



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Sent Via: Electronic Mail

Ramzi Mansour, Director  
County of Hawai'i  
Department of Environmental Management  
345 Kekūanāo'a Street, Suite 41  
Hilo, HI 96720  
[Ramzi.Mansour@hawaiicounty.gov](mailto:Ramzi.Mansour@hawaiicounty.gov)

**Re: Revised Administrative Order on Consent  
EPA Docket No. SDWA-UIC-AOC-09-2017-0002  
Pāhala and Nā'ālehu Large Capacity Cesspool Closure Projects  
Pāhala Preliminary Engineering Report**

Dear Director Mansour:

On April 19, 2023, in accordance with Paragraph 31.b. of the above-referenced Administrative Order on Consent (Consent Order),<sup>1</sup> the County of Hawai'i (the County) submitted for the United States Environmental Protection Agency's (EPA) approval its Pāhala Preliminary Engineering Report (the PER). The PER, which was prepared by Brown and Caldwell, in association with Engineering Partners, Inc., details the County's technical analysis of the two-wastewater treatment plant (WWTP) options and two individual wastewater system (IWS) options that the County determined were feasible to implement to facilitate closure of the large capacity cesspools (LCCs) that serve the community of Pāhala.<sup>2</sup> The PER evaluated certain details of the WWTP and IWS options and recommended that the County pursue an IWS option because of the "significantly lower capital and lifecycle costs and favorable implementation schedule."

To fulfill the requirements of Paragraph 31.b. of the Consent Order, the PER must "describe the project details for each feasible option, including the planning area description, planning period, description of construction phases, owner and operator of the facilities, and location of facilities (including a map); the design parameters for each feasible option; and project costs for each feasible option." EPA finds that the PER provides preliminary information on the project details, design parameters, and project costs for each feasible option, thereby meeting this requirement of the Consent Order.

However, upon review, EPA finds the PER's recommendation that the County pursue an IWS option to be premature. The Consent Order requires the County to conduct a planning process in order to make an informed decision and select an appropriate wastewater treatment option for the 109 properties that are

---

<sup>1</sup> The Consent Order was first issued June 22, 2017 and was revised August 22, 2022. The Consent Order can be found at <https://www.epa.gov/uic/sdwa-uic-aoc-09-2017-0002-closure-cesspools-pahala-and-naalehu-administrative-order-consent#aoc>.

<sup>2</sup> The following four project options were evaluated: (i) package plants and new collection system; (ii) package plants connected to the existing collection system; (iii) a maintenance contract model individual wastewater system program; and (iv) an operating permit model individual wastewater system program.

currently connected to the Pāhala LCCs and an additional 65 properties that are to be identified by the County. In order to make an informed decision, the County must first engage with the Pāhala community and consider the impacts the selected option will have on community members. Pursuant to Paragraph 31.c. of the Consent Order, the County shall identify its preferred option in an Environmental Information Document *after* conducting an Environmental Review that includes public engagement; the public engagement shall also be described in the Environmental Information Document.

Prior to identifying a preferred wastewater treatment option, the County must thoroughly consider the relative costs. The PER's recommendation to pursue an IWS option is partially based on the potential lower project costs that are associated with the selection. EPA's review found that the PER did not provide adequate analysis of the short and long-term project costs of the different alternatives for the County to make an informed decision. The County must consider how capital costs will be financed, how loans will be repaid if the County uses the State Revolving Fund or other loans, and how ongoing operation and maintenance costs will be financed. The County must be transparent with the community about the allocation of costs associated with each option and must consider public input on the relative costs. The County must engage in a more thorough analysis of costs in order to make an informed, transparent, and accountable selection.

Furthermore, and as detailed during the July 31, 2023, meeting between the County and EPA, several serious issues concerning public health risks and burdens placed on the Pāhala community have not been fully considered. These issues have far more significant implications for the community and for the success of the project than an implementation schedule that the County deems favorable. Because of the impacts the selected option will have on the Pāhala community and significant tradeoffs associated with each of the options, robust community engagement and transparency are necessary for the successful implementation of the Pāhala LCC replacement project. The County must fully consider the public health risks and burdens placed on the Pāhala community, including the community's input on these issues in order to make a fully informed and transparent decision.

EPA approves the use of the preliminary information provided in the PER for the Environmental Review. The County's Environmental Information Document, documenting completion of the Environmental Review, is due within 180 days of receipt of this letter, pursuant to Paragraph 31.c of the Consent Order.

EPA does not approve the premature recommendation that the County pursue an IWS approach. The County must first fully consider the benefits, costs, public health risks, and burdens placed on the Pāhala community prior to identifying its preferred wastewater treatment option for replacement of the Pāhala LCCs. Full consideration requires the County to consider input from the Pāhala community.


To comply with the Consent Order, the County must proceed with the Environmental Review in a manner that fairly presents the PER's technical analysis along with information on the short and long-term costs, public health risks, and burdens of *all four options* and a "no action" alternative to the community of Pāhala and solicits input on the environmental and financial tradeoffs between the options that the community is willing to accept. A list of key issues for the County to consider in order to make an informed selection is included in Attachment A.

EPA appreciates the effort the County is putting forth to address its unique challenges concerning wastewater management and looks forward to continuing working together to ensure the successful implementation of the Pāhala LCC closure project. If you have any questions about this letter, please

feel free to contact Jelani Shareem at (415) 972-3095 or via email at [shareem.jelani@epa.gov](mailto:shareem.jelani@epa.gov). Legal questions should be addressed to Kimberly Wells at (415) 972-3056 or [wells.kimberly@epa.gov](mailto:wells.kimberly@epa.gov).

Sincerely,

**AMY MILLER-  
BOWEN**

 Digitally signed by AMY MILLER-  
BOWEN  
Date: 2023.07.31 08:30:11 -0700

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

cc: Mitch Roth, Mayor ([MitchD.Roth@hawaiicounty.gov](mailto:MitchD.Roth@hawaiicounty.gov))  
Lee Lord, Managing Director ([LeeE.Lord@hawaiicounty.gov](mailto:LeeE.Lord@hawaiicounty.gov))  
Brenda Iokepa-Moses, DEM Deputy Director ([brenda.iokepa-moses@hawaiicounty.gov](mailto:brenda.iokepa-moses@hawaiicounty.gov))  
Chris Laude, P.E, Acting Wastewater Division Chief ([Christopher.Laude@hawaiicounty.gov](mailto:Christopher.Laude@hawaiicounty.gov))  
Diana Mellon-Lacey, Corporation Counsel ([Diana.Mellon-Lacey@hawaiicounty.gov](mailto:Diana.Mellon-Lacey@hawaiicounty.gov))  
Sherilyn K. Tavares, Corporation Counsel ([Sherilyn.Tavares@hawaiicounty.gov](mailto:Sherilyn.Tavares@hawaiicounty.gov))  
Sina Pruder, P.E., DOH-WWB ([sina.pruder@doh.hawaii.gov](mailto:sina.pruder@doh.hawaii.gov))  
Craig Lekven, P.E., Brown & Caldwell ([CLekven@BrwnCald.com](mailto:CLekven@BrwnCald.com))

## **Attachment A – Key issues for the County of Hawai‘i to consider during Environmental Review to make an informed selection to replace the LCCs in Pāhala.**

### **1. Protection of Public Health**

Either a wastewater treatment plant (WWTP) or individual wastewater system (IWS) can be protective of public health if they are properly designed, operated, and maintained. The County must consider design options and plans for operation and maintenance associated with each option to select an option that will be protective of public health in Pāhala.

The PER indicates that many lots in Pāhala are too small to support a properly sized IWS and that many lots are sloped and do not meet the infiltration rates required for an IWS.<sup>1</sup> Inadequately sized IWSs can cause untreated waste to surface, especially where there are sloped lots and multiple lots in close proximity with variances from the Hawai‘i State Department of Health’s (DOH) absorption bed requirements. The untreated waste is likely to surface in yards and public spaces, where community members, including children, and pets could come in contact with it. During wet weather any untreated waste that surfaces would be spread further by stormwater. The wastewater from sloped lots and multiple lots in close proximity with variances from DOH absorption bed requirements could also cause erosion and slope destabilization.

The PER noted the likelihood of IWSs to fail and cause public health problems if they are not properly maintained.<sup>2</sup> IWS failure causes untreated sewage to back up into homes or to surface where public contact could occur. In a 1997 report to Congress, EPA found that most communities lack an adequate management program to ensure proper maintenance for a system of IWSs.<sup>3</sup> Because EPA found that many IWS systems were improperly managed and were not adequately protecting public health, in 2003 EPA issued Management Guidelines to improve IWS system performance.<sup>4</sup> The County must describe management program options and implications for public health and must solicit public input on the options before determining whether an IWS option is appropriate in Pāhala.

The County must weigh the public health risks and benefits associated with the IWS options against those associated with the WWTP options and consider ways to mitigate risks. WWTPs provide effective treatment of wastewater when they are properly operated and maintained. That is why the County has identified a WWTP as the ultimate goal in Pāhala<sup>5</sup> and why EPA and the State of Hawai‘i generally support installation of WWTPs, especially in densely populated areas, like Pāhala.<sup>6</sup> However, if a WWTP or its collection system is not properly operated and maintained they could spill untreated wastewater in

---

<sup>1</sup> PER Part B pg. 8-10; *see also* EPA Response to Congress on Use of Decentralized Wastewater Treatment Systems, pg. 3. April 1997.

<sup>2</sup> PER Part B pg. 6.

<sup>3</sup> EPA Response to Congress on Use of Decentralized Wastewater Treatment Systems, pg. 21.

<sup>4</sup> EPA Voluntary National Guidelines for Management of Onsite and Clustered (Decentralized) Wastewater Treatment Systems, March 2003.

<sup>5</sup> PER Part A pg. 4-6; Ka‘ū Community Development Plan § 5.8.2, October 2017.

<sup>6</sup> *See* 33 U.S.C. §§ 1251 and 1281 and Hawaii Administrative Rules §11-62-01, March 21, 2016. EPA and the State of Hawai‘i both acknowledge that IWSs are appropriate for wastewater management in less densely populated areas. *See* EPA Response to Congress on Use of Decentralized Wastewater Treatment Systems, pg. 6, April 1997; Hawaii Administrative Rules §11-62-01, March 21, 2016. The County has previously also reached the conclusion that “community wastewater services should be prioritized in the following areas: lot sizes of one acre or less.” *See* County of Hawai‘i June 2023 Puakō and South Kohala Regional Wastewater Master Plan.”

streets or other areas where public contact could occur. The PER did not adequately consider ongoing operation and maintenance for a WWTP, or design options that would reduce ongoing operation and maintenance needs. The County must adequately consider how a WWTP option would be implemented to protect public health.

To make a fully informed decision, the County must accurately present the potential public health risks and benefits of each option to the Pāhala community, gather public input, and identify appropriate measures that can be implemented to protect public health. This information must inform the County's identification of a preferred wastewater solution for Pāhala.

## **2. Burden on the Pāhala Community**

The burdens the County must consider include:

- a. Physical Disruption – All four of the wastewater treatment options being considered will cause physical disruption for at least some members of the Pāhala community. Installation of IWSs would require digging up community member's yards and potentially removing structures, fences, driveways, and landscaping from their properties.<sup>7</sup> IWSs would have to be pumped regularly, which would increase truck traffic on main roads and residential streets and would require driving over private properties to access the IWSs. The pumping would cause multiple hours of disruption each time.

One of the WWTP options includes construction of a new collection system, which would require digging up roads used to access community member's homes and would require installation of laterals on the properties. The other WWTP option uses the existing collection system, which is located on private property rather than in public rights of way. If the existing collection system remains in use, the County may need to access private properties from time to time to maintain the system. Additionally, if a WWTP is installed, solids and grit would need to be hauled from the WWTP to the West Hawai'i landfill, which would increase truck traffic on Pāhala's main roads.

- b. Costs – All four of the wastewater solutions being considered will incur costs that will be borne by the Pāhala community. It is EPA's current understanding that if either WWTP option is selected, community members will have to pay sewer rates for wastewater services and if an IWS option is selected community members will either have to pay rates to the County or will have to pay to maintain the IWSs on their own. The possible rate options must be presented to the community and considered by the County.
- c. Legal and Administrative Burden – With an IWS option property owners will own the IWSs and may become responsible for variance renewals and replacement at the end of the system's service life.<sup>8</sup> With an operating permit model or voucher system, the property owners would also be responsible for IWS inspections and maintenance, and for any system failures that occur.<sup>9</sup>

---

<sup>7</sup> PER Part B pg. 12-13.

<sup>8</sup> PER Part B pg. 4.

<sup>9</sup> PER Part B pg. 4.

The County must be transparent with the community about the benefits and burdens associated with each option and must consider the community's input on the allocation of burdens before identifying a preferred option for LCC replacement.

### **3. Costs to the County**

The PER indicates that the initial costs of installing a WWTP and the costs of installing IWSs may not be significantly different.<sup>10</sup> However, the PER does not analyze the ongoing costs or provide a thorough comparison of the lifetime costs of a WWTP option versus the lifetime costs of an IWS option.

The County must thoroughly analyze the costs associated with each option and must also consider how the costs will be covered. The County must identify rate options to cover the costs of loan repayment (if the County intends to finance capital costs of a WWTP or IWSs with State Revolving Fund or other loans) and ongoing operation and maintenance. The County must also identify opportunities to expand the rate payer base, for example, by connecting additional properties to a WWTP, and consider how this would impact their ability to cover costs.

The cost analysis for each option is necessary for the County to make an informed selection. The cost analysis is also relevant for calculating the costs to be borne by the Pāhala community. The County must thoroughly and transparently consider costs to identify its preferred wastewater treatment option.

### **4. Long-Term Planning**

Either an IWS option or a WWTP option is a significant investment, and the County must consider whether the investment make sense for the long-term. In addition to the 174 properties that will be served by the selected wastewater option required by the Administrative Order on Consent, hundreds of properties in Pāhala will need wastewater treatment to replace their cesspools, which must be closed by 2050. In its Community Development Plan, the County identified expanding the wastewater collection lines and connecting properties to a WWTP as development actions for Pāhala.<sup>11</sup> The County must consider how the option it selects now will support the needs of the community and the identified development goals.

---

<sup>10</sup> The PER did not provide conclusive information about the installation costs for a WWTP or IWSs and provided only conclusory statements about the lifecycle costs. The PER lacked information specific to the properties in Pāhala and instead provided a generalized estimate of \$5.7 - \$17.4 million for installation of IWSs. Similarly, the PER lacked details about the costs of installing sewer laterals if a new collection system is constructed to serve a WWTP. The County and the prior owner of the LCCs and collection system had previously agreed to pay for installation of sewer laterals to connect the properties served by the LCCs to a new collection system. The PER did not indicate whether installation is complete or whether sewer lateral installation is a remaining cost associated with a new collection system.

<sup>11</sup> Ka'ū Community Development Plan § 5.8.2, October 2017.