



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

FINDING OF NO SIGNIFICANT IMPACT

Pāhala Large Capacity Cesspool Replacement Project, Hawai'i, United States

Proposed Action

In accordance with the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4370h, and its implementing regulations, 40 C.F.R. §§ 1500.1-1508.28, as well as the U.S. Environmental Protection Agency (EPA) procedures for implementing NEPA, 40 C.F.R. Part 6, EPA has prepared a Final Environmental Assessment (EA) describing the potential environmental impacts associated with, and the alternatives to, the proposed Pāhala Large Capacity Cesspool (LCC) Replacement Project (Proposed Action).

Project Background

In 2006, EPA awarded a Special Appropriations Act Project (SAAP) grant to the County of Hawai'i (County) for the Ka'ū LCC Replacement Project (Grant No. XP-96942401) in the amount of \$1.842 million. The initial SAAP grant work plan included wastewater upgrade projects for LCCs serving both the Nā'ālehu and Pāhala communities in the Ka'ū District. It was later determined that federal grant funds would only cover a portion of one of the projects. The grant work plan was revised to address the LCCs serving the Pāhala community since the timeline appeared to be on a faster path than Nā'ālehu and there was a concern about spending grant funding within the project period.

EPA's award of the SAAP grant for the Proposed Action is considered a major federal action requiring compliance with NEPA in accordance with 40 C.F.R. § 1508.18. In addition, NEPA regulation 40 C.F.R. § 1506.2, calls for federal agencies to cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and State and local requirements. The Final EA has been prepared by both the EPA and the County of Hawai'i to meet the content and procedural requirements of both NEPA and Hawai'i State and local requirements.

Purpose and Need for Action

In 1999, EPA promulgated regulations under the Safe Drinking Water Act's (SDWA) Underground Injection Control (UIC) Program which prohibited the construction of new LCCs as of April 2000 and required the closure of all existing LCCs by April 5, 2005 (40 C.F.R. § 144.88). Under federal regulations, an LCC is a cesspool which serves multiple dwellings, or for non-residential facilities has the capacity to serve 20 or more persons per day. In June 2017, EPA and the County entered into an Administrative Order on Consent (AOC) to close the LCCs serving the Pāhala community by June 2021. The compliance date was revised in September 2019 to April 2023.

The purpose of the Proposed Action is to enable the County to comply with the SDWA and to fulfill the compliance provisions of the June 2017 AOC between EPA and the County with respect to closure of the Pāhala LCCs by April 2023.

The need for action is driven by the public health and environmental concerns associated with LCCs. Cesspools can release disease-causing pathogens and other pollutants (e.g., nitrates) into groundwater aquifers, streams, and eventually the ocean, thus leading to public health and environmental concerns.

Alternatives Analysis and Selection of the Preferred Alternative

The proposed location for the Proposed Action is both within and immediately south of the community of Pāhala, which is about 52 miles southwest of Hilo, in the Ka'ū District, Island of Hawai'i. Pāhala is located west (mauka) of Māmalahoa Highway (State Route 11) about 3.8 miles from the shoreline. Most of the community lies between 980 feet above mean sea level (msl) on the western end and approximately 800 feet above msl on the eastern end.

Candidate sites were identified based on three primary criteria. First, the site would have to be appropriate for the preliminary design of the treatment and disposal facility. Second, access to the site would allow the County to meet the various requirements of the AOC that stipulated closure of the LCCs by June 2021. Third, the environmental impacts of construction of the treatment and disposal facility were considered. Based on these three primary criteria, and considering additional suggestions from the Pāhala community obtained during Community Outreach meetings in December 2017, nine candidate sites for the proposed wastewater treatment and disposal facility were identified.

As detailed in the Final EA, the suitability of each candidate site was evaluated using a weighted scoring system that considered twenty-one criteria within four general categories (environmental, social, and cultural; location and site; land use and availability; and collection system and service area). The three highest-scoring candidate sites (Sites 7, 8, and 9) were carried forward as alternatives for evaluation, and the highest-scoring site (Site 7) was ultimately selected as the Preferred Alternative.

Site 7 Alternative (Preferred Alternative)

Under the Preferred Alternative for the Proposed Action, the County will perform the following actions:

- 1) Acquire, or otherwise obtain the right to develop and use, a 14.9-acre portion of a 42.5-parcel (Tax Map Key (TMK): 9-6-002:018), identified as "Site 7", that is currently owned by B. P. Bishop Estate Trustees (commonly known as Kamehameha Schools), then construct a new secondary wastewater treatment and disposal facility within that portion of the parcel;
- 2) Construct a new wastewater collection system, primarily within the public right-of-way (ROW) and three segments within easements in the Pāhala community, to collect and convey sanitary waste from the currently connected and accessible (in accordance with Hawai'i County Code) properties to the new wastewater treatment and disposal facility;
- 3) Close and abandon two LCCs, according to State of Hawai'i Department of Health closure procedures; and
- 4) Abandon the existing wastewater collection system in place.

Under the Preferred Alternative, the proposed wastewater treatment and disposal facility will occupy about 14.9 acres and will consist of a headworks and an odor control unit, an operations building, four lined aerated lagoons, a subsurface flow constructed wetland to remove nitrogen, an adjacent disinfection system to remove pathogens, and four slow-rate land treatment basins that occupy a total area of approximately 8.0 acres for disposal of the treated effluent. The proposed wastewater collection system will be located within five streets in the western portion of the community (Maile, 'Ilima, Huapala, Hīnano, and Hala Streets) and three public streets in the eastern portion of the community (Puahala, Pīkake, and Kamani Streets).

Site 8 Alternative

Under the Site 8 Alternative for the Proposed Action, the County would perform the same actions as described above for the Preferred Alternative, with the exception that the new wastewater treatment and disposal facility would be constructed at Site 8, a 45.2-acre parcel (TMK: 9-6-002:021) located southwest of and adjacent to Site 7, across Maile Street and above Māmalahoa

Highway. The Site 8 Alternative would require approximately 1,600 feet of additional pipe within the ROW of Lower Maoula Road for the new wastewater collection system and, because of the steeper slopes, would require larger slow-rate land application groves totaling approximately 12 acres. Site 8 was not selected as the Preferred Alternative because it scored lower in the weighted scoring system due to the presence of a stream bisecting the parcel lengthwise that would complicate siting of the treatment and disposal facility.

Site 9 Alternative

Under the Site 9 Alternative for the Proposed Action, the County would perform the same actions as described above for the Preferred Alternative, with the exception that the new wastewater treatment and disposal facility would be constructed at Site 9, a 157-acre parcel (TMK: 9-6-002:049) located southeast of Sites 7 and 8 across Māmalahoa Highway. The Site 9 Alternative would require approximately 3,200 feet of additional pipe within the ROW of Maile Street and across Māmalahoa Highway for the new wastewater collection system. Site 9 was not selected as the Preferred Alternative because it scored lower in the weighted scoring system due to the presence of surface water within the parcel and the added difficulty of access given its location relative to existing roads.

No-Action Alternative

In addition to the Site 7, 8, and 9 Alternatives, EPA considered a No-Action Alternative, under which the County would continue to use the two existing LCCs in Pāhala, existing substandard gravity sewer lines, and individual septic systems. No additional properties would be added to the community sewer system under this alternative. Under the No-Action Alternative, the action would not be implemented and the Pāhala community would not be provided with an acceptable wastewater collection, treatment, and disposal system. This alternative would not fulfill the purpose and need for the action and would result in non-compliance with the AOC between EPA and the County. Because this alternative would not achieve the objectives of the SAAP grant, protect human health and the environment, or enhance State and local agency efforts to achieve compliance with the Safe Drinking Water Act, it was not considered to be the Preferred Alternative.

Environmental Impacts

In compliance with NEPA, EPA has prepared a Final EA that analyzes the environmental impacts of the Pāhala LCC Replacement Project. After considering a wide range of regulatory, environmental (both natural and human), and socioeconomic factors, the Final EA did not identify any significant impacts to the environment that will result from the implementation of the Preferred Alternative for the Proposed Action. The following is a summary of environmental impacts as described in the Final EA associated with the Preferred Alternative.

Summary of Endangered Species Act, Section 7 Consultation

The collection system will be constructed primarily within areas that were disturbed during construction of County streets, plus two short segments within easements in the Pāhala community. The treatment and disposal facility site has previously been cleared, graded, and planted with a macadamia nut orchard. The affected sites do not provide habitat for federal or State of Hawai'i listed or candidate threatened or endangered species of flora or fauna. A biological field survey in August 2018 did not identify any native mammalian or avian species within Site 7, though the endangered Hawaiian Petrel (*Pterodroma sandwichensis*) and the threatened Newell's Shearwater (*Puffinus newelli*) have been recorded flying over the general area between April and the end of November each year. Construction and design of the wastewater treatment and disposal facility will incorporate impact avoidance measures as summarized below to avoid or minimize adverse effects to protected avian species. On December 21, 2018, the designated non-federal representative for consultations under Section 7 of the Endangered Species Act, on behalf of EPA and the County of Hawai'i, requested concurrence from the U.S. Fish and Wildlife Service (FWS)

that the Pāhala LCC Replacement Project is not likely to adversely affect federally listed threatened and endangered species or critical habitat. The FWS concurred on February 15, 2019 that the Preferred Alternative may affect, but is not likely to adversely affect, listed species.

Summary of National Historic Preservation Act, Section 106 Consultation

An Archaeological Inventory Survey (AIS), which included subsurface testing within Site 7, was conducted to test for the presence of archaeological resources on the project site. The AIS confirmed no significant artifacts or cultural deposits were observed on the ground surface within the proposed treatment and disposal facility site as the area experiences ongoing disturbance by macadamia harvesting operations and stormwater runoff. Further, no cultural deposits or lava tubes were encountered during the subsurface trenching in Site 7. On September 26, 2019, EPA sent a letter to Hawai'i State Historic Preservation Division (SHPD) to document its determination that no historic properties will be affected by the undertaking and to request concurrence from SHPD in accordance with 36 C.F.R. § 800.4(d)(1). Pursuant to 36 C.F.R. §800.5(c)(1), EPA may proceed after the close of a 30-day review period if SHPD does not provide a response within such time. No response was received within this timeframe, therefore, EPA fulfilled its responsibilities under Section 106. The Preferred Alternative will incorporate appropriate mitigation measures as summarized below to avoid impacts should unanticipated archeological resources be discovered during construction.

Consultation letters were delivered to invite comments from organizations that may attach religious or cultural significance to properties affected by the Preferred Alternative. A total of 14 letters were mailed to various Native Hawaiian Organizations requesting comments. No responses were received from these organizations.

Summary of Other Resource Area Impacts

The Preferred Alternative will result in minor, short-term impacts to noise, air quality, and traffic in the immediate vicinity of the project site during the period of construction. Short-term construction-related impacts include intermittent and unavoidable noise from construction vehicles and equipment within the Pāhala community, including a possible short-term increased noise impact associated with the removal of bedrock depending on conditions encountered in the collection system area. Construction of the wastewater treatment and disposal facility will also require removal of macadamia nut trees, removal of several of the Cook pines (*Araucaria columnaris*) that line Maile Street, and clearing and excavating for construction of various improvements. Wastewater treatment plants can be a source of nuisance odors to the surrounding community if not properly designed or operated. However, the facility will include an odor control system to limit odors typically associated with a wastewater treatment facility. The minor short-term increase in traffic during construction of the proposed wastewater treatment and disposal facility will be due to the transport of construction equipment and supplies to the construction site. Deliveries to the construction site could require temporary stoppage of traffic on Maile Street to safely unload equipment and supplies. Operation of the wastewater treatment and disposal facility will contribute almost no additional light pollution, noise, or air emissions to the local area or detrimentally affect air or water quality.

Construction of the treatment and disposal facility will result in an increase in impervious surfaces. However, the treatment and disposal facility would be designed with an on-site drainage system and will ensure there is no adverse impact on adjacent or downstream properties due to post-development flows. In addition, the wastewater treatment and disposal facility would be designed and sized so the exposed (not enclosed) treatment processes have sufficient free-board depth to accommodate a 24-hour, 100-year storm event at the site. The wastewater treatment processes would be designed to accommodate the peak flows caused by the design storm event, including precipitation that falls on the aerated and covered lagoon treatment system.

Other resource areas besides those described above were evaluated in the Final EA but will not be impacted by the Proposed Action. These include, but are not limited to, floodplains, wetlands,

coastal zones, and Sole Source Aquifers. The Preferred Alternative does not establish a drinking water system, and since no Sole Source Aquifers are present on the Island of Hawai'i, will not impact such aquifers based on the location. The collection system and wastewater treatment and disposal facility will not affect coastal resources and is not located within a floodplain area and therefore will not have an adverse impact on floodplains and will minimize the risk of flood-related impacts on surrounding properties. The site of the Preferred Alternative contains no wetland features and no streams and therefore is not expected to impact surface water or wetland resources.

The Pāhala LCC Replacement Project will allow the County to provide wastewater collection, treatment, and disposal facilities meeting the needs of the Pāhala community and will have a beneficial impact on the economic and social welfare of the community. The Preferred Alternative will not result in population changes in the Pāhala area. The Preferred Alternative will not result in disproportionately high and adverse human health or environmental effects on sensitive populations.

Mitigation Measures

The Preferred Alternative will include the incorporation of certain mitigation measures as discussed in the Final EA, including, but not limited to, measures related to archeological resources and those that were specified in the FWS Section 7 Consultation process. The Preferred Alternative will incorporate appropriate mitigation measures to avoid impacts should unanticipated archeological resources be discovered during construction. The contract documentation will state that, should archaeological sites such as walls, platforms, pavements or mounds, or remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work will cease immediately and the find will be protected from further damage.

The Preferred Alternative will incorporate the avoidance and minimization measures cited in the FWS Section 7 Consultation letter, including, but not limited to, avoiding impacts to potential Hawaiian hoary bat habitat during the bat birthing and pup rearing season, conducting a Hawaiian hawk nest survey prior to any work during the nesting season, avoiding activities near active nests, and avoiding nighttime construction during the seabird fledging period.

Public Review and Comments

A Draft EA was circulated for public comment from September 23, 2018 through December 10, 2018. In accordance with 40 C.F.R. § 6.203(b)(1), a preliminary FONSI was made available for public review and comment as part of the Draft EA. A public information meeting was conducted by the County on October 10, 2018 in Pāhala at the Ka'ū Gym Multi-Purpose Conference Room to discuss the availability of the Draft EA and process for submitting comments. In addition, the County conducted two additional workshops for property owners that would be affected by the Proposed Action prior to the October 10 public information meeting. Lastly, the County voluntarily convened an additional public meeting in Pāhala on March 21, 2019 to gain further input from property owners and provide financing options available to owners of certain parcels that would be affected by the Proposed Action.

EPA received detailed, technical, and other public comments from individuals, various agencies, and interested parties. In total, 77 comment letters were received, some of which included multiple individual comments. Responses to comments were developed and are attached to the Final EA as an appendix. No substantial changes to the Proposed Action were necessary as a result of comments on the Draft EA.

Finding

After carefully considering the regulatory, environmental, and socioeconomic factors as described in the Final EA, EPA has determined that the Preferred Alternative of the Proposed Action will not significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of NEPA. Accordingly, preparation of an environmental impact statement on the Proposed Action is not required and this FONSI formally documents EPA's finding of no significant impact in accordance with 40 C.F.R. § 1508.13, 40 C.F.R. § 6.206, and 40 C.F.R. § 6.203(b).

APPROVAL



Tomás Torres
Director, Water Division

2/20/20

Date