

DEPARTMENT OF WASTEWATER MANAGEMENT
CITY AND COUNTY OF HONOLULU

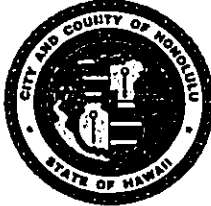
650 SOUTH KING STREET
HONOLULU, HAWAII 96813

RECEIVED

'94 JAN 19 AM 11:18

FRANK F. FASI
MAYOR

OFFICE OF ENVIRONMENTAL
QUALITY CONTROL



KENNETH M. RAPPOLT
DIRECTOR

FELIX B. LIMTIACO
DEPUTY DIRECTOR

WEP 94-2

January 5, 1994

Mr. Brian J.J. Choy, Director
Office of Environmental Quality Control
220 South King Street, 4th Floor
Honolulu, Hawaii 96813

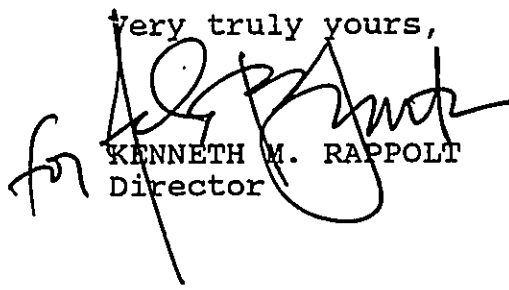
Dear Mr. Choy:

Subject: Negative Declaration for Enchanted Lake Wastewater
Pump Station 8,000 Gallon Storage Tank,
TMK 4-2-50:33, Kailua, Koolaupoko, Oahu, Hawaii

The Department of Wastewater Management has reviewed the comments received on the Draft Environmental Assessment (EA) for the subject project during the 30-day public comment period which ended on November 7, 1993. The Department has determined that this project will not have a significant environmental effect and has issued a Negative Declaration. Please publish this notice in the next OEQC Bulletin.

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the Final EA. Please contact Mr. Richard Leong at 527-5863 if you have any questions.

Very truly yours,


KENNETH M. RAPPOLT
Director

Enclosures

1994-02-08-0A-PEA-Enchanted Lake
Wastewater Pump Station

FEB 8 1994

NOTICE OF DETERMINATION
NEGATIVE DECLARATION FOR THE PROPOSED
ENCHANTED LAKE WASTEWATER PUMP STATION
8,000 GALLON STORAGE TANK

A. Proposing Agency

Department of Wastewater Management, City and County of Honolulu

B. Accepting Authority

Not applicable to a negative declaration.

C. Description of the Proposed Action

The Department of Wastewater Management, City and County of Honolulu, proposes potential modifications to the facilities of the Enchanted Lake Wastewater Pump Station (ELPS) to comply with a Consent Decree concerning discharges of wastewater to Kaelepulu Pond and Kailua Bay. The proposed action is design and, if necessary in the future, construction of an 8,000 gallon capacity storage tank on the ELPS site. This EA was prepared to expedite installation of the tank should it become necessary in the future.

The ELPS site is at 893 Akumu Street (Tax Map Key 4-2-50:33). In the past, storm flow events have sometimes necessitated discharges to Kaelepulu Pond. Recent modifications to the wastewater handling system in the area include installing a new force main, replacing a section of gravity sewer line, and installing larger pumps.

D. Determination and Reasons Supporting the Determination

The proposed project would not have a significant effect on the environment and therefore preparation of an Environmental Impact Statement is not required. The "Significance Criteria," Section 12 of Hawaii Administrative Rules Title 11, Chapter 200, "Environmental Impact Statement Rules," were reviewed and analyzed. Based on the analysis, the following were concluded:

1. *No irrevocable commitment to loss or destruction of any natural or cultural resource would result.* There are no significant natural resources on the site. What natural value is retained by Kaelepulu Pond would be protected by the reduction of wastewater bypasses. There are no known or expected historic or cultural resources on the site as the substratum is fill material the surface of which has been completely worked.

2. *The action would not curtail the range of beneficial uses of the environment.* The proposed action would increase potential beneficial uses of the environment by reducing wastewater bypasses into Kaelepulu Pond, Kaelepulu Stream and ultimately into Kailua Bay.
3. *The proposed action does not conflict with the state's long-term environmental policies or goals and guidelines.* The proposed action would have no significant negative environmental impacts. Temporary impacts associated with construction can be adequately mitigated. The proposed action would be supportive of other state goals and guidelines in the areas of public health, pollution control, and protection of the natural environment.
4. *The economic or social welfare of the community or state would not be substantially affected.* The proposed project would provide short-term economic benefits in the form of engineering and possibly, construction jobs, and long-term benefits to nearby residents in terms of public health, pollution control and protection of the natural environment.
5. *The proposed action does not substantially affect public health.* The proposed action would benefit public health by reducing the frequency of wastewater bypasses into Kaelepulu Pond, Kaelepulu Stream and ultimately into Kailua Bay.
6. *No substantial secondary impacts, such as population changes or effects on public facilities, are anticipated.* The proposed action would not affect population growth or distribution, but would simply improve service to residential areas already existing. There are no provisions for expansion of the proposed facilities. No long-term negative effects are expected on any public facilities.
7. *No substantial degradation of environmental quality is anticipated.* The proposed action is expected to result in a long-term improvement in environmental quality as a consequence of reducing wastewater bypasses into Kaelepulu Pond, Kaelepulu Stream and ultimately into Kailua Bay. There would be minor short-term increases in noise, emissions of air pollutants from mobile sources, and traffic in the immediate area if construction takes place.
8. *The proposed action does not involve a commitment to larger actions, nor would cumulative impacts result in considerable effects on the environment.* The proposed action is an isolated remediation of a long-standing problem. It does not involve a commitment to any other action. Its negative impacts on the environment will be insignificant.

9. *No rare, threatened or endangered species or their habitats would be affected. The project site is in a mostly residential area. No protected species or important habitat would be affected.*
10. *Air quality, water quality or ambient noise levels would not be detrimentally affected. None of these environmental characteristics would be significantly affected by the proposed action. Operation of equipment and vehicles associated with tank construction would temporarily elevate ambient noise and concentrations of exhaust emissions in the immediate vicinity of the site during construction. Mitigation measures would be employed to ensure compliance with applicable regulations.*
11. *The project would not affect environmentally sensitive areas, such as flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters. No environmentally sensitive areas will be negatively affected by the project. It is intended to protect recreationally important coastal and inland waters.*

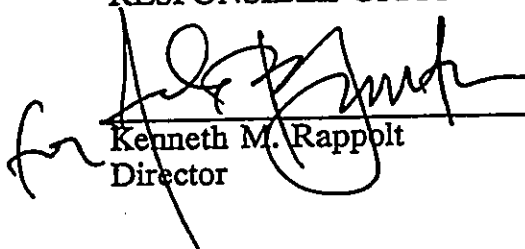
E. Supplementary Information

The Environmental Assessment (EA) for the proposed action and the results of the coordination undertaken with affected agencies and parties are attached to support the determination of a Negative Declaration.

F. Name, Address and Phone Number of Contact Person

Department of Wastewater Management
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813
Richard Leong, (808) 527-5863

RESPONSIBLE OFFICIAL



Kenneth M. Rappolt
Director

1/6/94

Date

FINAL
ENVIRONMENTAL ASSESSMENT

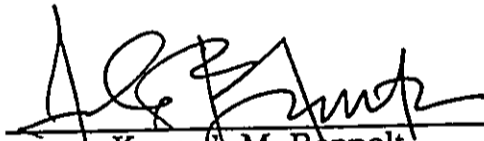
FOR

**ENCHANTED LAKE WASTEWATER PUMP STATION
8,000 GALLON STORAGE TANK**

Kailua, Koolaupoko, Oahu, Hawaii
Tax Map Key: 4-2-50:33

Proposing Agency: **DEPT. OF WASTEWATER MANAGEMENT
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET
HONOLULU, HAWAII 96813**

Responsible Official:


Kenneth M. Rappolt
Director

1/6/94
Date

Prepared by
GK & Associates/
SEY Engineers, Inc.

This Document is prepared pursuant to Chapter 343, HRS.

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 Project Description	1
1.1 Background	2
1.2 Storage Tank	5
1.3 Project Cost and Schedule	5
2.0 Summary Description of the Affected Environment, Potential Environmental Impacts and Mitigation Measures	6
2.1 Existing Site and Land Use	8
2.2 Topography and Soils	8
2.3 Climate and Air Quality	9
2.4 Water Resources	9
2.5 Flora and Fauna	10
2.6 Archaeology and Historical Sites	10
2.7 Social and Economic Environment	10
2.8 Recreational Activities	11
2.9 Utilities	11
2.10 Noise	11
2.11 Traffic	11
2.12 Views	11
2.13 Odor	12
3.0 Summary of Major Impacts and Alternatives Considered	12
3.1 Major Impacts	12
3.2 No Action	12
3.3 Delayed Action	12
3.4 Alternate Designs	13
4.0 Determination and Justification	15
5.0 List of References	15
6.0 List of Consulted Parties	16
6.1 Pre-Assessment Consultation	17
6.2 Draft EA Review	17

FIGURES

1. Project Location	3
2. Site Plan	4
3. Proposed Storage Tank Location	5
4. Existing Pump Station	6
5. Land Use Districts	7

1.0 PROJECT DESCRIPTION

1.1 BACKGROUND

The Department of Wastewater Management, City and County of Honolulu, proposes potential modifications to the facilities of the Enchanted Lake Wastewater Pump Station (ELPS) to comply with a Consent Decree concerning discharges of wastewater to Kaelepulu Pond and Kailua Bay. The proposed action is design and, if necessary in the future, construction of an 8,000 gallon capacity storage tank on the ELPS site. This EA was prepared to expedite installation of the tank should it become necessary in the future.

The ELPS site is at 893 Akumu Street (Tax Map Key 4-2-50:33). The project location is shown on Figure 1. In the past, storm flow events have sometimes necessitated discharges to Kaelepulu Pond. Recent modifications to the wastewater handling system in the area include installing a new force main, replacing a section of gravity sewer line, and installing larger pumps. These measures in themselves may prevent future spills or discharges, but data on peak flow events are not yet available.

If excessive inflows to the ELPS do occur in the future, the Consent Decree specifies that:

[The City] will provide tank truck(s), with a total capacity of 10,000 gallons (per day), for removal of the first 10,000 gallons of excess inflow of sewage per day. The tank trucks would be available on a continuous basis, i.e., there would be no gaps between the trucks' removal of the excess inflow. The initial truck would be on-site within thirty (30) minutes of a "triggering event." A triggering event is defined as:

- a. The wet well depths being four (4) inches above the high-alarm depth, or*
- b. The flow rate into the Kailua Heights Pumping Station equals the influent line capacity into the Kailua Heights Pumping Station.*

The terms of the settlement oblige the City to remove only the first 10,000 gallons of excess inflow per calendar day. Amounts in excess of the first 10,000 gallons on a given day will be considered an "Act of God," and may be disposed of as the City deems necessary. (If the storage tank is constructed, the City will be obliged to remove only 8,000 gallons per calendar day.)

Presently available at the Kailua Wastewater Treatment Plant are two 5,000 gallon tankers and one 7,000 gallon tanker on loan (temporarily available). If a maximum excess inflow event were to occur, it would therefore require two tankers to comply with the above terms.

In the event it becomes necessary to initiate bypass of excess inflows into the drainage canal, a public warning system will be required. The Consent Decree specifies as follows:

[The City] shall maintain a systematic and reliable warning system from the ELPS to the mouth of Kaelepulu Stream (where it empties into Kailua Bay). A City employee shall check, at least once per day, that all warning signs are in place and not missing (or otherwise not observable by the public). [The City] shall also maintain a systematic public and media information system which will advise the surrounding communities of bypasses from the ELPS.

With regard to the possible storage tank, the Consent Decree specifies that:

Within eight (8) months of the approval of this Consent Decree by City Council, the City shall have completed...the preliminary plans and drawings for a storage tank or tanks having a total 8,000 gallon capacity, to be located at or near the ELPS.

Should any violation occur...Defendants shall, within a reasonable time following the violation, commence actual construction of the storage tank...

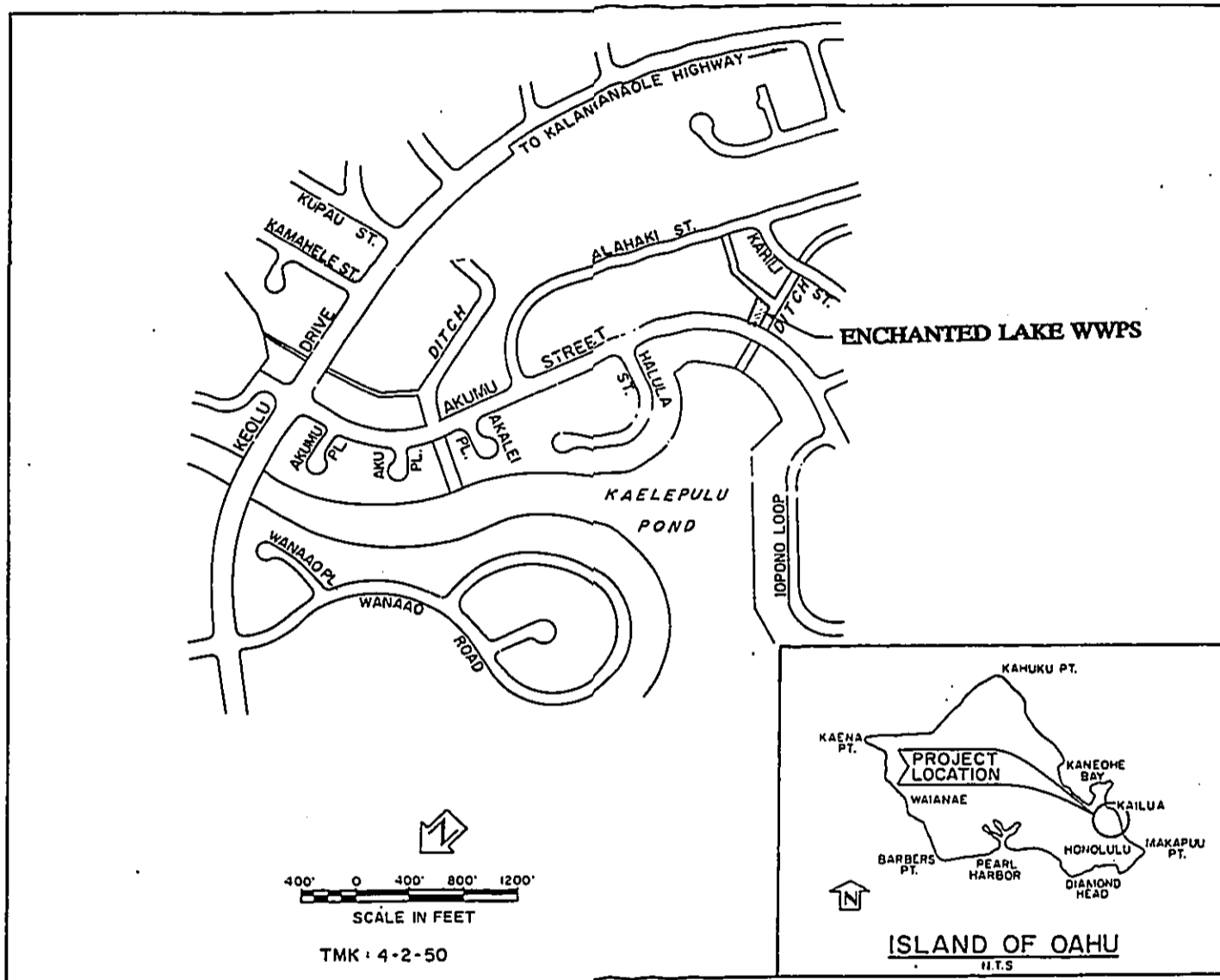
A violation would be a bypass of any of the first 10,000 gallons of excess inflow on a given calendar day.

1.2 STORAGE TANK

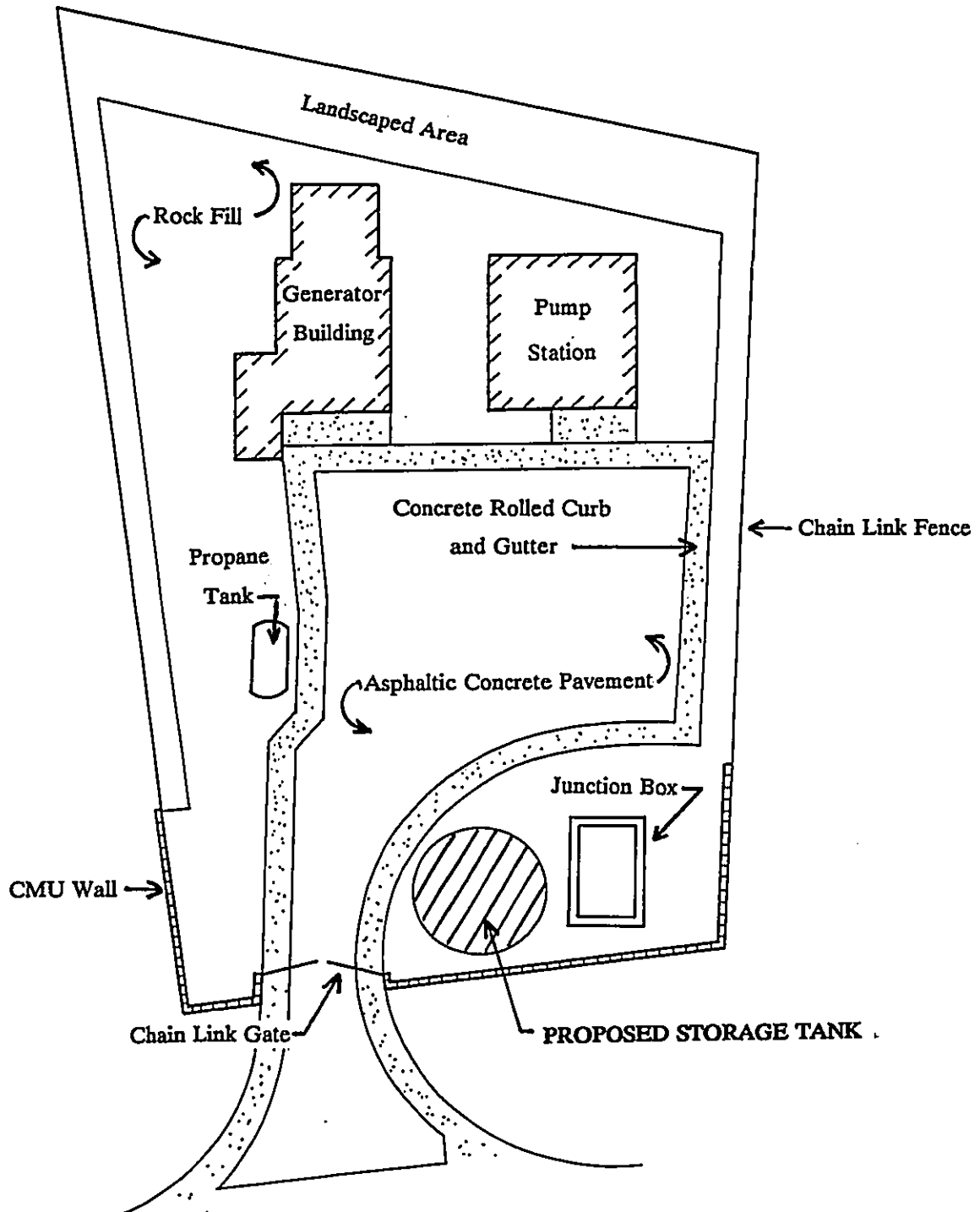
The tank is being designed as a single-wall, steel or fiberglass reinforced plastic (FRP) tank approximately 10 feet high and 12 feet in diameter which will sit on a concrete pad. A valve on the tank influent line will control sewage flow into the tank. An overflow line connecting directly to the wet well will be installed near the top of the tank to eliminate the possibility of overflowing and spillage. There will also be a sight-glass along the upper three feet of the tank so that an operator can visually monitor the liquid level in the tank and close the valve when the tank is filled. When capacity exists in the wet well, the contents in the tank will be drained into it. Additional pumps will not be required to operate the tank system.

The proposed site for the storage tank is shown on the Site Plan (Figure 2) and in a recent photograph (Figure 3). The pump station will remain in service during installation of the storage tank.

**FIGURE 1
PROJECT LOCATION**



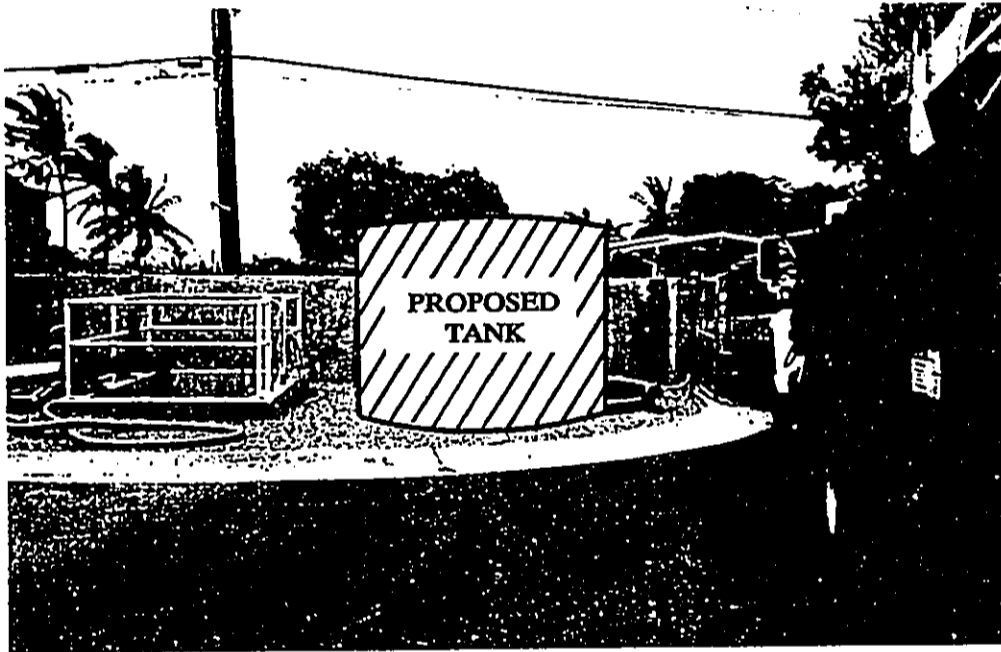
**FIGURE 2
SITE PLAN**



1.3 PROJECT COST AND SCHEDULE

The cost of the storage tank, installation, piping connections, etc., is presently estimated at \$66,000. As discussed above, construction of the tank will not be required unless there is a violation of the terms of the Consent Decree. The Decree, however, establishes a schedule for completion of design of the tank, that is, within eight months of approval of the Decree by the City Council. The date of this approval was January 27, 1993, and therefore, tank design must be completed by September 27, 1993.

**FIGURE 3
PROPOSED STORAGE TANK LOCATION**



2.0 SUMMARY DESCRIPTION OF THE AFFECTED ENVIRONMENT, POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

2.1 EXISTING SITE AND LAND USE

The existing pump station is located on Akumu Street in the Enchanted Lake section of Kailua. The site is bounded on two sides by drainage canals which discharge into Kaelepulu Pond and ultimately to Kailua Bay. The site encompasses an area of 5,662 square feet. Existing facilities and site improvements include a pump station building, generator building, an above-ground propane storage tank, walls and fences, asphalt pavement, concrete pads and sidewalks, gravel fill, and landscaping.

FIGURE 4
EXISTING PUMP STATION



The pump station site is in the state's Urban Land Use District (Figure 5). City and County zoning of the pump station site is Residential, R-5. The site is designated Public Facility on the City's Development Plan Land Use Map, and is consistent with the wastewater pump station designation on the Koolaupoko Development Plan Public Facilities Map. According to Honolulu's Land Use Ordinance (DLU, 1986), utility installations of Type A are a principal permitted use in R-5 zones. Type A utility installations are those having minor impacts on adjacent land uses, and include wastewater pump stations. Maximum permitted building heights are 25 feet with adequate setbacks. The maximum permitted building area is 25% of the lot for non-agricultural structures. The pump station

FIGURE 5
LAND USE DISTRICTS



is presently in conformance with these restrictions; addition of the storage tank would not change this, as the maximum height of the tank is about 10 feet. Development Standards for the R-5 Residential District specify a front yard setback of 30 feet for non-residential uses, however, a waiver for public utility use may be granted by the Director of the Department of Land Utilization.

The site is not in a Special District, Special Management Area (SMA) or in the Shoreline Setback. It is in Flood Zone X, outside the 500-year flood plain.

There will be no long-term interference with any existing or proposed use of surrounding properties.

2.2 TOPOGRAPHY AND SOILS

A geotechnical investigation was completed in 1991 prior to installation of a relief sewer line from the ELPS to Keolu Drive. The ground elevation ranged from 6.8 to 8.3 feet above mean sea level (MSL). Groundwater levels were encountered at depths ranging from about MSL to 1.8 feet above MSL. Soils were silty clay overlying clayey silt, with coral rubble apparent 20 feet or more below the surface. The surface strata consists of fill material.

A minor amount of excavation would be required to form the foundation for the tank, but grading would not be required. Maximum excavations to about 3.7 feet above MSL would be required. Dewatering, therefore, would not be required.

The tank and new pipelines associated with it, would be tested for leakage, and the water used would be discharged into the wet well. Therefore, an NPDES Permit under DOH Chapter 55 would not be required for "hydrotesting waters." As the project would involve disturbance of less than five acres of total land area, an NPDES Permit for "Construction Activity" would not be required.

2.3 CLIMATE AND AIR QUALITY

The climate is characterized by the persistence of trade winds, a strong gradient of increasing rainfall from the coast to the mountains, a concomitant gradient from sunny coastal areas to persistent cloudiness over nearby mountain crests, equable temperatures from day to day and season to season, and the infrequency of severe storms. Northeasterly trade winds prevail throughout the year, although their average frequency varies from more than 90 percent during the summer to only 50 percent in January. Annual rainfall in the project area averages about 75 inches (Univ. of Hawaii, 1983).

Air quality in Windward Oahu is generally very good due to the lack of stationary sources of pollutants and the effects of the tradewinds. During periods of light or calm

winds, however, "hot spots" where air pollutants may exceed short-term standards can occur in areas of traffic congestion.

If the storage tank is constructed, exhaust emissions during construction would be generated from vehicles and construction machinery. Fugitive dust will be generated during excavation for the pad and as a result of vehicular traffic. Considering the size of the project, these impacts would be insignificant. The contractor will be required to comply with Hawaii Administrative Rules 11-60 "Air Pollution Control" which contains restrictions on visible emissions from motor vehicles and fugitive dust generation.

2.4 WATER RESOURCES

According to Takasaki (1977), groundwater in the project area is found as deep artesian water in inland areas. Most of the shallow groundwater occurs in coralline material. The deep artesian water moves into the coralline material and from there to the sea. Borings taken in the geotechnical survey indicated the occurrence of groundwater at depths of 5.0 to 7.6 feet below the existing ground surface. The proposed project will not impact groundwaters underlying the site.

The ELPS lies adjacent to a drainage canal which empties into Kaelepulu Pond (Enchanted Lake). The pond was once more than 200 acres in size, surrounded by an approximately equal area of marshland. The pond is connected to the sea by Kaelepulu Stream. A sand berm blocks this drainage at the sea except when cleared mechanically or occasionally by storm runoff. Development of lands surrounding the pond into residential properties has been accompanied by filling of the marshlands and draining of the pond, such that the pond is now but a fraction of its former size. The shores of the pond are now a combination of rock walls and steep dirt ledges. Water in the pond is often quite turbid.

The proposed project will have no direct impact on groundwater beneath the site or on adjacent surface waters. It is itself a mitigation measure designed to reduce the incidences of wastewater bypasses into Kaelepulu Pond.

2.5 FLORA AND FAUNA

The project site is within an area developed for residential uses. The ELPS sits on fill material which has been completely worked. No native habitat exists on the site. No candidate, endangered or threatened plant or animal species are known to exist on the site or use the site as habitat. Dogs, cats, rats and mongoose roam throughout the area.

Kaelepulu Stream, seaward of the pond, supports populations of mullet and other fish, but the most abundant fish in the pond is tilapia. Several varieties of crabs are also present (Ahuimanu Productions, 1977).

Urbanization of Enchanted Lake removed a large amount of exotic forest, remnants of which still exist further inland. This habitat supported a typical lowland avifauna of exotic species. Hawaiian Owls (*Pueo*) may forage across the area. In times past, Kaelepulu Pond was an important waterbird habitat, but reduction in the amount of shallow water feeding habitat, degradation of water quality, increased human disturbance, and access to the pond by predators have reduced the value of the pond for waterbirds. Nevertheless, consultation with the U.S. Fish and Wildlife Service revealed that the Pond continues to provide valuable habitat for all four of Hawaii's endangered waterbirds (Hawaiian Stilt, *Himantopus mexicanus knudseni*; Hawaiian Coot, *Fulica americana alai*; Hawaiian Moorhen (Gallinule), *Gallinula chloropus sandvicensis*; and Hawaiian Duck, *Anas wyvilliana*)

The proposed project will have no effect on the flora and fauna of the site or surrounding area, other than to reduce the frequency of wastewater discharges to Kaelepulu Pond.

2.6 ARCHAEOLOGY AND HISTORICAL SITES

The surface of the existing pump station site has been completely worked during previous construction. Furthermore, the site sits on fill material. No significant archaeological or historical sites, features or artifacts are expected.

2.7 SOCIAL AND ECONOMIC ENVIRONMENT

The following projections are from the Department of Business and Economic Development (1988). The resident population on Oahu is projected to rise 23 percent, from 811,100 in 1985 to 999,500 in 2010. Oahu's de facto population, which includes visitors present but excludes residents temporarily absent, is projected to grow to 1,094,700 in 2010. The civilian job count, which was 473,100 in 1985, is projected to increase to 720,600 by 2010. Most gains are expected in trade, services and diversified agriculture. Per capita personal income is projected to rise from \$12,400 in 1985 to \$16,800 (in 1982 dollars) in 2010, or 35.5%.

The proposed project would provide short-term economic benefits in the form of engineering and possibly, construction jobs, and long-term benefits to nearby residents in terms of public health and water quality.

2.8 RECREATIONAL ACTIVITIES

There are no public recreational facilities adjacent to the site. Neither construction nor operation of the proposed facilities would hinder in any way the use of any local or regional recreational facilities.

2.9 UTILITIES

Preliminary coordination with all affected utilities (electrical, water, sewer, telephone, cable TV, and gas) was done in the pre-assessment consultation, and will be continued during engineering design. If construction of the tank proceeds, the contractor would be required to verify utility locations and coordinate any temporary or permanent displacement so as to insure no interruption of service.

2.10 NOISE

State Department of Health regulations impose daytime/nighttime noise limits of 55/45 dBA at the property line adjoining residential properties, in this case at the eastern boundary of the site. The City and County of Honolulu Land Use Ordinance imposes noise regulations which are based on Octave Band Sound Levels. Converting the octave bands limits into dBA yields approximate limits of 56 dBA and 53 dBA for daytime and nighttime, respectively. The State nighttime limit of 45 dBA is therefore the most stringent of the regulations.

The operation of construction equipment would raise ambient noise levels in the project vicinity. Construction equipment and on-site vehicles or devices requiring an exhaust of gas or air would have to be equipped with mufflers. In addition, all construction-related vehicles traveling on roadways must meet the vehicle noise level requirements set by the State (Hawaii Administrative Rules 11-42 "Vehicular Noise Control for Oahu").

Construction of the storage tank would be accomplished during daytime hours. All ambient noise restrictions would be observed.

2.11 TRAFFIC

All construction would take place on the site, so there would be no lane closures or other traffic inconveniences. Traffic on Akumu Street would be increased slightly by workers transiting to and from the site and deliveries of supplies and materials, but the number of vehicles would be minimal and most of the additional traffic would be during off-peak hours. Should pumping into tank trucks be required by a high flow event, a maximum of two tankers per day will be required.

2.12 VIEWS

The existing pump station is relatively inconspicuous from Akumu Street (see Figure 3), situated behind masonry walls. Hedges and other landscaping obscure views from residential lots behind the pump station. The new 10 feet high tank, however, will be visible above the 6 feet high wall. Although residents may object to the aesthetics of the tank, no protected public views would be impacted.

2.13 ODOR

Odor is not expected to be a major problem, as the storage tank will be covered, presumably would be used only infrequently, and would be emptied promptly. However, the tank will be vented, so odors may be discernable when the tank is used.

3.0 SUMMARY OF MAJOR IMPACTS AND ALTERNATIVES CONSIDERED

3.1 MAJOR IMPACTS

The major beneficial impact of the proposed project is intended to be reduction of the possibility and potential volumes of sewage bypasses into Kaelepulu Pond.

Construction activities would create very minor temporary negative impacts in the areas of noise and air quality. Mitigation measures would serve to minimize these impacts. If constructed, the storage tank would be visible from surrounding properties and roadways.

3.1 NO ACTION

The No Action Alternative is the default scenario which will occur in the absence of a violation of the Consent Decree. If, during the term of the Consent Decree, excessive inflows to the ELPS trigger deployment of tanker truck(s), and if the required volumes of wastewater are successfully removed from ELPS without an unauthorized bypass, then construction of the storage tank will not be required.

3.2 DELAYED ACTION

The Consent Decree establishes a schedule for the completion of the design of the tank. The construction of the tank is contingent on the occurrence of a future violation. Delay in the completion of the design of the tank would contravene the terms of the Consent Decree, and cause the City to incur monetary fines.

3.3 ALTERNATE DESIGNS

The size of the site, the locations of existing facilities, and the space needed for the proposed tank leave little leeway in terms of alternative designs or site plans. The proposed configuration is the most efficient in terms of integration with other facilities at the pump station and access by tanker trucks. Another alternative might be to acquire a lot in the immediate vicinity by condemnation, and displace a residence. This is not considered a reasonable alternative.

4.0 DETERMINATION AND JUSTIFICATION

The proposed project would not have a significant effect on the environment and therefore preparation of an Environmental Impact Statement is not required. The "Significance Criteria," Section 12 of Hawaii Administrative Rules Title 11, Chapter 200, "Environmental Impact Statement Rules," were reviewed and analyzed. Based on the analysis, the following were concluded:

1. *No irrevocable commitment to loss or destruction of any natural or cultural resource would result.* There are no significant natural resources on the site. What natural value is retained by Kaelepulu Pond would be protected by the reduction of wastewater bypasses. There are no known or expected historic or cultural resources on the site as the substratum is fill material the surface of which has been completely worked.
2. *The action would not curtail the range of beneficial uses of the environment.* The proposed action would increase potential beneficial uses of the environment by reducing wastewater bypasses into Kaelepulu Pond, Kaelepulu Stream and ultimately into Kailua Bay.
3. *The proposed action does not conflict with the state's long-term environmental policies or goals and guidelines.* The proposed action would have no significant negative environmental impacts. Temporary impacts associated with construction can be adequately mitigated. The proposed action would be supportive of other state goals and guidelines in the areas of public health, pollution control, and protection of the natural environment.
4. *The economic or social welfare of the community or state would not be substantially affected.* The proposed project would provide short-term economic benefits in the form of engineering and possibly, construction jobs, and long-term benefits to nearby residents in terms of public health, pollution control and protection of the natural environment.
5. *The proposed action does not substantially affect public health.* The proposed action would benefit public health by reducing the frequency of wastewater bypasses into Kaelepulu Pond, Kaelepulu Stream and ultimately into Kailua Bay.
6. *No substantial secondary impacts, such as population changes or effects on public facilities, are anticipated.* The proposed action would not affect population growth or distribution, but would simply improve service to residential areas already existing. There are no provisions for expansion of the proposed facilities. No long-term negative effects are expected on any public facilities.

7. *No substantial degradation of environmental quality is anticipated.* The proposed action is expected to result in a long-term improvement in environmental quality as a consequence of reducing wastewater bypasses into Kaelepulu Pond, Kaelepulu Stream and ultimately into Kailua Bay. There would be minor short-term increases in noise, emissions of air pollutants from mobile sources, and traffic in the immediate area if construction takes place.
8. *The proposed action does not involve a commitment to larger actions, nor would cumulative impacts result in considerable effects on the environment.* The proposed action is an isolated remediation of a long-standing problem. It does not involve a commitment to any other action. Its negative impacts on the environment will be insignificant.
9. *No rare, threatened or endangered species or their habitats would be affected.* The project site is in a mostly residential area. No protected species or important habitat would be affected.
10. *Air quality, water quality or ambient noise levels would not be detrimentally affected.* None of these environmental characteristics would be significantly affected by the proposed action. Operation of equipment and vehicles associated with tank construction would temporarily elevate ambient noise and concentrations of exhaust emissions in the immediate vicinity of the site during construction. Mitigation measures would be employed to ensure compliance with applicable regulations.
11. *The project would not affect environmentally sensitive areas, such as flood plains, tsunami zones, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters.* No environmentally sensitive areas will be negatively affected by the project. It is intended to protect recreationally important coastal and inland waters.

5.0 LIST OF REFERENCES

Ahuimanu Productions. 1977. *An Ornithological Survey of Hawaiian Wetlands*. Prep. for U.S. Army, Engineer District, Honolulu. 406pp.

City and County of Honolulu, Department of Land Utilization. 1986. *Land Use Ordinance*.

GMP Associates. 1984a. *Kaneohe-Kailua Wastewater Facilities Plan*. Prep. for City and County of Honolulu, Division of Wastewater Management.

GMP Associates. 1984b. *Revised Environmental Impact Statement for Kaneohe-Kailua Wastewater Facilities*. Prep. for City and County of Honolulu, Division of Wastewater Management.

State of Hawaii, Department of Business and Economic Development. 1988. *Population and Economic Projections for the State of Hawaii to 2010 (Series M-K)*.

Takasaki, K.J. 1977. "Elements Needed in Design of a Ground-Water-Quality Monitoring Network in the Hawaiian Islands." U.S. Dept. of the Interior, Geological Survey, Water Supply Paper 2041.

University of Hawaii, Department of Geography. 1983. *Atlas of Hawaii*. University of Hawaii Press. Honolulu. 238 pp.

6.0 LIST OF CONSULTED PARTIES

6.1 PRE-ASSESSMENT CONSULTATION

All owners of record of parcels surrounding the pump station site were consulted by letter. In addition, the following agencies, organizations and utilities were consulted.

FEDERAL AGENCIES

U.S. Army Corps of Engineers, Pacific Ocean Division
U.S. Department of the Interior, Fish and Wildlife Service
U.S. Department of Commerce, National Marine Fisheries Service

STATE AGENCIES

Department of Business, Economic Development and Tourism
Department of Land and Natural Resources
Department of Land and Natural Resources, State Historic Preservation Division
Department of Health
Department of Health, Environmental Management Division
Office of State Planning
University of Hawaii, Water Resources Research Center

COUNTY AGENCIES

Board of Water Supply
Building Department
Department of Housing and Community Development
Department of General Planning
Department of Land Utilization
Department of Parks and Recreation
Department of Transportation Services
Kailua Neighborhood Board No. 31

UTILITIES

Hawaiian Electric Company
Hawaiian Telephone Company
GASCO, Inc.
Oceanic Cablevision

ORGANIZATIONS

Hawaii's Thousand Friends
Malama Na Pa
Life of the Land
Sierra Club, Hawaii Chapter
Outdoor Circle

6.2 DRAFT EA REVIEW

Copies of the Draft EA were provided to the same agencies, organizations and individuals included above on the master list provided by OEQC for the pre-assessment consultation. The list was supplemented to include parties who, during the pre-assessment consultation process, requested to receive copies of the Draft EA for their review and comment. Copies of all substantive review comments and responses follow.



STATE OF HAWAII
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM
LAND USE COMMISSION
Room 111, Old Federal Building
Honolulu, Hawaii 96813
Telephone 571-3121

ESTHER UEDA
EXECUTIVE OFFICER

**GK &
ASSOCIATES**

294 AWAKEA RD. • KAILUA, HAWAII 96734 • TEL/FAX (808) 262-2120

October 11, 1993

SUBJECT: Director's Referral No. 93-292-C
Draft Environmental Assessment (EA) for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank,
TMK No.: 4-2-50: 33, Kailua, Koolaulopoko, Oahu, Hawaii

We have reviewed the subject draft EA for the proposed
Enchanted Lake Wastewater Pump Station storage tank, and confirm
that the project location as shown on figure 1 of the draft EA is
located within the State Land Use Urban District.

We suggest that the final EA include a map showing the
project location in relation to the State Land Use Districts.

We have no further comments to offer at this time.

EU:BS:th

December 8, 1993

Ms. Ester Ueda, Executive Officer
Department of Business, Economic Development & Tourism
Land Use Commission
335 Merchant Street, Room 104
Honolulu, Hawaii 96813

Dear Ms. Ueda:

Subject: Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK
No. 4-2-50:33, Kailua, Koolaulopoko, Oahu, Hawaii

Thank you for your letter of October 11, 1993. We will include in the final EA a
map showing the project location in relation to the State Land Use Districts.

Sincerely,

George Krasnick
President

GK & ASSOCIATES

294 AWAKEA RD. • KAILUA, HAWAII 96734 • TEL/FAX (808) 262-2120



STATE OF HAWAII
DEPARTMENT OF HEALTH
ENVIRONMENTAL MANAGEMENT DIVISION
FIVE WATERFRONT PLAZA, SUITE 250
HONOLULU, HAWAII 96813
October 13, 1993

JOHN WAINKE
GOVERNOR OF HAWAII

JOHN C. LEVINSKI, M.D.
DIRECTOR OF HEALTH

In reply, please refer to:
EMD
A-04-02-50-33 P33

December 8, 1993

Mr. George Krasnick, President
GK & Associates
294 Awakea Road
Kailua, Hawaii 96734

Mr. Dennis Tulang, Chief
Department of Health
Environmental Management Division
Five Waterfront Plaza, Suite 250
500 Ala Moana Boulevard
Honolulu, Hawaii 96813

Dear Mr. Krasnick:

Subject: Transmittal of Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank
Kailua, Koolauapoko, Oahu
TMK: 4-2-50: 33

Dear Mr. Tulang:

Subject: Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK
No. 4-2-50:33, Kailua, Koolauapoko, Oahu, Hawaii

We have reviewed the document on the subject project submitted by your office. The document proposes to design, and if necessary in the future, construct an 8,000 gallon capacity storage tank on the Enchanted Lake Wastewater Pump Station site. This was prepared to expedite installation of the tank should it become necessary in the future.

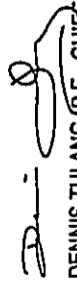
Thank you for your letter of October 13, 1993. As described in the subject EA, the present action is design of the system. The design will conform to all applicable provisions of the DOH's Administrative Rules, Chapter 11-62, "Wastewater Systems." Construction of the storage tank may or may not be necessary in the future. In the event construction is necessary, plans will be submitted for your review before proceeding.

We are in favor of the proposed action and concur with the construction of a storage tank.

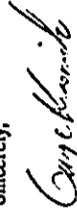
However, we would like to review all plans pertaining to the proposal as it happens. All wastewater plans must conform to applicable provisions of the DOH's Administrative Rules, Chapter 11-62, "Wastewater Systems." However, we do reserve the right to review the detailed wastewater plans for conformance to applicable rules.

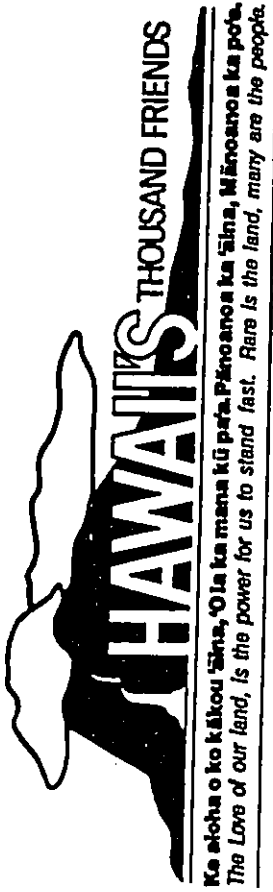
Should you have any questions, please contact Ms. Lori Kajiwara of the Wastewater Branch at telephone 586-4290.

Sincerely,


DENNIS TULANG, P.E., CHIEF
Wastewater Branch

Sincerely,


George Krasnick
President



October 21, 1993

GK & Associates
294 Awakea Road
Kailua, Hawaii 96734

Dear George Krasnick:

Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK 4-
2-50:33, Kailua, Koolauoko, Oahu, Hawaii

Thank you for sending us a copy of the Draft EA. We have just two
minor comments:

Pg. 10

2.12 VIEWS - Since the new tank will be visible over the 6
foot wall would it be possible to leave or create a
border near/around the tank area where trees could
be planted to help conceal the tank? This would be
most appreciated by the neighbors.

2.13 ODOR -

It would be helpful and appreciated by the
neighbors if they could be notified ahead of time
when venting and possible odors might occur.

**GK &
ASSOCIATES**

294 AWAKEA RD. • KAILUA, HAWAII 96734 • TEL/FAX (808) 262-2120

December 8, 1993

Hawaii's Thousand Friends
305 Hahani St, Suite 282
Kailua, Hawaii 96734

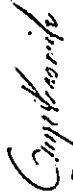
Dear Sirs:

Subject: Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK
No. 4-2-50:33, Kailua, Koolauoko, Oahu, Hawaii

Thank you for your letter of October 21, 1993. We understand that potential odors
from and visual impacts of the storage tank are of concern to the neighbors. Presently, it
remains an open question whether or not recent improvements to the pump station are
sufficient to avoid future violations of the terms of the consent decree, and consequently,
negate the necessity to construct the storage tank. This most desirable scenario would avoid
the impacts in question. If tank construction becomes necessary, the potential for roots to
penetrate buried piping precludes the use of trees or large plants around the tank. It is
possible however, that the existing hedge could be cultivated and maintained to provide
visual screening along the street side of the property.

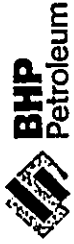
The tank would be vented when in use. This would occur under conditions of heavy
rainfall and high runoff volumes. This could occur at any time, day or night, with little
opportunity for advance notification. The notification process might well be more of a
nuisance than the odor itself.

Sincerely,


George Krasnick
President

305 Hahani St., Suite 282 • Kailua, HI 96734 • Phone/Fax: (808) 262-0682

The Gas Company
505 Kamehameha Street
P.O. Box 3379 Honolulu, Hawaii 96842
Telephone (808) 547-3373
Telex: 150045 GSKO HAWAII
Fax: 547-3374



October 21, 1993

GK & ASSOCIATES
294 Awakea Rd.
Kailua, Hawaii 96734

Attention: Mr. George Krasnick
President

Gentlemen:

Subject: Draft Environmental Assessment for
Enchanted Lake Wastewater Pump Station 8,000 Gallon Storage Tank,
TMK 4-2-50-33, Kailua, Koolauapoko, Oahu, Hawaii

Please be advised that The Gas Company maintains an underground utility gas main in the project vicinity, which serves residential customers in the area and is interconnected with the utility network in Kailua. We would appreciate your consideration during the project planning and design process to minimize any potential conflicts with the existing gas facilities in the project area.

Thank you for the opportunity to comment on the Draft Environmental Assessment. Should there be any questions, or if additional information is desired, please call me at 547-3574.

Very truly yours,

THE GAS COMPANY

Keith K. Yamamoto
Supervisor, Engineering

10/20/93:sk
12:10

**GK &
ASSOCIATES**

294 AWAKEA RD. • KAILUA, HAWAII 96734 • TEL/FAX (808) 282-2120

December 8, 1993

Mr. Keith K. Yamamoto, Engineering Supervisor
The Gas Company
P.O. Box 3379
Honolulu, Hawaii 96842

Dear Mr. Yamamoto:

Subject: Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK
No. 4-2-50-33, Kailua, Koolauapoko, Oahu, Hawaii

Thank you for your letter of October 21, 1993. We understand that there are underground gas facilities in the project area. Should it be necessary to construct the storage tank, the contractor would be required to verify the location of all buried utilities which could be affected by excavation. In this instance however, all excavation would take place on the pump station parcel. It would not be necessary to encroach into offsite utilities rights-of-way.

Sincerely,

George Krasnick
President

JOHN WILSON
COPY MADE BY WILSON



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

KEITH J. BUCK, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
DIVISION
JOHN P. LUTYLLER
DONALD L. MAHLE
AGRICULTURE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESOURCE EMPOWERMENT
COMMITTEES
FORESTRY AND WILDLIFE
RESTORATION
DIVISION
LAND MANAGEMENT
STATE PARKS
PLANNING AND DEVELOPMENT
DIVISION
LOG NO: 9750
DOC NO: 9310TD38

October 26, 1993

George Krasnick, President
GK & Associates
294 Awakea Street
Kailua, Hawaii 96734

Dear Mr. Krasnick:

SUBJECT: Draft Environmental Assessment (DEA) for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank
Kailua, Ko'olaupoko, O'ahu
TMK: 4-2-50: 33

Thank you for the opportunity to review this DEA. A review of our records shows that there are no known historic sites at the project location. The project location has been completely developed as a wastewater pump station. Since it is unlikely that historic sites will be found here we believe that the proposed project will have "no effect" on historic sites.

Sincerely,

DON HIBBARD, Administrator
State Historic Preservation Division

TD:ji

**GK &
ASSOCIATES**

294 AWAKEA RD. • KAILUA, HAWAII 96734 • TEL/FAX (808) 262-2120

December 8, 1993

Mr. Don Hibbard, Administrator
Department of Land and Natural Resources
State Historic Preservation Division
33 South King Street, 6th Floor
Honolulu, Hawaii 96813

Dear Mr. Hibbard:

Subject: Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK
No. 4-2-50:33, Kailua, Koolaulupoko, Oahu, Hawaii

Thank you for your letter of October 26, 1993. We understand that there are no known historic sites at the project location, and acknowledge your finding that the project will have "no effect" on historic sites.

Sincerely,

George Krasnick
President



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, HONOLULU
BUILDING 230
FT. SHAFTER, HAWAII 96858-5440
October 27, 1993

REPLY TO
ATTENTION OF:

Planning Division

Mr. George Krasnick, President
GK and Associates
294 Awakea Road
Kailua, Hawaii 96734

Dear Mr. Krasnick:

Thank you for the opportunity to review and comment on the Draft Environmental Assessment for the Enchanted Lake Wastewater Pump Station and Storage Tank, Kailua, Oahu (TMK 4-2-50: 33). The following comments are provided pursuant to Corps of Engineers authorities to disseminate flood hazard information under the Flood Control Act of 1960 and to issue Department of the Army permits under the Clean Water Act; the Rivers and Harbors Act of 1899; and the Marine Protection, Research and Sanctuaries Act.

- a. The work does not involve any waters of the U.S.; therefore, a DA permit will not be required.
- b. The flood hazard information provided on page 7 is correct.

Sincerely,

Thomas Ushijima, P.E.
Acting Director of Engineering

**GK &
ASSOCIATES**

294 AWAKEA RD. • KAILUA, HAWAII 96734 • TEL/FAX (808) 262-2120

December 8, 1993

Mr. Thomas Ushijima, Acting Director of Engineering
U.S. Army Engineer District, Honolulu
Building 230
Fort Shafter, Hawaii 96858-5440

Dear Mr. Ushijima:

Subject: Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK
No. 4-2-50:33, Kailua, Koolaulupoko, Oahu, Hawaii

Thank you for your letter of October 27, 1993. We understand that the proposed work will not require a Department of the Army permit, and acknowledge your finding that the flood hazard information for the site was correctly presented in the draft environmental assessment.

Sincerely,

George Krasnick
President

Michael B. Compton, M.E.
854 Akumu Street
Kailua, Hawaii 96734

**GK &
ASSOCIATES**

294 AWAKEA RD. • KAILUA, HAWAII 96734 • TEL/FAX (808) 262-2120

October 27, 1993

Mr. Kenneth M. Rappolt
Director
Department of Waste Water Management
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Dear Mr Rappolt:

Thank you for the opportunity to comment on the Draft Environmental Assessment for the Enchanted Lake Waste Water Pump Station (ELPS) 8,000 gallon Storage Tank. I am a concerned citizen as I live near the ELPS and am also a representative from this area on the Kailua Neighborhood Board.

I have several comments about the proposal. First the visual impact of the tank on the road view could be mitigated by reducing the height of the tank from 10 feet to 6 feet. An 8,000 gallon tank that is 6 feet high could be either 15 feet in diameter if cylindrical or 12 feet by 15 feet if rectangular. Since either of these designs is only three feet larger on a side, both should fit on the property. A 6 foot high tank would not protrude above the current CRU wall.

My second concern is the presumption of the waiver of set back. Have you considered changing the driveway to allow the tank to remain outside of the setback? There does appear to be adequate room to allow the tank trucks to maneuver and still allow the placement of the tank within legal setbacks.

I note your departments efforts to landscape the site and I do appreciate them. However, more attention must be paid to the front hedge. It has not prospered. This hedge has the potential to completely mitigate the tank if it is properly maintained.

Sincerely,

Michael B. Compton
Michael B. Compton

December 8, 1993

Mr. Michael B. Compton
854 Akumu Street
Kailua, Hawaii 96734

Dear Mr. Compton:

Subject: Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK
No. 4-2-50-33, Kailua, Koolauapoko, Oahu, Hawaii

Thank you for your letter of October 27, 1993 to Mr. Rappolt. The size and location of the storage tank were selected based on the area available within the pump station site, proximity to the junction box and associated piping, and accessibility to tanker trucks. The basic problem is the very small size of the site. As designed, the tank barely fits into the remaining open space near the junction box. An expansion of three feet on a side is not possible. Changing the configuration of the driveway would entail considerable additional work, including widening the entrance. It might not be possible to maintain vehicular access to the pump and generator buildings. As it is now, tanker trucks cannot completely enter the site or turn around. Pumping of the tank will have to be done from the entrance way or even from outside the site.

As you note, improving the existing hedge fronting the site could provide adequate visual mitigation, and this will be considered should construction of the tank be necessary.

Sincerely,

George Krasnick
George Krasnick
President

adequately maintained?



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

P. O. BOX 521
HONOLULU, HAWAII 96809

REF:OCEA:DKP

NOV 10 1993

File No.: 94-252
Doc. No.: 3710

Mr. George Krasnick, President
GK & Associates
294 Awakea Road
Kailua, Hawaii 96734

Dear Mr. Krasnick:

SUBJECT: Draft Environmental Assessment (DEA): Enchanted Lake
Wastewater Pump Station, Kailua, Oahu, THK: 4-2-50: 33

We have reviewed the DEA information for the subject project transmitted by your letter dated October 1, 1993, and have the following comments:

Commission on Water Resource Management

The Commission on Water Resource Management's (CWRM) staff comments that the DEA does not present sufficient information to adequately describe how this project may have an impact on streams.

Stream permits are required when the bed or banks of stream channels are altered (Section 169-50, Hawaii Administrative Rules (HAR)), or when stream diversion works are constructed or altered (Section 160-32, HAR). In addition, since interim instream flow standards have been adopted state wide, an amendment to the interim instream flow standard is required if the proposed project will alter the flow of streams (Section 169-40, HAR).

The Final EA should describe whether these permits will be required.

Historic Preservation Division

The Historic Preservation Division (HPD) comments that a review of their records shows that there are no known historic sites at the project location. The project location has been completely developed as a wastewater pump station. Since it is unlikely that historic sites will be found here, HPD believes that the proposed project will have "no effect" on historic sites.

231,
SLOTTED AND CHAPERON
BOARD OF LAND AND NATURAL RESOURCES
DEPT. OF LAND AND NATURAL RESOURCES
CONTROL UNIT
LAND USE DEVELOPMENT
PROGRAM
ADULTIC RESOURCES
BOARDING AND OCCUPATION
DIVISION
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RECREATION
RECREATION AND WILDLIFE
CONSERVATION
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PLANNING
DIVISION AND UNDERDEVELOPMENT

Mr. G. Krasnick -2- File No.: 94-252

Division of Land Management

The Division of Land Management comments that their Oahu District Office has no objections provided that the applicant obtain the applicable Federal, State, and County permits prior to initiating the proposed work. We have no other comments to offer at this time. Thank you for the opportunity to comment on this matter.

Please feel free to call Steve Tagawa at our Office of Conservation and Environmental Affairs, at 587-0377, should you have any questions.

Very truly yours,

Keith W. Ahue
KEITH W. AHUE

**GK &
ASSOCIATES**

294 AWAKEA RD. • KAILUA, HAWAII 96734 • TEL/FAX (808) 262-2120

December 8, 1993

Mr. Keith W. Ahue, Chairperson
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

Dear Mr. Ahue:

Subject: Draft Environmental Assessment for Enchanted Lake
Wastewater Pump Station 8,000 Gallon Storage Tank, TMK
No. 4-2-50:33, Kailua, Koolauapoko, Oahu, Hawaii

Thank you for your letter of November 10, 1993. Regarding the concerns of the Commission on Water Resource Management's (CWRM) staff, if the storage tank is required to be constructed, site work would consist of excavation for a foundation pad for the tank and a short, shallow ditch for the pipes tying the tank into the wetwell. It is not anticipated that there will be any off-site impacts to streams or any other resource. No stream beds or banks will be altered; the project does not involve construction or alteration of stream diversion works. Stream flows will not be altered. No permits relative to any of these activities will be required.

The comments of the Historic Preservation and Land Management Divisions are acknowledged. HPD was responded to directly in earlier correspondence.

Sincerely,



George Krasnick
President