M&E Pacific, Inc.
Engineers & Architects

June 6, 1990

Dr. Marvin T. Miura, Director
Office of Environmental Quality Control
455 S. King Street
Kekuanaoa Building #104
Honolulu, Hawaii 96813

SUBJECT: Nanakuli Residence Lots Gravity Sewer System

Attached are four (4) copies of the Negative Declaration for the subject project.

Please publish this notice of filing in the forthcoming edition of the OEQC Bulletin.

If you should have any questions of this matter, please feel free to contact me or Lambert Yamashita at 521-3051.

FRANCIS T. SANPEI
VICE PRESIDENT

NNKH/LT

xc: Department of Hawaiian Home Lands (S. Wong)
NEGATIVE DECLARATION AND ENVIRONMENTAL ASSESSMENT
FOR THE CONSTRUCTION OF WASTEWATER CONVEYANCE SYSTEM
AT NANAKULI RESIDENCE LOTS, OAHU

I. GENERAL INFORMATION

A. APPLICANT

Department of Hawaiian Home Lands, State of Hawaii.

B. APPROVING AGENCY

Governor, State of Hawaii.

C. AGENCY CONSULTED

1. City & County of Honolulu:
   Department of Land Utilization
   Department of Public Works, Div. of Wastewater Management

2. State of Hawaii:
   Department of Health
   Department of Transportation
   Department of Land and Natural Resources

3. Private and Community Organization:
   Hawaiian Railway Society

II. DESCRIPTION OF PROPOSED ACTION

A. GENERAL DESCRIPTION

The Department of Hawaiian Home Lands (DHHL), State of Hawaii, has contracted to build a wastewater conveyance system at Nanakuli Residence Lots, on Oahu.

The project site shown on Figure 1 is located on State of Hawaii property at Nanakuli Valley on land under the administrative control of the DHHL.

Seepage from sub-surface waste disposal is recognized by the Board of Water Supply (BWS) and the Department of Health (DOH), State of Hawaii, as a threat to the quality of potable groundwater and to the pristine nature of near coastal waters. To minimize these threats to the environment and to comply with DOH ruling which will eliminate all cesspools by 1990, DHHL wishes to install approximately 22,000 linear feet of sewerline to service about 372 unsewered residential lots in Nanakuli Valley.
The site of the proposed action will infringe on land within the special management area (SMA) (see Figure 1) designated by the city and County of Honolulu, Department of Land Utilization (DLU), for maintenance, restoration, and enhancement of the overall quality of the coastal zone environment. Therefore, an SMA permit will be required.

B. TECHNICAL DESCRIPTION

1. Proposed Action

The proposed sewer system for the project area is shown on Figure 2. The sewer lines are designed in accordance with the Design Standards of the Division of Wastewater Management.

The Nanakuli Avenue sewer main functions as the primary collector for the southern division of the project area (see Figure 2). This sewer main conveys wastewater offsite to the Nanakuli Interceptor sewer. The proposed 15-inch sewer main will be placed alongside an existing 12-inch force main where both sewer lines will be connected to the Nanakuli Interceptor at an existing sewer manhole (SMH). All three utilities, the existing 18-inch interceptor and 12-inch force main, and the proposed 15-inch sewer main, will be situated within the shoulder area on the makai side of the railway along Farrington Highway.

Wastewater generated in the northern division of the project area will be collected in proposed sewer mains along Mokiawe and Palikea streets and discharge into the existing (SMH) on Palikea Street.

2. No-Action Alternative

The no-action alternative will necessitate continued use of cesspools in Nanakuli Valley. The existing wastewater collection system will not be expanded. An advantage of this alternative is avoidance of short-term direct impacts resulting from construction. Sewer hook-up charges and monthly maintenance fees will also be avoided. Disadvantages to implementing this alternative are the continued potential impacts on public health and safety from cesspool seepage into near-shore waters and potable water aquifers. Both the BWS and DOH recognize cesspool seepage as a threat to potential drinking water. The DOH has delineated an underground injection control (UIC) line (see Figure 1) above which cesspools may not be built. Future
development in Nanakuli Valley above the UIC line will be required to connect to a wastewater collection system. The decision not to expand the existing wastewater collection system would affect future development in the valley.

C. PHYSICAL ENVIRONMENT

Nanakuli Valley is for the most part undeveloped with approximately 87 percent of the area categorized by land use as agricultural or open space (Wilson, Okamoto & Assoc., 1985). Public facilities, recreational areas, and residential development are concentrated in the lower valley along Farrington Highway. The proposed wastewater collection system will service the single-family homes in the developed residential area.

D. BIOLOGICAL ENVIRONMENT

The affected area is presently developed with single-family residences, thus it has limited value as a wildlife habitat. The biological environment largely consists of domestic animals and vegetation commonly found in residential areas. Threatened or endangered species of flora and fauna are not known to inhabit the lower areas of Nanakuli Valley.

E. SOCIAL AND ECONOMIC ENVIRONMENT

Nanakuli Valley residence lots are part of a housing program administered by the DHHL for qualified Hawaiians. The purpose of the program is to assist in rehabilitation of the Hawaiian people. Homestead leases are granted for the period of 99 years at a rate of $1.00 per year. The residents may be categorized in the low to moderate income bracket.

Residents will incur the following costs as a result of the proposed action:

- Backfilling cesspools: $450 to $750
- Installing laterals: $4500 to $7000

In addition, a monthly user charge will also be assessed to help pay for the operation and maintenance costs. The basic monthly user charge is presently $11.95 per residence, plus an additional $0.57 per 1,000 gallons per water consumption—up to 9,000 gallons, with a maximum monthly charge of $17.08 per month.

The proposed action represents a $4.8 million investment by the DHHL to provide a wastewater conveyance system in Nanakuli Valley.
III. EFFECTED ENVIRONMENT

A. RELATION TO EXISTING AND PROPOSED LAND USE

1. General Information

The proposed action is located in Nanakuli Valley on land owned entirely by the State of Hawaii under the administrative control of the DHNL. The proposed wastewater utility will service approximately 100 acres of existing development.

2. State Land Use Districts

Lands within Nanakuli Valley have been designated as Urban, Agricultural or Conservation by the State. Existing development, including the residential units proposed to be sewered, are located in the Urban District.

3. City and County of Honolulu General Area

The existing and proposed land use encompassing the proposed action is designated as R-6 residential by the City and County of Honolulu. Approximately 6 acres of land located along the makai side of Farrington Highway is designated as P-1 preservation due to a railway which is registered under the National Register of Historic Places (TMK 8-9-01:03, 8-9-06:09).

The General Plan sets forth long-term policies for development and general design objectives (social, economic and environmental) to be achieved for the welfare of the people. The project area is designated as rural. Applicable policies call for preservation of the rural character of the area.

4. Special Management Area

The Special Management Area (SMA) was established to preserve, protect, and possibly restore natural resources in Hawaii's coastal zone. Development proposed within the SMA requires a permit from the City and County of Honolulu. A portion of the project site falls within the SMA; thus, a permit is required.

5. State Housing Plan

The purpose of the State Housing Plan is to improve the state housing situation by defining objectives and policies, and implementing actions; and to improve housing conditions by assisting in effectuating actions. DHNL has been able to provide eligible Hawaiians with homeownership opportunities. However,
developable land has been insufficient to meet demand. The proposed action would allow future DHHL development mauka of existing residences the ability to connect to a wastewater collection system.

6. **208 Water Quality Management Plan**

The recommended pollution abatement measure in the 208 plan has been to expand the service area of the Waianae Wastewater Treatment Facility. Construction of the Nanakuli Pump Station and extension of the Nanakuli Interceptor would allow the project site to be included in the expanded treatment plant service area.

7. **Nanakuli Development Plan**

The Nanakuli Development Plan is a guide to the physical development of the community as reflected by social and economic values. It is designed as a decision-making guide that reflects the goals and objectives of DHHL, and community desires and intentions. The proposed wastewater collection system is in accordance with the development plan.

**B. RELATION TO PARK AND RECREATIONAL RESOURCES**

The range of uses within the surrounding area will not be affected.

**C. RELATION TO ENDANGERED CULTURAL AND ARCHAEOLOGICAL RESOURCES**

The project will be constructed in an area that has been previously studied in relation to endangered species, historic, cultural and archaeological resources. In addition, the sewers will be largely within roadway rights-of-way and underground, therefore, no adverse impacts are expected.

**D. RELATION TO FUGITIVE DUST**

Fugitive dust will be generated during construction periods from activities such as clearing, excavating and backfilling. The dust will be mitigated by spraying water from tanker trucks. Impacts will be temporary with no continuous air quality impairment anticipated.

**E. RELATION TO NOISE**

Noise will be generated by various vehicles and equipment used in the construction activities. Construction hours will be regulated to minimize disturbance to residents in the area according to the State Administrative Rules, Title 11, Chapter 43.
F. RELATION TO EROSION

During the construction of the proposed sewers, the adjoining areas will create an erosion hazard that can result in damage and pollution of surface waters, especially during heavy rainfall. The magnitude of such impacts will be mitigated by limiting the amount of open trench at any time. Erosion potential will also be less of a concern because the majority of trench construction will be in existing paved roadways.

G. RELATION TO COASTAL VIEWS AND AESTHETIC VALUES

Construction activities create a very disorganized appearance. Once the sewers are installed, the affected road sections will be repaved and restored to preconstruction conditions.

Coastal views will be temporarily blocked by construction related equipments, however, no permanently adverse impacts are expected since sewer lines will be buried underground.

H. RELATION TO DISTURBANCE OF RAILWAY

Construction activities will require removal of sections of the railway located makai of Farrington Highway. The temporary impact will be mitigated by replacement of the track sections in their original alignment upon completion of construction activities. The railway is listed in the National Register of Historic Places; thus, removal and restoration will be coordinated with the Hawaiian Railway Society and the State of Historic Preservation Officer of the Department of Land and Natural Resources.

I. RELATION TO TRAFFIC

Traffic will be disrupted when motorists are routed around trenching operation. The disruption along roadways will probably restrict traffic to a single lane pattern, with vehicular speeds reduced accordingly. Construction vehicular traffic, generated by disposal of excavated material and other construction related activities, will be regulated to minimize interruptions to normal traffic flow. Traffic disruption will be temporary, thus, once construction is completed this impact will no longer be of consequence.

J. RELATION TO COASTAL HAZARDS

Portions of the proposed action will fall within the tsunami zone and areas of minimal flooding. Effects on these sensitive areas should be insignificant due to location of sewer lines underground.
K. RELATION TO QUALITY OF RECEIVING COASTAL WATERS

Location of the sewer lines near the shore should not affect coastal water quality since infiltration into a sewer is more prevalent than leaks from a sewer to the ground.

L. RELATION TO GROUNDWATER RESOURCES

The proposed action should not adversely impact the groundwater quality since the intent of the proposed action is to eliminate cesspool seepage into the groundwater aquifers.

IV. SUMMARY DESCRIPTION OF EFFECTED ENVIRONMENT

The proposed action consisting of approximately 22,000 linear feet of underground sewer mains will service about 372 existing single family residences which are currently unsewered.

V. SUMMARY OF MAJOR IMPACTS

No major adverse impacts on property, environment, or residents has been identified from the proposed action.

The no-action alternative will necessitate continued use of cesspools in Nanakuli Valley. Disadvantages of this alternative are the continued potential impacts on public health and safety from cesspool seepage into near-shore waters and potable water aquifers.

The provisions of sewers will eliminate the need for cesspools in a major portion of the previously unsewered areas of Nanakuli Valley. Long term beneficial impacts to coastal water and groundwater quality will result from the reduction of the present practice of subsurface disposal. Instead, wastewater emissions will be conveyed to the Waianae Wastewater Treatment Facility and its associated disposal system.

Potential failures of cesspools will also be avoided, thus protecting the public health and minimizing nuisances from odor.

VI. SUMMARY OF MITIGATION MEASURES

No mitigation effects are contemplated as the system is being designed to prevent impacts.

VII. DETERMINATION

Since no major adverse impact is anticipated, a determination has been made that an environment impact statement (EIS) is not required.
VIII. FINDINGS & REASONS SUPPORTING DETERMINATION

The finding is that a negative declaration should be filed as early as possible. The justification for this determination is that no major impacts were identified after consideration of the affected environment in relation to the proposed action's technical, economic, social, and environmental characteristics and alternatives to the proposed action.

[Signature]

Hoaliku L. Drake, Chairman
Hawaiian Homes Commission

06-01-90

Date