notice and a copy of this Order to the DOH upon execution.

59. The undersigned signatory for Respondent certifies that he or she is authorized to execute this Order and legally bind the Respondent.

60. For purposes of the identification requirement in section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), and 26 C.F.R. § 162-21(b)(2), performance of the compliance activities called for under Part V of this Order is "restitution," "remediation," or "required to come into compliance with the law."

XI. EFFECTIVE DATE

61. This Order shall become effective on the date it is signed by the EPA.

IT IS SO AGREED AND ORDERED

For the County of Hawai'i:

3-20-2024

Mayor Mitchel D. Roth
for Mayor, County of Hawai'i
25 Aupuni Street
Hilo, HI 96720

Date

Approved by County Council:

Resolution No. 441-24 March 6, 2024

Recommend Approval:

Ramzi Mansour
Director, Environmental Management
County of Hawai'i

Approved As To Form & Legality:

3-19-2024

Deputy Corporation Counsel/ Date
County of Hawai'i

IN THE MATTER OF: COUNTY OF HAWAI'I
DOCKET NO. CWA-309(a)-24-003

IT IS SO AGREED AND ORDERED:

FOR U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 9:

AMY MILLER-BOWEN Digitally signed by AMY MILLER-BOWEN
Date: 2024.03.26 07:08:04 -07'00'

Amy C. Miller-Bowen, Director
Enforcement and Compliance Assurance Division

Date

Of counsel:
Brett Moffatt
Attorney-Adviser
Office of Regional Counsel

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 9
75 Hawthorne Street
San Francisco, California 94105

IN THE MATTER OF:	)	DOCKET NO. CWA-309(a)-24-003
	)	
County of Hawai'i	)	**ADMINISTRATIVE ORDER ON CONSENT:**
25 Aupuni Street	)	**APPENDIX 1**
Hilo, HI 96720	)	
Respondent.	)	*Proceeding under Section 309(a) of the*
	)	*Clean Water Act, 33 U.S.C. § 1319(a)*
	)	

This Appendix (Appendix 1) sets forth the actions and compliance deadlines required by Section V of the Administrative Order on Consent (EPA Order) between the United States Environmental Protection Agency (EPA) and the County of Hawai'i (COH or Respondent). The parties intend for this Appendix to be compatible with, and capable of being incorporated into, one or more orders that may be issued by the State of Hawai'i, Department of Health ("DOH") to the COH.

Each item that is required to be submitted by the EPA Order (including this Appendix), shall be submitted concurrently to EPA and DOH. The COH shall also submit Project Tracking Schedules for all actions listed herein to EPA and DOH, in accordance with Section V of the EPA Order. The requirements and deadlines set forth below are incorporated into, and are enforceable provisions of, the EPA Order, except where expressly limited.

I. CRITICAL CAPITAL IMPROVEMENT PROJECTS

The County shall implement the following critical capital improvement projects and related actions pursuant to the specified compliance schedule. Within 90 days, the COH shall establish interim milestones for construction planning and project development in accordance with the Project Tracking Schedules as specified in Section V of the EPA Order:

1. Hilo WWTP Rehabilitation and Replacement Project: By **September 30, 2024**, the COH shall issue an invitation for bid for the construction proposal for the new or upgraded WWTP. By **August 1, 2025**, the COH shall begin construction on the new or upgraded WWTP, except that after having identified a construction contractor (but prior to August 1, 2025), the COH may submit a construction schedule to EPA and DOH for approval of a different construction start date. By **June 30, 2035**, the COH shall complete construction and begin operation of the new or upgraded WWTP.

a. This project shall include, but not be limited to, the evaluation and repair or replacement of all assets which are inoperable, exhibiting significant corrosion, deteriorating, or otherwise at risk of failure, including the headworks, primary treatment train, and biosolids handling.

2. Kula'imano WWTP Rehabilitation and Replacement Project: By **October 30, 2026**, the COH shall issue an invitation for bid for the construction proposal for the project. By **March 1, 2027**, the COH shall begin construction on the project, except that after having identified a construction contractor (but prior to March 1, 2027), the COH may submit a construction schedule to EPA and DOH for approval of a different construction start date. By **June 30, 2030**, the COH shall complete construction and begin operation of the new and upgraded headworks and Air Delivery System for the aeration basin.

    a. This project shall include, but not be limited to, evaluation and repair of the mechanical screen, barminutor, and aeration basin.

3. Pāpa'ikou WWTP Rehabilitation and Replacement Project: By **October 30, 2027**, the COH shall issue an invitation for bid for the construction proposal for the project. By **March 1, 2028**, the COH shall begin construction on the project, except that after having identified a construction contractor (but prior to March 1, 2028), the COH may submit a construction schedule to EPA and DOH for approval of a different construction start date. By **June 30, 2031**, the COH shall complete construction and begin operation of the new and upgraded headworks, clarifier rake system, and Air Delivery System for the aeration basins.

    a. This project shall include, but not be limited to, evaluation and repair of the mechanical screen, barminutor, clarifier rake system, and aeration basin.

4. Kealakehe WWTP: (The COH has committed to undertake the actions specified in I.4.a and b, below. These actions are not requirements of the EPA Order, but may be incorporated into one or more orders by the DOH).

    a. By **September 1, 2025**, the COH will issue an invitation for bid for the construction proposal for the project described herein. By **March 1, 2026**, the COH will begin construction on the project, except that after having identified a construction contractor (but prior to March 1, 2025) the COH may submit a construction schedule to EPA and DOH for approval of a different construction start date. By **June 30, 2029**, the COH will complete evaluation and construction of upgraded and rehabilitated facilities including, but not limited to, design of a redundant 30" parallel influent pipe, rehabilitation of the existing two vortex grit chambers, new foul air piping, new force main influent stub, rehabilitation of the existing influent box, a small pump for an existing bathroom, removal of existing equipment no longer in use, and repair/removal of concrete T-lock lining. The project scope

consists of modifications to the existing influent piping, septage receiving area, and headworks facilities.

b. The COH is coordinating with the DOH on a plan to evaluate the WWTP's discharge of treated wastewater, which is expected to be included in a DOH Administrative Order to the COH.

5. Kealakehe SPS Force Main: By **July 1, 2025**, the COH shall complete design of a new (second) force main.

6. Hale Hālāwai SPS Force Main: By **January 1, 2025**, the COH shall issue an invitation for bid for the construction proposal for the project. By **July 1, 2025**, the COH shall begin construction on the project, except that after having identified a construction contractor (but prior to July 1, 2025 the COH may submit a construction schedule to EPA and DOH for approval of a different construction start date. By **June 30, 2027**, the COH shall complete construction of a new force main.

7. Pua SPS Force Main: By **December 31, 2030**, the COH shall issue an invitation for bid for the construction proposal for the project. By **December 31, 2031**, the COH shall begin construction on the project, except that after having identified a construction contractor (but prior to December 31, 2031), the COH may submit a construction schedule to EPA and DOH for approval of a different construction start date. By **June 30, 2035**, the COH shall complete rehabilitation of the existing force main.

II. PLANNING AND REPORTING

8. Capital Improvement Program (CIP): The COH shall conduct a comprehensive condition assessment to identify wastewater infrastructure in critical need of repair: The CIP process shall include:

   a. CIP Criteria: The COH shall develop and propose objective scoring criteria for the condition of wastewater infrastructure and appurtenances. The scoring criteria shall be used to prioritize and rank necessary repair, rehabilitation, and replacement projects as well as new capital improvement projects. The scoring criteria must address condition, criticality, and lifespan based on records review, direct assessment, or other appropriate technical methods used to evaluate wastewater infrastructure.

   b. Preliminary Condition Assessment: The COH shall complete a preliminary condition assessment to identify any components of wastewater infrastructure in critical need of repair or recommended for system sustainability and efficiency. The assessment shall include the following and shall utilize the objective scoring criteria developed above: (1) Evaluation of potential data gaps or further assessment needs to fully identify projects for CIP improvements; (2) Review

existing cost estimates to identify additional needs, data, or updates for cost assessments; (3) Review feasibility of existing proposed timeframes and provide recommendations; (4) Identify additional projects or recommendations for consideration of projects to be considered for CIP ranking; (5) Recommendations for capital projects to increase program efficiencies (e.g., energy, maintenance, equipment replacement, etc.); and (6) Evaluate capital projects for climate change planning considerations (e.g., sea level rise, water supplies).

c. Preliminary Priority Ranking: By **July 30, 2024** the COH shall develop a priority ranked list of wastewater infrastructure in critical need of repair, replacement, or rehabilitation based on the comprehensive condition assessment conducted. The list shall include: (1) a list of all capital projects considered, including new construction, equipment replacement, facility management plans and major studies; (2) the ranking criteria used to rank projects; (3) project justification and project prioritization; (4) technical project scope for the construction or completion of the projects; (5) projections for a 5-year timeframe and 20-year planning timeframe; (6) a classification, itemization and explanation for project expenditures including workforce/staffing needs; (7) estimated operations and maintenance costs for each project; and (8) an evaluation of current AMP and CIP efforts.

d. Detailed Condition Assessment: The COH shall complete a detailed condition assessment of the following components of wastewater infrastructure to further evaluate critical need of repair or recommended for system sustainability and efficiency: (1) Keōpū Sewer Pump Station and Force Main; (2) Project 19 Sewer Pump Station and Force Main; (3) Wailuku Sewer Pump Station and Force Main; (4) Onekahakaha Sewer Pump Station and Force Main; (5) Kōlea Sewer Pump Station and Force Main; and (5) Pauka'a Sewer Pump Station and Force Main.

e. Final Priority Ranking: By **December 31, 2026**, the COH shall develop a final priority ranked list of wastewater infrastructure in critical need of repair, replacement, or rehabilitation based on the comprehensive condition assessments conducted. The list shall include: (1) a list of all capital projects considered, including new construction, equipment replacement, facility management plans and major studies; (2) the ranking criteria used to rank projects; (3) project justification and project prioritization; (4) technical project scope for the construction or completion of the projects; (5) projections for a 5-year timeframe and 20-year planning timeframe; (6) a classification, itemization and explanation for project expenditures including workforce/staffing needs; (7) estimated operations and maintenance costs for each project; and (8) an evaluation of current AMP and CIP efforts.

f. Critical Projects Implementation Schedule: By **June 30, 2027**, The COH shall complete an implementation schedule for all CIP and repair, rehabilitation, or

replacement projects ranked as critical in the Final Priority Ranking. The implementation schedule will take into account the assessment of technical and fiscal feasibility based on the project designs and the Interim Fiscal Plan for Critical Capital Improvement Projects.

g. Annual Assessment and Report: The COH shall conduct an annual assessment of the CIP to evaluate potential changes to the list of critical projects, implementation schedules, and technical scope. The COH shall produce an annual report on the status of the CIP list, including improvements, accomplishments, and future critical needs of the system. The COH shall provide the report in a standardized format to inform the public and decisionmakers of its operations.

h. Interim Financial Plan for Critical Capital Improvement Projects: By **June 30, 2027**, the COH shall develop and submit an Interim Financial Plan. The financial plan shall include at a minimum (1) cost estimates for all Critical Capital Improvement Projects; (2) estimated annual budget (staffing, office space, vehicles, computers, etc.) for execution of the capital improvement projects; and (3) a detailed descriptive plan for raising sufficient revenue to meet the projected costs as outlined in the annual budgets, including adjustments to user fees, taxes, assessments, or other sources of revenue financing mechanisms.

9. County Integrated Wastewater Master Plan: By **January 31, 2027**, the COH shall complete an Integrated Wastewater Master Plan that accounts for operation and maintenance of current wastewater infrastructure and future upgrades and expansions. The plan shall account for each COH wastewater treatment plant and associated collection systems, as well as planned expansions or new service areas. The purpose of the Wastewater Master Plan is to identify, prioritize, budget, and schedule the construction of CIP and repair, rehabilitation, or replacement projects needed to maintain and expand the COH wastewater system, as well as project costs, staffing and other needs associated with operating the wastewater systems with a 20-year horizon. The Master Plan shall consist of the following components:

a. WWTP Facility Plans: Develop or update plans for each wastewater treatment plant and associated collection systems (the "Facility Plans"). The Facility Plans shall include a running list of CIP and repair, rehabilitation, or replacement projects needed to maintain and improve the wastewater system and include all projects not identified as "critical" in Section I, above. The CIPs identified shall be used to inform the Financial Plan required in Paragraph 10 of this Appendix (below). The planning document shall be completed for a 5-year, a 10-year, and a 20-year planning horizon.

b. WWTP Operations and Maintenance Manuals: Update Operations and Maintenance (O&M) Manuals for all WWTPs. O&M Manuals should include staffing plans for each facility and for the greater wastewater program. The

staffing plans must include, at a minimum: (1) Identification of adequate staffing levels; (2) summary of budget needs for the program (3) identification of training needs for Operators and staff; and (4) identification for adequate funding to support program. Staffing required for proper O&M of all WWTPs should be budgeted for in the fiscal year after the County-wide Master Plan is completed.

c. SPS Operations and Maintenance Manuals: Update O&M Manuals for all Sewage Pumping Stations (SPS) that include staffing plans similar to the WWTP O&M Manuals.

d. Cesspool Conversion Master Plan. The Cesspool Conversion Plan shall include the following components: Perform desktop analysis of cesspool areas; conduct community engagement and education; development of a Financial and Funding Plan; and Development of the Cesspool Conversion Plan

e. Regional Plans for Puna, Puakō, South Kohala, and Pāhoa.

f. Wastewater Sewer Service Connection Expansion Program: By **December 31, 2026**, the COH shall develop a Wastewater Sewer Service Connection Expansion Program to promote environmental compliance, cesspool conversion, efficiency of operations, and revenue generation.

    i. The COH shall establish sewer service areas for each of its wastewater treatment plants.

    ii. Within 9 months of the effective date, the respondent shall develop a program to verify existing connections within the service areas and identify parcels that need to be connected to the existing POTW and where collection system expansion is appropriate.

    iii. The COH shall modify the county code to require all new development within service areas to connect to the POTW.

    iv. The COH shall modify the county code to require all parcels within service areas to connect to the POTW by the cesspool conversion date.

    v. The COH shall produce a policy/procedure/rule requiring future rate studies and facility plans include POTW expansion evaluations, and that those expansions are programmed into the division budget through the financial plan and CIP program.

g. Organizational Chart: The COH shall submit an Organizational Chart that shows the staffing needed to perform the planning and engineering effort required under the EPA Order.

10. Financial Plan: By **June 30, 2028**, the COH shall develop and submit a Financial Plan for a 5-year, 10-year, and 20-year planning horizon. The Financial Plan shall include, at a minimum:

    a. A financial management plan that can generate sufficient revenues to cover wastewater operations, compliance activities, planning, design and construction for the CIP project list for a 5-year, 10-year, and a 20-year horizon.

    b. Estimated annual budgets for all costs of operating, maintaining, and repairing wastewater systems, including, but not limited to: personnel and staffing; operations; maintenance; repair; and projected CIP and County Wastewater Master Plan projects.

    c. A detailed descriptive plan for raising sufficient revenue to meet the projected costs as outlined in the budgets, including adjustments or increases in user fees, increase of customer base, within the sewer service areas, taxes, assessments, or other sources of revenue financing mechanisms.

III. OPERATIONS AND MAINTENANCE

11. Asset Management System: The COH shall fully implement an Asset Management System (AMS) for WWTPs, pump stations and the collection system. The AMS shall include, at a minimum:

    a. AMS Implementation Plan: By **June 30, 2024**, the COH shall develop and submit a draft AMS Implementation Plan. The Implementation Plan must include review of service request and work order standard operating procedures (SOP) to develop a framework for supporting the following: (1) Collection system spill response plan; (2) Collection system Preventative Maintenance Program; (3) Warehouse management; and (4) Condition assessment inspections for vertical and horizontal assets.

    b. AMS Completion: By July 1st, 2025, the COH shall complete the AMS enhancements, at a minimum to include: (1) An ordering system within existing AMS software; (2) A system to catalog and maintain a spare parts inventory; (3) Incorporation of individual asset costs to replace existing data; (4) A completed initial condition assessment of gravity sewer lines; (5) A formal review and response to the recommendations provided in the Final Report including training needs, workforce recommendations, water efficiency and conservation, and rate structure.

    c. Annual Report: The COH shall utilize the AMS software to produce an annual report detailing, at a minimum: (1) summary of condition assessments conducted; (2) summary of O&M conducted on assets; (3) summary of major assets repaired,

replaced or rehabilitated; (4) identification of assets remaining in critical condition that have not been repaired, replaced or rehabilitated; (5) identification of assets newly determined to be in critical condition; (6) proactive rehabilitation and replacement planning for critical condition assets; (7) detailed cost analysis; and (8) review of CIP planning to address critical assets.

12. County Sewage Collection Systems Preventative Maintenance Program: The COH will use its best efforts to eliminate sewage spills from force mains, pumps stations, gravity lines and WWTPs. The COH will continue to work toward reducing the number, frequency, and duration of spills.

    a. Spill Response. By **July 1, 2024**, the COH shall develop and submit a Spill Response Plan for Force Mains and Gravity Mains. The Spill Response Plan shall be developed with regional considerations and include: (1) Procedures for immediate response to contain spills and minimize spill volume; (2) Standard procedures for estimating spill volume; (3) Standard operating procedures for reporting spills.

    b. Sewer Line Operations and Maintenance Preventative Maintenance Program Plan. By **July 1, 2025**, the COH shall develop and submit a Sewer Line Operations and Preventative Maintenance Program Plan. The Sewer Line Plan shall include:

        i. Initial Condition Assessment: A condition assessment of all gravity sewer lines shall be completed by CCTV by **October 1, 2028**. The assessment shall utilize an industry standard, such as the Pipeline Assessment process developed by the National Association of Sewer Service Companies (NASSCO) or similar procedure. The sewer line condition rating shall be integrated into the AMP. A condition assessment of all force mains shall be completed by **October 1, 2030**. The COH shall propose to EPA and DOH which industry standard assessment tool will be followed within 18 months after the EPA Order is executed.

        ii. Regular Inspection/cleaning: A schedule for regular inspections and/or cleaning for each asset will be established and recorded in the AMS as it is assessed. The plan will establish what factors are used to determine the schedule and may include age, construction material, condition, and the presence of defects. The plan shall also identify priority areas for more frequent inspections and/or cleaning based on relevant information, including citizen reports, prior inspections and cleaning, spill reports, the history of spills, the incidence of problems with fats, oil, and grease (FOG) and root blockages, and the design and history of the sewer lines. The COH shall propose to EPA and DOH the inspection schedule and frequency for force main inspections and cleaning, where appropriate, within 6-months of after the initial assessment.

iii. Corrective Actions: A schedule to complete repairs of sewer line deficiencies identified as being at NASSCO Level 5 (or equivalent) within 36 months, and deficiencies identified as NASSCO Level 4 (or equivalent) within 5 years. Repairs for sewer lines shall be in accordance with Water Environment Federation (WEF) guidance to prevent spills due to improper pipe bedding, line loads, earth movement, root growth damage, openings in sewer lines, and faulty building sewer connections. The identification and correction over time of any other sewer line system deficiencies, such as misaligned pipes, grade deviations, solids build-up, hydrogen sulfide gas generation, pipe deformation hydraulic overloads, misaligned or damaged manhole covers, and manholes shall be in accordance with WEF guidance. Sewer line system deficiencies may, in some cases, be addressed with increased maintenance.

iv. Controls: The plan shall provide for appropriate control system and equipment redundancy for each county operated pump station and shall also provide for timely response to pump station alarms. The plan shall include a written checklist of standard procedures for pump station repair and maintenance work for use by County personnel. The plan shall be based on the County's experience and shall address, where appropriate, any additional failure scenarios besides operator error.