

**NA‘ALEHU AND PAHALA VILLAGES
LARGE CAPACITY CESSPOOL CONVERSION PROJECT
Department of Environmental Management
County of Hawai‘i**

PROJECT SUMMARY

Background:

In 1998, the U.S. Environmental Protection Agency (EPA) established regulations that require the elimination of all large capacity “gang” cesspools (LCC) by April 5, 2005. LCC’s allow untreated sewage to percolate directly into the soil and ground water. Consequently, LCC’s are a public health and environmental concern and are banned because of their likelihood of releasing diseases and other contaminants to ground water, streams, and the ocean. C. Brewer and Company, Ltd. (Brewer) has maintained LCC systems serving 162 and 106 lots in the respective villages of Na‘alehu and Pahala in the Ka‘u District of the Island of Hawai‘i for the past 60 years. Currently, the company is dissolving and proposes to relinquish ownership of the wastewater system to the County (public system portion within the public right-of-way) and the residents (portion within private property).

In August 2004, the Mayor’s Office established an Outreach Program to assist the villages in complying with the EPA regulations. Homeowners in Na‘alehu and Pahala were requested to cast ballot votes for a preferred sewer alternative in their respective village. The overwhelming majority in both villages voted for a County-owned sewer system. This new system will consist of installing sewers and manholes in the County Right-of-Way and installing a new septic tank system in the general location of the existing gang cesspool.

The cost of construction, operation and maintenance of the new County-owned sewer system will be borne by the County. Brewer has committed to providing approximately \$1.4 million to assist homeowners with funding new sewer lines within private properties. The funds apply only those private properties that are currently connected to the existing Brewer sewer system. Brewer has indicated that the cost of construction for other private properties currently not connected to the existing sewer system would be borne by the property owner. Moreover, Brewer has indicated that for private properties where deeds have conveyed ownership of the existing sewer lines to the homeowner, the homeowner will bear the costs of construction for the new sewer lines.

The benefits of a new sewer collection system within the County Right-of-Way includes access to the sewer collection system for maintenance work and allows for dissolution of the existing Brewer easements within the private properties. Brewer has indicated that all existing sewer easements within the private properties will be dissolved and the easements returned to the property owners once the new sewer collection systems have been installed.

The County of Hawai‘i, Department of Environmental Management – Technical Services Section (TSS) engaged the Planning/Engineering firm of SSFM International (SSFM) to address sewer improvements necessary to convert existing gang cesspools currently serving portions of the Na‘alehu and Pahala Villages. Several sewer collection, treatment, and disposal alternatives were considered for each community and will be presented at the Public Meetings scheduled for November 14 and 15, 2006. The

recommended alternative was based on available land areas, operation and maintenance costs, level of treatment provided, government regulations, and condition of the existing LCC's.

Recommended Sewer Improvements:

Na'alehu Community: (Alternative 1 – See Figure 5)

1. Construct a sewer collection system within the County Right-of-Way based upon County of Hawaii wastewater system design standards. This collection system would serve the existing 162 residential lots currently serviced by the Brewer system and 1 commercial property currently served by an existing LCC.
2. Construct septic tanks on the existing parcel currently utilized for disposal via the LCC.
3. Clean and reuse the existing LCC as a seepage pit to dispose of the treated effluent.

Sewer System Component	Approximate Cost to County
Collection	\$ 6,300,000.00
Treatment	\$ 1,200,000.00
Disposal	\$ 225,000.00

Pahala Community: (Alternative 1 – See Figure 8)

1. Construct a sewer collection system within the County Right-of-Way based upon County of Hawaii wastewater system design standards. This collection system would serve the existing 113 residential lots currently serviced by the Brewer system, 6 commercial properties currently served by existing LCC's, and 5 residential properties currently served by an existing LCC.
2. Construct septic tanks on the existing parcel currently utilized for disposal via the LCC.
3. Construct a new underground injection well to dispose of the treated effluent due to concerns that the existing LCC may be connected to a lava tube.

Sewer System Component	Approximate Cost to County
Collection	\$ 6,350,000.00
Treatment	\$ 1,200,000.00
Disposal	\$ 300,000.00

Comments received from the community will be recorded for consideration and included in the final Preliminary Engineering Report to be approved by County and completed in November 2006. The next step would be system design based on the final PER. Public participation is encouraged.