REVISED ENVIRONMENTAL IMPACT STATEMENT

Nawiliwili Coral Fill Industrial Subdivision

Dept. of Land & Natural Resources
April 24, 1972

MEMORANDUM

TO: Honorable William Thompson, Director
    Department of Land and Natural Resources

SUBJECT: Environmental Impact Statement for Nawiliwili Coral Fill Industrial
         Subdivision, Nawiliwili, Kauai

Based upon the recommendation of the Office of Environmental
Quality Control, I am pleased to accept the subject document as satisfactory
fulfillment of the requirements of Chapter 343, Hawaii Revised Statutes, and the
Executive Order of August 23, 1971. This environmental impact statement will be
a useful tool in the process of deciding whether or not the action described therein
should or should not be allowed to proceed. My acceptance of the statement is an
affirmation of the adequacy of that statement under the applicable laws and does
not constitute an endorsement of the proposed action.

When you make your decision regarding the proposed action itself, I
hope you will weigh carefully whether the societal benefits justify the environ-
mental impacts which will likely occur. These impacts are adequately described in
the statement, and, together with the comments made by reviewers, will provide
you with a useful analysis of alternatives to the proposed action.

[Signature]

George R. Ariyoshi

cc: Hon. Richard L. O'Connell
State of Hawaii
Department of Land and Natural Resources

REVISED

ENVIRONMENTAL IMPACT STATEMENT

FOR THE

NAWILIWILI CORAL FILL INDUSTRIAL SUBDIVISION

Niumalu, Kauai, Hawaii  TMK: 3-2-03:7

This Environmental Document is submitted
pursuant to Chapter 343, HRS

Responsible Official  W.Y. Thompson  Date 2/20/78
Chairman of the Board

Prepared by
VTN Pacific
1164 Bishop St., Suite 906
Honolulu, Hawaii 96813
Revised
Environmental Impact Statement
for the
Nawiliwili Coral Fill Industrial Subdivision

SUMMARY

PROPOSING AGENCY

Department of Land and Natural Resources
Division of Water and Land Development
State of Hawaii
Honolulu, Hawaii 96813

ACCEPTING AUTHORITY

Governor, State of Hawaii

DESCRIPTION OF THE PROPOSED PROJECT

The proposed project consists of subdividing a 16-acre site on a peninsula in Nawiliwili Harbor into approximately 20 industrial lots of various sizes. Access and utilities, including offsite water and sewer lines, will also be provided. The construction of buildings for specific industrial uses is not a part of this project.

DESCRIPTION OF THE ENVIRONMENTAL SETTING

The proposed industrial subdivision is located on a coral fill peninsula created in 1956, when the Nawiliwili Harbor was deepened. The elevation of the site ranges from approximately 9 feet (mean sea level) along the easterly property line to approximately 13 feet near the center. A small portion of the project site is presently used for industrial purposes, including a lot used by Gasco, Inc. for an operating yard and propane storage tank farm. The south end of the peninsula is occupied by the Nawiliwili Small Boat Harbor. The small neighborhood of Niumalu is west of the project site, with approximately 30 homes within one-half mile of the site.
PROBABLE IMPACTS OF THE PROPOSED PROJECT
AND MITIGATING MEASURES

The site preparation activities will have only minor short-term impacts (noise and dust). Soil erosion is not anticipated due to the stability of the coral fill and the level topography of the site. Grading will remove some of the ironwood trees from the central portion of the site. No adverse impacts are anticipated from construction of the storm drain on Nawiliwili Harbor or the sewer line across Nawiliwili Stream. The impacts of industrial use of the property can not be identified until the specific industries are known. However, an increase in traffic through the existing industrial area can be expected.

ALTERNATIVES TO THE PROPOSED PROJECT

Four categories of alternatives were evaluated: alternative land uses, alternative sewage disposal systems, alternative site layouts and no project. Because of its proximity to Nawiliwili Harbor, the proposed industrial subdivision is judged to be the most appropriate use for the subject property. Cesspools and a temporary system were considered but connection with the municipal sewer system is recommended. The site layout, including the alignment of the roadway, may be slightly altered, but a single central entrance is recommended for the access point. Under the No Project alternative, the need for industrial lots in Lihue would have to be met at another site which might not be as suitable as the proposed location.
## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary</td>
<td>i</td>
</tr>
<tr>
<td><strong>I. DESCRIPTION OF THE PROPOSED PROJECT</strong></td>
<td></td>
</tr>
<tr>
<td>A. Location</td>
<td>1</td>
</tr>
<tr>
<td>B. Objectives</td>
<td>1</td>
</tr>
<tr>
<td>C. Project Characteristics</td>
<td>1</td>
</tr>
<tr>
<td>D. Cost and Schedule</td>
<td>10</td>
</tr>
<tr>
<td>E. Related Projects</td>
<td>10</td>
</tr>
<tr>
<td><strong>II. DESCRIPTION OF THE ENVIRONMENTAL SETTING</strong></td>
<td>11</td>
</tr>
<tr>
<td><strong>III. PROBABLE IMPACTS OF THE PROPOSED PROJECT AND MITIGATING MEASURES</strong></td>
<td></td>
</tr>
<tr>
<td>A. Site Preparation</td>
<td>15</td>
</tr>
<tr>
<td>B. Offsite Construction</td>
<td>16</td>
</tr>
<tr>
<td>C. Industrial Use of the Site</td>
<td>16</td>
</tr>
<tr>
<td><strong>IV. ALTERNATIVES TO THE PROPOSED PROJECT</strong></td>
<td></td>
</tr>
<tr>
<td>A. Alternative Land Uses</td>
<td>21</td>
</tr>
<tr>
<td>B. Alternative Sewage Disposal Systems</td>
<td>21</td>
</tr>
<tr>
<td>C. Alternative Site Layouts</td>
<td>22</td>
</tr>
<tr>
<td>D. No Project</td>
<td>23</td>
</tr>
<tr>
<td><strong>V. UNAVOIDABLE ADVERSE IMPACTS</strong></td>
<td>23</td>
</tr>
<tr>
<td><strong>VI. THE RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY</strong></td>
<td></td>
</tr>
<tr>
<td><strong>VII. COMMITMENTS OF RESOURCES</strong></td>
<td>24</td>
</tr>
</tbody>
</table>
CONTENTS (continued)

Chapter                                                                 Page

VIII. GOVERNMENTAL POLICIES OFFSETTING ADVERSE EFFECTS   24

IX. RELATIONSHIP TO LAND USE PLANS AND POLICIES          24

X. SUMMARY OF UNRESOLVED ISSUES                         26

XI. NECESSARY APPROVALS                                 26

Tables
1. Comparison of Lot Sizes                             5
2. Permitted Uses and Potential for Impact              17

Figures
1. Location Map                                        2
2. Site Map                                             3
3. View of the Site                                     4
4. Offsite Water and Sewer System                       9
5. Aquatic Environment of Nawiliwili Bay                14

Appendices
A. Agencies and Organizations Consulted for the EIS
B. Comments and Responses to the EIS
CHAPTER I  DESCRIPTION OF THE PROPOSED PROJECT

A. Location

The Nawiliwili Harbor is located on the southeast coast of Kauai, approximately 2 miles south of Lihue (Figure 1). The project site is situated in the western end of the Harbor on a 24-acre peninsula of dredged coral fill material (Figures 2 and 3). The subject property is approximately 16 acres in size and is bounded by Wapa Road on the north, Niumalu Road on the west, Niumalu Stream (also known as Puali Stream) and a small boat harbor on the south, and Nawiliwili Harbor on the east. The land is owned by the State of Hawaii.

B. Objectives

The purpose of the proposed action is to provide lots for industrial activities in Lihue. This is to be accomplished by subdividing the subject property and by providing access and utilities for general industrial facilities. (The construction of buildings for specific industrial uses is not a part of this project.) It is the expressed goal of the County of Kauai to expand the County's economic base through the encouragement of more industrial activity. The Lihue Development Plan (County of Kauai, October 1975) designates the subject property for General Industrial use. Providing the necessary support facilities is an important step toward achieving the goal of increasing industrial activity in Lihue.

C. Project Characteristics

1. Subdivision Layout. The 16 acre subdivision will contain approximately 20 lots of various sizes, ranging from a minimum of roughly 10,000 square feet to a maximum of approximately 4 acres. The lot sizes were generally determined by comparison with existing industrial lots, as shown on Table 1. The site does not have enough area for many large lots (greater than 50,000 square feet), and there is not as much demand for small lots (less than 20,000 square feet). The majority of the lots are therefore in
Figure 3  View of the site from Niumalu Road looking south toward the Hoary Head Range. The Harbor entrance is to the left and the tidal flat and Niumalu Park is to the right. The facility in the right foreground is a portion of Gasco, Inc.'s operation and propane storage yard. (Photo taken June, 1976)
TABLE 1 COMPARISON OF LOT SIZES

<table>
<thead>
<tr>
<th>Area Sq. Ft.</th>
<th>Existing Lots</th>
<th>Proposed Lots</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>% of Total</td>
</tr>
<tr>
<td>10-20,000</td>
<td>4</td>
<td>9.5</td>
</tr>
<tr>
<td>20-30,000</td>
<td>18</td>
<td>42.9</td>
</tr>
<tr>
<td>30-40,000</td>
<td>5</td>
<td>11.9</td>
</tr>
<tr>
<td>40-50,000</td>
<td>5</td>
<td>11.9</td>
</tr>
<tr>
<td>50-60,000</td>
<td>4</td>
<td>9.5</td>
</tr>
<tr>
<td>&gt; 60,000</td>
<td>6</td>
<td>14.3</td>
</tr>
<tr>
<td>TOTALS</td>
<td>42</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Includes existing GASCO lot (60,924 s.f.)
the 20-50,000 square foot category, providing an ample number of the more desirable lot sizes. A "module approach" was considered, whereby a leasee could obtain any lot size by combining 10,000 square foot modules. However, with the leasing procedure required by law, there is no guarantee that the leasee could obtain adjacent parcels.

2. Access. Waapa Road, which fronts the proposed subdivision, presently has a substandard right-of-way width of 30 feet. In accordance with the "Road Widening Dedication Policy" adopted by the Kauai Planning Commission on October 27, 1976, an additional 26 feet will be dedicated to the County to meet roadway standards of 56 feet. The additional area will be from State lands on both sides of the existing right-of-way.

One access road to the site from Waapa Road is recommended. Waapa Road has a curve on each end of the site; by placing the entrance centrally located between the two curves, sight distances of over 400 feet can be attained, thereby providing a safer entrance and exit.

Onsite roadways will have a minimum 44-foot right-of-way, with 24-foot wide pavement and 10-foot wide shoulders on both sides. Grassed drainage swales will be provided within the shoulders. Road slopes vary from a minimum of 0.5 per cent to a maximum of 5 per cent. New driveways will be provided to Gasco and the old Honolulu Iron Works building. Driveways to all other lots will be the responsibility of the individual future tenants.

3. Grading and Drainage. Since the site is relatively level, only minor grading will be required to prepare the lots and establish the drainage pattern. It is estimated that roughly 4,500 cubic yards of the coral fill will be moved from a 7-acre high spot in the central position of the site. An attempt will be made to balance the cut and fill; any excess material will become the property of the Contractor.

Drainage from the lots will be by surface runoff. The northeasterly portion of the site will drain toward Waapa Road and the Harbor. The southerly portion will drain into the small boat harbor, and the southwesterly lots will drain into the inner Nawaiwili Harbor. Runoff collected on the roadway will be directed via a storm drain to the inner harbor. Design of the storm drain system will be in accordance with the "Storm Drainage Standards", Department of Public Works, County of Kauai, dated February, 1972.
A 15-foot wide strip along the western shoreline boundary is proposed for dedication to the County for maintenance purposes along Niumalu Stream.

4. Existing Uses. Of the 24 acres that make up the coral fill area, approximately 8 acres on the southern portion of the site are allocated for the small boat harbor. Included in this area is a 40-foot wide strip on the eastern shoreline boundary for continuous harbor access along the shoreline. The harbor boundaries are being coordinated with the Water Transportation Facilities Division of the State Department of Transportation.

Of the existing uses, the Gasco lot will be retained, although the fence along the western boundary will have to be relocated to the property line. Access to this lot will need to be relocated to Waapa Road. The old Honolulu Iron Works Building will also be retained. However, other uses and structures, such as the scrap metal business, will be removed.

5. Electricity and Telephone. Electrical power and telephone services will be provided to the site by the respective utility companies. The costs of providing services to the site will be advanced by the site developer, which will be reimbursed by the utility company as permanent customers connect to the line. The Kauai Electric Company has indicated that sufficient power is available to serve the proposed subdivision.

Distribution of the electrical and telephone systems on the site will be designed in accordance with the respective utility companies. The system will be an overhead type, installed on poles. The cost of the on-site utility system will be borne by the State.

6. Water Supply. The project site is presently served by a 4-inch water line along Niumalu Road and a 2-1/2 inch line along Waapa Road. These lines are inadequate for the proposed subdivision, as they do not provide sufficient fire fighting pressure.

Pipeline improvements in accordance with "A General Plan for Domestic Water/Island of Kauai", dated February 1972, are currently proposed. The Department of Water is currently replacing the 2-1/2 inch line along Waapa Road with a new 12-inch line connecting to an existing 8-inch line. Under the first
phase of the proposed subdivision project, the 4-inch line on Niumalu Road will be replaced with a new 12-inch line. This line will run from the intersection at Waapa Road to Nawiliwili Highway and extend up Nawiliwili Highway to the Lala Road intersection, where it will connect with an existing 12-inch line (Figure 4). Approval for the construction of the water line has already been obtained, following approval of a Negative Declaration.

The Department of Water, with assistance from the Department of Land and Natural Resources, is investigating several well sources to upgrade their water requirements for the Lihue Water System, of which the proposed industrial subdivision is a part. The Department of Water has indicated that sources should be adequate by the time the subdivision will be ready for use.

7. Wastewater Disposal. Of several alternatives considered (Chapter IV), providing a connection to the municipal sewer system is recommended for the disposal of liquid wastes generated on the project site. At present, the municipal system serves the Kauai Surf Hotel and consists of a pump station that lifts the sewage through a 14-inch force main to the Lihue Sewage Plant (see Figure 4).

The "Water Quality Management Plan as Related to Waste Treatment for the County of Kauai", July 1973, (Sunn, Low, Tom and Hara, Inc.), presents the County's plans for sewer ing of this area. In general, the recommended system (as shown on Figure 4) includes a gravity sewer along Waapa Road and Rice Street to the intersection of Rice Street and Wilcox Road. From this point the sewage will enter a pump station and then be forced up to the existing Kauai Surf Sewage Pump Station. All sewers and pump stations will be designed for ultimate capacity.

In addition to serving all of the lots within the subdivision, a service lateral will be provided to the small boat harbor. This will allow the small boat harbor to connect to the municipal system and abandon their temporary sewage treatment plant. After it is constructed, the entire system will be turned over to the County of Kauai for operation and maintenance.
D. Cost and Schedule

The construction cost estimates noted herein are preliminary only and are based on costs for June, 1977. The onsite work, which includes grading, paving, grassing the roadway shoulders, the storm drain system and water and sewer connections, would cost roughly $290,000. The offsite water lines would cost approximately $100,000, and the offsite sewer system would cost approximately $750,000. The total cost would be roughly $1,140,000, which breaks down to approximately $60,000 per lot or $1.80 per square foot. This project will be funded by the State.

Implementation of this project is dependent on a number of factors, including review of this EIS and approval of necessary permits. Therefore, a construction date has not been set, although it is anticipated for some time in mid-1978.

E. Related Projects

The fill and breakwater immediately south of the subject property was recently constructed by the Corps of Engineers for a small boat harbor. The State Department of Transportation, Water Transportation Facilities Division has plans for the phased development of docks and other facilities for the small boat harbor.

The County of Kauai, Department of Water is presently constructing two segments of pipeline along Waapa Road, one of which runs in front of the proposed subdivision.
CHAPTER II  DESCRIPTION OF THE ENVIRONMENTAL SETTING

The proposed industrial subdivision is located on a coral fill peninsula created in 1956, when the Nawiliwili Harbor was deepened. The present size and configuration was attained in 1974, with the construction of Phase I of the small boat harbor by the Army Corps of Engineers. The fill material is composed of coarse to fine coral fragments, sand and silty sand. The perimeter of the site is protected by a rock revetment. Elevation of the site ranges from approximately 9 feet (mean sea level) along the easterly property line to approximately 13 feet near the center.

The majority of the site is bare, but there are some ironwood and coconut trees, and several patches of koa haole. Some of these ironwood trees are over 10 feet high, and form a windbreak and visual screen along the easterly perimeter. They also form a small, but dense patch in the central portion of the site.

Niumalu (or Puali) Stream flows along the westerly edge of the site, and has deposited a small mudflat at its mouth. According to the Corps of Engineers, the project site is not within the 100-year flood hazard zone of this stream ("Preliminary Floodway Map, Puali Stream and Nawiliwili Stream" August, 1972). The 100-year tsunami run-up is approximately 8 feet above sea level in Nawiliwili Harbor. The EIS Preparation Notice reported a minimum site elevation of 6 feet; however, the site is only this low in the easterly strip of land adjacent to the Harbor, and this land is to be dedicated to the Department of Transportation for access purposes. The land to be developed is 1-5 feet above the tsunami hazard zone.

Preliminary investigations of the marine environment of Nawiliwili Harbor were conducted prior to completion of the Master Plan Study. The waters surrounding the project site are estuarine with the Huleia River contributing the greatest share of nutrient and food sources to the ecosystems in the tidal flats and harbors (Figure 5).

Within the tidal flats, three species of crabs were found: White crab (Portunus sanguinoleutus or papa'iKan-normi), Samoan crabs (Scylla serrata) and Red crabs (Podophthalmus vigi or mo'ala). The White crabs were the most common (86%), followed by the Samoan crabs (10%) and the Red crabs (4%). The crab communities were segregated on the basis of relative salinity of different areas within the tidal flats with Samoan crabs predominant in the least saline areas (inland along the Huleia River) and Red crabs most common in the more saline and deeper sections adjacent to the flats and extending into
the harbor. The White crabs were predominant on the flats themselves. The tidal flats did not support significant fish communities although the Kalapaki Bay east of the project site contained a complete ecosystem of fish species from algae feeders (i.e. Surgeon fish) to carnivores (i.e. goat fish, pompano and silversides).

The Huleia River contains 7 endemic species of stream life, two crustaceans and five fishes. (Maciolek, Timbal, 1976). The crustaceans, Atyid shrimps (Atya bisculcata or opae kalaole) and Hawaiian prawn (Macrobrachium grandimanus or opae o'eha'a) were listed as common and abundant within the rivers. The 5 fish species include 3 gobies (Awaous genivittatus or O'apu naniha; Awaous stamineus or O'apu na kea; and Sncydium stimpsoni or O'apu napilli), Kuhlia (Electris sandvicensis or aholehole) these species ranged from abundant to occasional. Although the habitat within the Huleia River differs for the various species (from upper stream to lower stream and all stream areas), they have one characteristic in common - their life cycles require marine faunal development (diadomous). Therefore the lower stream courses, and in this instance, the tidal flat and inner harbor areas are important for these animals as migrating pathways for seaward moving larvae and young fish returning to the stream. The gobies in particular journey to the river mouths during peak flow periods to lay their eggs and enhance the opportunity for larvae to be washed out to sea.

Potential bird species that may utilize the waters surrounding the project site were identified in a 1976 study. This report listed all bird species that were sited within a 5-mile radius of the Lihue Airport. This area does include the proposed Nawiliwili Industrial Park site (Peat, Marwick, Mitchell & Co. 1976). The study identified 15 endemic species and 17 exotic species in this area of which 16 were either marine or water birds. Of these 16 species, two were migratory birds which probably use the tidal flat area, the Pintail (Anas acuta) and the Northern Shoveler (Anas clypeata). Another five species had mudflats listed as a possible habitat; Ruddy Turnstone (Arenaria interpresa); Sanderling (Crocethia alba); Wandering Tattler (Heterochilus incanus); Hawaiian Stilt (Himontopus mexicanus hau); and American Golden Plover (Pluvialis dominica) and may possibly utilize the tidal flats. Of these birds, the Hawaiian Stilt is listed as an endangered species. The Lihue Plantation, the Menehune Fish Pond and the marshes and wetlands of the lower Huleia River Valley, were described as favorite habitats for the Hawaii's endangered waterfowl (DFG, DLNR). None of these areas are affected by the proposed project. The Division of Fish and Game has no record of the Hawaiian Stilt using the tidal flats though stated that it was a possibility (Walker 1977). However, the DFG has not recognized the Nawiliwili tidal flats as either a key or secondary area for preservation as an endangered waterfowl habitat (DFG, DLNR).
A small portion of the project site is presently used for industrial purposes, including a lot used by Gasco, Inc. for an operating yard and propane storage tank-farm. In addition, there is a machine shop and a scrap metal business. Other industries in the area (east of the project site) are containerized shipping, petroleum storage, sugar products storage and shipping, and cement and concrete products manufacturing. The small neighborhood of Niumalu is west of the project site. There are approximately 30 homes within one-half mile of the site. Water-related activities adjacent to the project site include the small boat harbor and crabbing on the mudflats at the mouth of the Niumalu Stream.
Figure 5  DESCRIPTIVE SUMMARY OF AQUATIC ENVIRONMENT OF NAVILIWILI BAY

Source: Final EIS for the Nawiliwili Small Boat Harbor, Army Corps of Engineers, March 29, 1973
CHAPTER III PROBABLE IMPACTS OF THE PROPOSED PROJECT AND MITIGATING MEASURES

A. SITE PREPARATION

Grading will be a short-term operation; however, some treatment such as sprinkling, will be required to control fugitive dust. The homes at Niumalu are far enough from the site so that they would not be adversely affected by noise from the construction equipment.

The sand and coral fill of the project site has a very low erosion hazard, so stabilization is not deemed necessary. The shoulders of the roadway will receive topsoil and be grassed. Other landscaping will be the responsibility of the tenants, who will be subject to the guidelines of the "Kauai Urban Design Plan" (when it is approved). The screen of ironwood trees along the eastern perimeter will become the responsibility of the Water Transportation Facilities Division after dedication of the access strip. A majority of the ironwood trees in the central portion of the site will be removed during grading. Although they are salt tolerant and grow well in the sandy soil of the project site, ironwood trees are of questionable value for landscaping, since they produce a large volume of litter and old trees tend to topple in high winds. These trees can not be transplanted elsewhere on the project site, since the locations of future buildings are not known.

The only construction proposed on the banks of Niumalu Stream is the preparation of a service road and fence as specified by the County of Kauai Drainage Standards. A 24-inch outlet for the main roadway storm drain system will be located at the property line adjacent to the small boat harbor. The storm drain outlet will be located on the inner harbor side of the coral fill peninsula. Neither construction of the storm drain or the preparation of the service road will adversely affect the aquatic life near the project site.

The "Future Fill and Park" noted on Figure 2 is not a part of the proposed project. It is shown on the "Master Plan for Nawiliwili Boat Harbor" (Harbors Division, October 1973), although no details are given. Presumably, it is intended as a spoil disposal site for future dredging operations in Nawiliwili Harbor. The "Lihue Development Plan" (County of Kauai, 1976), also designates this strip for park use.
B. OFFSITE CONSTRUCTION

For the most part, the new sewer line will be placed within the right-of-way of existing streets, so there will be no impact to natural ecosystems. The sewer line will cross Nawiliwili Stream near the abandoned railroad bridge at the mouth of the stream. Although detailed construction plans have not yet been drawn up, it is most likely that the line will span the stream from foundations set back from the stream banks, in order to avoid construction in the stream.

Construction of the sewer lines could cause temporary disruption of traffic, and the trenches could pose a safety hazard. However, these are short-term impacts, and can be mitigated by providing flagmen and warning signs, and by covering hazardous sections of the trenches at night.

Improving the sewage system will enhance the public health and welfare of the area, and as a consequence, may induce growth. However, the proposed sewer system is designed to accommodate only uses within its drainage area which are shown on existing zoning and development plans. Also, the Nawiliwili Industrial Park and small boat harbor are the only connections which will be made initially.

C. INDUSTRIAL USE OF THE SITE

The proposed action is a precedent to other actions, namely the construction and operation of industrial facilities. Long-term impacts that may occur at the site as a result of development, cannot be quantified, however, since the type of industries which may ultimately locate there is unknown. Some generalized idea of potential impacts of the project can be obtained through evaluation of the regulatory restrictions on the proposed site.

The County of Kauai Comprehensive Zoning Ordinance (Section 3.043B) lists thirty generally permitted uses and structures under the General Industrial Zoning of the project site. The following table lists these permitted uses and identifies their potential for adverse impacts in the areas of water pollution (including aquatic life), air pollution and community disturbance (noise, aesthetics, safety hazards). This is a very general analysis; a specific industry may not have adverse
# Table 2: Permitted Uses and Potential for Impact

<table>
<thead>
<tr>
<th>Generally Permitted Uses and Structures</th>
<th>Impact Potential</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Water</td>
<td>Air</td>
</tr>
<tr>
<td>1. Acssory uses and structures</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>2. Animal hospital</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>3. Automobile service, sales, repair and storage</td>
<td>mod</td>
<td>nil</td>
</tr>
<tr>
<td>4. Cemeteries, mortuaries and crematoriums</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>5. Communication facilities</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>6. Construction material manufacturing</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>7. Construction material storage</td>
<td>mod</td>
<td>mod</td>
</tr>
<tr>
<td>8. Excavation and extraction</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>9. Factories</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>10. Food processing and packaging</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>11. Light manufacturing</td>
<td>mod</td>
<td>mod</td>
</tr>
<tr>
<td>12. Manufacturing in retail sales</td>
<td>mod</td>
<td>mod</td>
</tr>
<tr>
<td>13. Mineral processing</td>
<td>mod</td>
<td>nil</td>
</tr>
<tr>
<td>14. Private and public utilities and facilities</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>15. Public parks and monuments</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>16. Restaurants, bars, and food services</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>17. Research and development</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>18. Retail sales</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>19. Transportation terminals and docks</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>20. Warehouses</td>
<td>nil</td>
<td>nil</td>
</tr>
</tbody>
</table>

**Uses and Structures That Require a Use Permit:**

<table>
<thead>
<tr>
<th>Uses and Structures That Require a Use Permit</th>
<th>Water</th>
<th>Air</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Commercial recreation and parks</td>
<td>nil</td>
<td>nil</td>
<td>mod</td>
</tr>
<tr>
<td>2. Diversified agriculture</td>
<td>mod</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>3. Inflammable or noxious chemical processing or storage</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>4. Junk yards and dumps</td>
<td>high</td>
<td>mod</td>
<td>high</td>
</tr>
<tr>
<td>5. Livestock and poultry yards and piggeries</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>6. Museums, libraries and public services</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>7. Office and professional buildings</td>
<td>nil</td>
<td>nil</td>
<td>nil</td>
</tr>
<tr>
<td>8. Project Development</td>
<td>mod</td>
<td>mod</td>
<td>mod</td>
</tr>
<tr>
<td>9. Stock yards</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>10. Any other appropriate use or structure</td>
<td>mod</td>
<td>mod</td>
<td>mod</td>
</tr>
</tbody>
</table>

**Notes:**

a. Kauai Comprehensive Zoning Ordinance, Sections 3.043B and 3.044B.
b. high = high potential for adverse impact from industries in this category
   mod = moderate impact potential depending on specific industry
   nil = no or very low potential for adverse impact
Although the inner regions of the Nawiliwili Harbor undergo little mixing and transport (Army Corps of Engineers, 1973) the contributions of runoff from the project site to overall discharge is relatively small, therefore the potential of dilution of pollutants entering the inner harbor will be large. Also, the amount of organic material being introduced by runoff from the project site will be minute compared to that discharged by the Huleia River, the primary source of nutrients and other material in the inner harbor at present. Localized areas of higher pollutant concentrations may potentially occur at times, but the overall impact is not expected to be significant.

Regardless of the specific industries, the subdivision will generate additional traffic movement in the area. It is estimated that a warehouse operation would generate roughly 90 truck-trips per acre and 80 auto-trips per acre. (Based on studies by the Department of Transportation.) Since it is unlikely that the entire subdivision would be devoted to warehousing (which is traffic-intensive), the overall trip generation rate might be closer to 60 truck-trips and 50 auto-trips per acre, for a total of approximately 1,760 vehicle-trips per day (weekday, working hours) for the entire subdivision. Since Waapa Road is to be eventually upgraded, there should be no problems with congestion.

This additional traffic will increase daytime noise levels in the area; however, the normal traffic pattern (Waapa Road or Wilcox Road to Rice Street) will not result in impact to any residential neighborhoods. One noise measurement location was established near the west corner of the site (Waapa Road and Niulmu Stream) to obtain an approximate noise baseline for the site and adjacent residential area. With a 26 minute reading, the "average" (L50) noise level was 54dBA; the "peak" (L10) level was 60dBA, and the "ambient" (L99) noise level was 48 dBA, which is typical of a residential area. Major noise sources were vehicles, neighborhood activities and air traffic from the Lihue Airport. The noise impact of the project can not be predicted without knowing the specific industries.
The economic growth potential of Kauai rests primarily in the visitor industry. Growth in this industry generates demand for the services of other industries. At the present time, the desire for expansion cannot be met by the available industrial land. This fact, coupled with a highly desirable location (adjacent to the harbor), creates a favorable market for the proposed Nawiliwili Coral Fill Industrial Subdivision. Even if (and especially if) growth in the visitor industry begins to lessen, the economy of Kauai needs a diversified base that includes more industrial activity. The provision of space at a desirable location is an important part of attracting that industrial activity.

An additional benefit of the proposed project will be the provision of jobs. A typical industrial park employs approximately 15-18 persons per acre; the proposed project could therefore support from 240 to 290 permanent positions. While some of these positions would already be filled, a business that moves into a larger facility typically hires additional employees.

D. SECONDARY IMPACTS OF THE PROPOSED IMPROVEMENTS

The proposed sewage trunk line may potentially induce urban development on land parcels within its service area but which otherwise are not a part of the project. Since this trunk line is designed to accommodate planned development within its service area, it will have capacity to carry wastewater flows generated by sources other than the industrial subdivisions and small boat harbor. This excess capacity may potentially induce urban development on available land serviced by this facility. However, the designed capacity of the trunk line was determined by using the present zoning classifications for the service area. Therefore, existing land uses within the service area which conform to existing zoning may potentially utilize some of this capacity. The remaining capacity will enable potential land uses to develop on undeveloped or underdeveloped parcels according to the specifications of the existing zoning classifications. The project will not induce growth which is incompatible with the zoning and general plans for the service area. Thus the project is a means by which the Development Plan for the Lihue area can be implemented.
CHAPTER IV ALTERNATIVES TO THE PROPOSED PROJECT

A. ALTERNATIVE LAND USES.

The industrial zoning of the subject property allows a wide variety of land uses and the options will not be limited. If the site is not developed as an industrial subdivision, it could be developed as a park without changing the zoning. However, the eastern margin of the site is designated on the Lihue Development Plan as a future landfill and park (Figure 2).

Residential development of the site would not be desirable due to the adjacent industrial uses. Commercial use would not be economically viable since the site is located away from residential or tourist activity. Because of its proximity to Nawiliwili Harbor, the proposed industrial subdivision is the most appropriate use for the subject property.

B. ALTERNATIVE SEWAGE DISPOSAL SYSTEMS

There are no municipal sewers within the immediate area and none are contemplated in the near future. Several alternatives to dispose of the sewage from the proposed subdivision have been studied and are described below. The recommended alternative is described in Chapter I. C. 7.

1. Cesspools. One alternative is to use cesspools, with or without treatment, for each individual lot. Under this situation the lessee would be responsible for the construction and maintenance of the cesspools. However, cesspools in this low lying area, and in coral fill, are not looked upon favorably by the Department of Health due to problems with other cesspools in the area. Low use systems with limited toilet facilities, such as warehouses, would be able to use cesspools with minimum problems. However, larger use systems, such as laundries or restaurants, could possibly anticipate problems requiring frequent pumping. Tests to determine the capability of cesspools would have to be made at the time the sewage flows are known and the
actual cesspool constructed.

Although this alternative requires no initial construction costs, it is not recommended since it limits the type of industry that can be developed until such time a hookup to the municipal system can be made. Also, there is also no assurance that cesspools would be acceptable at the time of construction nor would it be adequate for industries with more personnel than those now utilizing cesspools on the site.

2. **Temporary Private System.** This alternate would include a sewage pump station, secondary sewage treatment plant and effluent disposal system, and would be designed to treat and dispose of sewage generated by the proposed industrial subdivision only. The design capacity of the sewage treatment plant would be 100,000 gallons per day and the pump station and disposal system would be designed for 400 gallons per minute.

This system is not a viable alternate and no further studies were made due to the following reasons: (1) the County would not operate the system, and the State does not have the capabilities to do so; (2) the treatment plant would require approximately one acre of land, and would thereby tie up land that could not be developed until the subdivision could be hooked up to the municipal system; (3) disposal of the effluent would be very difficult in this area, since neither injection wells nor irrigation offer complete solutions; and (4) the construction and maintenance costs would add appreciably to the cost of developing the subdivision, but would not represent a long-term investment.

C. **ALTERNATIVE SITE LAYOUTS**

Several different site configurations have been studied, with variations in the lot sizes and access alignment. The proposed entrance location was selected to provide maximum sight distance along Waapa Road. The alignment of the interior roadway may be slightly adjusted, depending on the final approved lot lines.
D. **NO PROJECT**

If the subject property is not subdivided for industrial uses, the property would lay idle, and the anticipated economic benefits would not be realized. The goal of expanding Kauai's economic base would be pursued by developing another site, one which might not be as suitable as the proposed site.

**CHAPTER V  UNAVOIDABLE ADVERSE IMPACTS**

The temporary disturbances of construction (noise, dust and traffic conflict), the removal of some of the ironwood trees from the central portion of the project area, and potential localized pollution in the inner harbor at the storm drainage outlet from surface runoff are unavoidable adverse impacts of the proposed project. However, the landscaping value of the trees is questionable. In addition, special stipulations to the industrial park SMA permit can be made so that certain industries which may have a potential adverse impact on harbor water quality can be evaluated through an additional SMA permit process.

**CHAPTER VI  THE RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY**

The proposed project has a positive relationship to the "productivity" of the site, in that when it was created, the coral fill peninsula was designated for industrial uses. Certain industries may adversely affect the productivity of the adjacent harbor waters by discharging wastes via surface runoff. Provisions to prevent this could be written into the lease or made a condition of an SMA permit.
CHAPTER VII  COMMITMENTS OF RESOURCES

The proposed project will commit the coral fill peninsula to industrial uses for an indefinite period of time. This is in accord with the "Lihue Development Plan" and the desire of the County of Kauai to expand its economic base. The project will commit no "recoverable resources" (i.e. minerals, etc).

CHAPTER VIII  GOVERNMENTAL POLICIES OFFSETTING ADVERSE EFFECTS

Policies that will serve to control the impacts of the industries that will use the project site include the Public Health Regulations relating to water quality (Chapter 37A) and air quality (Chapter 42), and the "Rules and Regulations Relating to Environmental Shoreline Protection of the County of Kauai" (SMA permit). Also, the "Kauai Urban Design Plan" will, when adopted, set standards and guidelines for landscaping and other aspects of site development. (The County of Kauai currently has no noise control ordinances.)

CHAPTER IX  RELATIONSHIP TO LAND USE PLANS AND POLICIES

The proposed industrial subdivision is in conformance to the "Lihue Development Plan" (August, 1975) with regard to location and classification. However, there are some differences in the access as shown on the Niumalu-Nawiliwili Illustrative Plan. This Plan, as well as the proposed "Kauai Urban Design Plan", provides for complete separation of recreational and industrial traffic. Access to the small boat harbor would be via Niumalu Road and a new access road across the project area adjacent to Niumalu Stream. Access to the industrial subdivision would be from Wilcox Road; Waapa Road would be abandoned between Niumalu Road and Wilcox Road. The proposed project would not change the existing circulation pattern, and would provide a single entrance for both the industrial subdivision and the small boat harbor. A single access, rather than two separate road-
ways, is proposed for the following reasons: (1) the circulation pattern shown on the Lihue Development Plan involves realigning Niumalu and Wilcox roads, which is not a part of this project, nor is it in the County's short-range plans; (2) providing an additional roadway would increase development costs and would reduce the area available for industrial use; and (3) the moderate amount of traffic generated by the industrial subdivision would not hamper access to the harbor, which will receive peak use on weekends. The proposed access road is subject to the approval of the Kauai Planning Department.

The proposed offsite sewer system follows the basic recommendations in the "Water Quality Management Plan as Related to Waste Treatment for the County of Kauai" (July, 1973).

The "Kauai Urban Design Plan", the draft of which is under review, sets forth several planning objectives and guidelines for urban development in Nawiliwili that are relevant to the proposed project. With regard to the objective of maintaining a compatible land use mixture (Objective #2), the Design Plan recommends that a 30-foot planting strip be required around the perimeter of an industrial area, and that landscaping be required as a part of a development proposal. It is also recommended that recreational and industrial traffic circulation be clearly separated. The proposed industrial subdivision does not conform to these guidelines; if they are adopted, aspects of this project may have to be revised. Under the objective of increasing visual recognition (Objective #3), it is suggested that the shape and color of industrial buildings be expressive of their function; this would be the responsibility of the individual lessee. With regard to maintaining open space (Objective #4), the proposed subdivision will provide for continuous public access along the Harbor shoreline, by dedicating an access strip to the Water Transportation Facilities Division. With regard to preserving view and open space (Objectives #5 and #6), the height and bulk of the buildings in the proposed subdivision will be the responsibility of the individual lessees.
CHAPTER X  SUMMARY OF UNRESOLVED ISSUES

The Major issue yet to be resolved is the nature of the industries that will utilize the project site. If a candidate industry has a potential for adverse environmental impacts, a supplemental EIS may have to be filed by that industry.

CHAPTER XI  NECESSARY APPROVALS

The proposed drain outlet into the inner harbor and the sewer line crossing of Nawiliwili Stream may require Department of the Army Permits for Activities in Waterways (Section 404 permit). The necessary forms and supplemental data will be submitted with the Revised EIS. The project will also require a Special Management Area permit from the County of Kauai. Clearance has already been obtained from the State Historic Preservation Officer regarding archaeological and historical resources.
# APPENDIX A

## Agencies and Organizations Consulted for the EIS

<table>
<thead>
<tr>
<th>Federal Government</th>
<th>Response to Preparaton Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army Corps of Engineers</td>
<td>7/20/77</td>
</tr>
<tr>
<td>Geological Survey, Water Resources Division</td>
<td>none</td>
</tr>
<tr>
<td>Fish and Wildlife Service</td>
<td>8/10/77</td>
</tr>
<tr>
<td>Coast Guard</td>
<td>7/21/77</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State of Hawaii</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Health</td>
<td>8/1/77</td>
</tr>
<tr>
<td>Department of Land and Natural Resources</td>
<td></td>
</tr>
<tr>
<td>Division of Fish and Game</td>
<td>7/19/77</td>
</tr>
<tr>
<td>Division of Parks, State Historic Preservation officer</td>
<td>7/3/77</td>
</tr>
<tr>
<td>Department of Planning &amp; Economic Development</td>
<td>8/1/77</td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>7/12/77</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>County of Kauai</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Public Works</td>
<td>none</td>
</tr>
<tr>
<td>Department of Water</td>
<td>none</td>
</tr>
<tr>
<td>Office of Economic Development</td>
<td>8/8/77</td>
</tr>
<tr>
<td>Planning Department</td>
<td>8/9/77</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Public Utilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kauai Electric Company</td>
<td>7/20/77</td>
</tr>
<tr>
<td>Hawaiian Telephone Company</td>
<td>none</td>
</tr>
<tr>
<td>Gasco, Inc.</td>
<td>8/3/77</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Organizations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kauai Chamber of Commerce</td>
<td>none</td>
</tr>
<tr>
<td>Kauai Historical Society</td>
<td>none</td>
</tr>
<tr>
<td>The Kauai Outdoor Circle</td>
<td>none</td>
</tr>
<tr>
<td>Life of the Land</td>
<td>none</td>
</tr>
<tr>
<td>Shoreline Protection Alliance</td>
<td>none</td>
</tr>
<tr>
<td>Nawiliwili Tenants Association</td>
<td>none</td>
</tr>
<tr>
<td>Kanoa Estates</td>
<td>none</td>
</tr>
</tbody>
</table>
Department of Land and Natural Resources
Division of Land and Water Development
P. O. Box 373
Honolulu, Hawaii 96809

Gentlemen:

We received the Environmental Impact Statement Preparation Notice for the Nawaiwai Coral Fill Industrial Subdivision on 30 June 1977. At this time, we offer the following comments:

a. The proposed work site appears to be free from flood flows; however, the 100-year tsunami runup in this area is approximately 8 feet above MSL. Since the site elevation varies from 6 feet to 14 feet above MSL, a portion of the subdivision may be affected.

b. Impact of the proposed project will have short-term impact on water quality of Niulalu Stream and the receiving waters of the Huleia River. Possible long-term impacts of using the site for various industrial purposes should be evaluated when these industries apply for lease or SMA permits. An adequate discussion of the proposed measures to maintain the integrity of the banks of Niulalu Stream, and mitigate impacts from runoff of spoil materials from the fill site should be presented in the EIS document.

c. The subdivision should be as compatible as possible with existing shoreline development to insure retention of adequate backup facilities for the small boat harbor.

d. For your general information, any work to be conducted in Niulalu Stream or Nawaiwai Harbor will require DA permits under the authority of Section 404, Water Pollution Control Act Amendments of 1972, or Section 10, River and Harbors Act of 1899.

Thank you for the opportunity to review this notice.

Sincerely yours,

[Signature]

KISUN CHEUNG
Chief, Engineering Division
October 4, 1977

Mr. Kiuuk Cheung, Chief
Engineering Division
Department of the Army
Building 230, Fort Shafter
APO San Francisco 96358

Dear Sir:

EIS Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision, Kauai

Thank you for your comments on the subject EIS Preparation Notice by latter dated July 20, 1977. Our responses follow:

1. Kauai's Subdivision and Comprehensive Zoning Ordinance requires that structures placed in a tsunami hazard zone be constructed to withstand the anticipated forces. Compliance would be reviewed on an individual leasee basis.

2. Water quality and erosion impacts will be addressed in the EIS.

3. At the present time there are no restrictions, other than the Zoning Ordinance, on the types of industries that may use the proposed subdivision.

4. The only construction proposed near the stream is the placement of a drainage outlet.

Very truly yours,

ROBERT T. CHUCK
Manager-Chief Engineer

Land Management
VTN-Pacific, Inc.
August 10, 1977

Mr. Robert T. Chuck
Department of Land and Natural Resources
Division of Water and Land Development
P. O. Box 373
Honolulu, Hawaii 96809

Re: Environmental Impact Statement Preparation Notice for Job No. 50 KL-13, Nawiliwili Coral Fill Industrial Subdivision
Lihue, Kauai

Dear Mr. Chuck:

We have reviewed the referenced Environmental Impact Statement Preparation Notice, dated 23 June 1977.

It was not clear whether or not limited port facilities would be installed as a part of the project. This should be denoted in the environmental impact statement. Our following comments will reflect this possibility.

We understand that a diversity of uses would be applicable under the existing zoning regulations. While passive uses such as establishment of a park would be most compatible with fish and wildlife resources management objectives, we realize that this may not meet present development aims. However, to limit the need for additional shoreline construction and concomitant marine habitat destruction and degradation, we recommend that industrial development in this area be restricted to water dependent facilities such as containerized cargo storage.

Provision should be made for waste water treatment for both the land based facilities and any ships docking within the project area. This would include installation of bilge pump facilities, if required, and sewage collection facilities.

We noted that a future "fill and" park was identified in Figure 7. The need for this action and the source of material should be identified in the environmental impact statement. Please note that it is this
2.

Service's policy to discourage non-marine oriented development such as this.

Opportunities to enhance fishery usage in the project area would be limited by commercial development and any wildlife habitat creation possibilities irrevocably lost. Therefore, use of the seawall as shoreline access for fishermen and crabbers should be permitted.

Thank you for the opportunity to comment on the proposed project.

Sincerely yours,

Maurice H. Taylor
Field Supervisor

CC: HA
    NMFS
    HDF&G
October 4, 1977

Mr. Maurice M. Taylor
Field Supervisor
U. S. Department of the Interior
Fish and Wildlife Service
Division of Ecological Services
P. O. Box 50157
Honolulu, Hawaii 96850

Dear Sir:

EIS Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision, Kauai

Thank you for your review of the subject EIS Preparation Notice by letter dated August 10, 1977.

To clarify one point, port facilities will not be constructed as a part of this project. Therefore, bilge pump facilities will not be required. However, a sewer line will be constructed from the site to a new pump station on Rice Road.

The referenced "Future Fill and Park" is identified on the Master Plan for the Nawiliwili Boat Harbor. It may be the intention to use this area for spoil disposal from future harbor dredging.

With regard to seawall access, the property lines will be set back from the top of the wall so that public access will be retained.

Very truly yours,

Robert T. Chuck
Manager-Chief Engineer

Land Management
VTN-Pacific, Inc.
Mr. Robert T. Chuck  
State of Hawaii  
Department of Land and Natural Resources  
Division of Water and Land Development  
P. O. Box 373  
Honolulu, Hawaii 96809

Dear Mr. Chuck:

Staff review of the "Environmental Impact Statement Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision" has been completed and the Coast Guard has no comments to offer on the project at this time. It appears that the project will have no impact on Coast Guard facilities or operations in or around Nawiliwili Harbor. A copy of the Draft/Final EIS is requested when it becomes available.

Sincerely,

J. V. CAFFREY  
Captain, U. S. Coast Guard  
Chief of Staff  
Fourteenth Coast Guard District

Copy to:  
COMDT (G-WEP-7)  
EOC Hawaii
October 4, 1977

Captain J. V. Caffrey
Chief of Staff
U. S. Department of Transportation
Fourteenth Coast Guard District
PJKK Federal Building
300 Ala Moana Blvd.
Honolulu, Hawaii 96850

Dear Captain Caffrey:

EIS Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision, Kauai

Thank you for your review of the subject EIS Preparation Notice by letter dated July 21, 1977. We will include you on the mailing list for the Environmental Impact Statement.

Very truly yours,

[Signature]

ROBERT T. CHUCK
Manager-Chief Engineer

NS:jes

bcc: Land Management
VTN-Pacific, Inc.
MEMORANDUM

To: Mr. Robert Chuck, Manager and Chief Engineer
Division of Water and Land Development
Department of Land and Natural Resources

From: Chief, Environmental Protection & Health Services Division

Subject: Job No. 50-KL-13 - Nawiliwili Coral Fill Industrial Subdivision, Lihue, Kauai

Thank you for allowing us to review this EIS preparation notice.

We endorse the consultant's recommendation of connecting to the County's sewage system for wastewater disposal.

We reserve the right to impose environmental restrictions as more detailed information for the proposed project is made available to us.

SHINJI SONEDA
October 4, 1977

MEMORANDUM

TO:    Mr. Shinji Soneda, Chief
        Environmental Protection and Health Services
        Department of Health

FROM:  Robert T. Chuck

SUBJECT: EIS Preparation Notice for the Hawiliwili
         Coral Fill Industrial Subdivision, Kauai

Thank you for your review of the subject EIS
Preparation Notice and for your support of our plans
regarding wastewater disposal. We will continue to
consult with you.

RS: jes

bcc: Land Management
     VTN-Pacific, Inc.
MEMORANDUM

TO: Michio Takata, Director, Division of Fish and Game
THROUGH: Kenji Ego, Chief, Fisheries Branch/Henry Sakuda, Marine Section Chief

FROM: Jim Koenig, Aquatic Biologist

SUBJECT: Comments on 1. Conservation District Use Application
        2. Preparation Notice

Comment Requested by: Robert T. Chuck, DOWALD
Date of Request 6/24/77 Rec'd 7/5/77

Date of Date

Summary of Proposed Project
Job No. 50-KL-13
Title: Nawiliwili Coral Fill Industrial Subdivision

Project by: DLNR - DOWALD

Location: Nawiliwili Harbor, Kauai

Brief Description:

The Division of Water and Land Development plans to subdivide and develop approximately 17 acres of dredged coral fill land located at the western end of Nawiliwili Harbor. Site improvements will include minor grading, construction of roads, waterlines, drainage and sewer systems, and electrical and telephone facilities. An off-site sewage pump station will be built to serve the proposed subdivision. The purpose of the project is to provide access and services for unspecified industrial facilities which will occupy the area in the future. Construction of these facilities, however, is not a part of this project.

Comments:

The forthcoming EIS should include the following:

1. The location and type of outlets for the drainage system, and what construction methods will be used.

2. A description of the potential impacts to fisheries values where construction of drainage outlets or other utilities involves the shoreline or surrounding marine environment.

3. Detailed plans for the sewer line construction at the stream-crossing south of Nawiliwili town, and mitigating measures to be used to prevent adverse impacts on the stream environment.

CONCUR:

Michio Takata, Director
A-11

Division of Fish & Game

Jim Koenig

JIM KOENIG
October 4, 1977

MEMORANDUM

TO: Mr. Michio Takata, Director
Division of Fish and Game

FROM: Robert T. Chuck

SUBJECT: EIS Preparation Notice for the Mawiliwili Coral Fill Industrial Subdivision, Kauai

The Environmental Impact Statement will address the points that you have raised by memorandum dated July 19, 1977. Our plans are to place a single surface drainage outlet near Niunaiu Stream so as to avoid impact to the marine environment from freshwater discharge.

[Signature]
ROBERT T. CHUCK

cc: Land Management
VTN-Pacific, Inc.
July 8, 1977

MEMORANDUM

TO: Robert T. Chuck
FROM: Jane Silverman
RE: Job No. 50-KL-13, Nawiliwili Coral Fill Industrial Subdivision, Lihue, Kauai

The proposed undertaking will have no effect upon any known historic or archaeological site on or likely to be eligible for inclusion on the Hawaii Register and/or National Register of Historic Places. This office has no reservations for the project to proceed.

In the event that any unanticipated sites or remains are encountered, please inform the applicant to contact this office immediately.

[Signature]
October 4, 1977

MEMORANDUM

TO: Miss Jane Silverman
State Historic Preservation Officer

FROM: Robert T. Chuck

SUBJECT: EIS Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision, Kauai

Thank you for your review of the subject EIS Preparation Notice by memorandum dated July 9, 1977, and your clearance of this project with regard to historical and archaeological resources. You will be notified if any artifacts are encountered.

ROBERT T. CHUCK

cc: jes

Land Management
VTN-Pacific, Inc.
August 1, 1977

Mr. Robert T. Chuck, Manager-Engineer
Division of Water and Land Development
Department of Land and Natural Resources
State of Hawaii
P.O. Box 373
Honolulu, Hawaii 96809

Dear Mr. Chuck:

Subject: Environmental Impact Statement Preparation Notice for Job No. 50-KL-13, Nawiliwili Coral Fill Industrial Subdivision, Lihue, Kauai

We have reviewed the subject EIS preparation notice and find that, in general, it has identified the significant impacts which can be anticipated to result from the proposed project.

In the forthcoming EIS, it would seem appropriate to include a detailed assessment of potential adverse impacts associated with increased truck traffic along anticipated delivery routes in the Nawiliwili area. For example, noise and dust generated by passing trucks may impact residences along frequently used routes. Also, an increase in slower moving truck traffic may congest roads or create hazardous driving situations. Measures to mitigate such impacts could also be examined.

We appreciate the opportunity to review and comment on this EIS preparation notice.

Sincerely,

[Signature]

HIDETO KONO
STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER AND LAND DEVELOPMENT

P. O. BOX 373
HONOLULU, HAWAII 96809

October 4, 1977

Honorable Hideto Kono, Director
Department of Planning and Economic Development
P. O. Box 2309
HONOLULU, HAWAII 96804

Dear Sir:

EIS Preparation Notice for the Hawiliwili Coral Fill Industrial Subdivision, Kauai

We appreciate your review of the subject EIS Preparation Notice by letter dated August 1, 1977. The Environmental Impact Statement will discuss the impact of truck traffic. However, traffic volumes cannot be predicted since the industries that will be using the site are not known.

Very truly yours,

W. P. THOMPSON
Chairman of the Board

cc: Land Management
VTH-Pacific, Inc.
MEMORANDUM

TO: ROBERT T. CHUCK, MANAGER-CHIEF ENGINEER
   DIVISION OF WATER AND LAND DEVELOPMENT
   DEPARTMENT OF LAND AND NATURAL RESOURCES

FROM: DAVID K. HIGA, CHIEF
       WATER TRANSPORTATION FACILITIES DIVISION
       DEPARTMENT OF TRANSPORTATION

SUBJECT: NAWILIWILI CORAL FILL INDUSTRIAL SUBDIVISION, LIHUE
         KAUAI, JOB NO. 50-KL-13

July 12, 1977

We have no specific comments on either the EIS preparation notice or the preliminary engineering report for the subject subdivision at this time. However, we look forward to continued close coordination between our Division and members of your staff and consultants as was afforded to us in the past.

Thank you for this opportunity to comment.

DAVID K. HIGA
October 4, 1977

MEMORANDUM

TO: Mr. David K. Hiqa, Chief
Water Transportation Facilities Div.
Department of Transportation

FROM: Robert T. Chuck

SUBJECT: EIS Preparation Notice for the Nawiliwill Coral Fill Industrial Subdivision

Thank you for your review of the subject EIS Preparation Notice. We will continue to keep you informed of our plans.

Robert T. Chuck

cc: Land Management
VTN-Pacific, Inc.
COUNTY OF KAUA\(\text{I}\)
OFFICE OF ECONOMIC DEVELOPMENT
4306 RICE STREET
LIHUE, KAUA\(\text{I}\), HAWAII 96766
TELEPHONE 245-4556

August 8, 1977

Mr. Robert T. Chuck
Manager - Engineer
Dept. of Land & Natural Resources
P. O. Box 373
Honolulu, Hawaii 96809

Dear Mr. Chuck:

We support the statement in the Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision which states: "It is the expressed goal of the County of Kauai to expand the County economic base through the encouragement of more industrial activity."

We would like to encourage the expansion of industrial lands on Kauai, especially in the Lihue area. Lihue is the commercial and industrial center of Kauai County and is also the gateway for all arriving goods and people. Currently, there is insufficient industrial space in Lihue to provide for the present level of industrial activities required to service existing local needs.

While expansion of the existing Lihue Industrial Park is planned in the future, we do not feel that the proposed expansion will be sufficient in satisfying future requirements for industrial activity in Lihue.

While we are not currently aware of the types of industries that would utilize the proposed site, we would certainly encourage those industries that would influence the least impact on the environment in proportion to the economic impact created.

The Nawiliwili Coral Fill Industrial Subdivision would be a positive and significant step in creating available lands for future industrial needs in Kauai County.

Sincerely,

JAMES N. KURITA
Director
Mr. James N. Kurita  
Director, Office of Economic Development  
County of Kauai  
4396 Rice Street  
Lihue, Hawaii 96766

Dear Mr. Kurita:

EIS Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision, Kauai

Thank you for your comments on the subject EIS Preparation Notice by letter dated August 3, 1977. We especially appreciate your support of this project.

Very truly yours,

W. Y. THOMPSON  
Chairman of the Board

bcc: VTN-Pacific, Inc.  
Land Management
August 9, 1977

Department of Land and Natural Resources
Division of Water and Land Development
P. O. Box 373
Honolulu, Hawaii 96809

Attention: Harold Sakai and James Yoshimoto

Subject: Nawiliwili Coral Fill Industrial Subdivision,
Lihue, Kauai, TMK: 3-2-03
Subdivision of Lot 12 of Nawiliwili Harbor Lots,
TMK: 3-2-04:9 (Proposed Sewage Pumping Station Site)

In response to the above submittals dated June 24, 1977 for subdivision and Special Management Area (SMA) use permit processing, please be advised the applications will be accepted after the draft EIS and the attached form, as completed, are received by this agency. The EIS will be of great assistance in our review of the applications.

As provided for by the County of Kauai's SMA environmental rules and regulations, the following areas of concern should be addressed by the proposed EIS:

a) The draft, Lihue Development Plan, presently under consideration for adoption by the County, specifies opportunities, problems, and an illustrative plan for the Niumalu-Nawiliwili area, which should act as a guide for the industrial subdivision. Copies of the plan have been previously made available to your agency.
b) Also under review by the County is the draft of the proposed Kauai Urban Design Plan that offers several guidelines which would ensure compatible land use mixes complementing the natural features of the area. Establishing a densely planted landscaped buffer along an industrial perimeter would help mitigate negative visual and noise impacts attributed to industrial development.

c) As it is impossible to determine further the physical impacts from individual industries attracted to the project, design, color and siting considerations should be left subject to future review at time of zoning and building permit applications.

d) The subdivisions and subsequent development shall comply with the provisions of the County's Subdivision and Comprehensive Zoning Ordinance(s) and the guidelines found in the County's SMA rules and regulations (copy enclosed for your reference).

Should you have any questions, feel free to call staff planner Curtiss Ako at 245-3919.

Avery Youn  
Deputy Planning Director

cc: Clifford Arakawa, VTN Pacific

Attachments
Mr. Avery Youn  
Deputy Planning Director  
Planning Department  
County of Kauai  
4280 Rice St.  
Lihue, Kauai, Hawaii 96766

Dear Sir:

EIS Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision, Kauai

We appreciate your review of the subject EIS Preparation Notice by letter dated August 9, 1977. The Environmental Impact Statement will evaluate the proposed project with regard to the Lihue Development Plan and the Kauai Urban Design Plan.

Very truly yours,

W.Y. THOMPSON  
Chairman of the Board

HS:jes  
bcc: Land Management  
VTN-Pacific, Inc.
July 20, 1977

State of Hawaii
Department of Land & Natural Resources
P.O. Box 373
Honolulu, HI 96809

ATTENTION: Mr. Robert T. Chuck
Manager-Engineer

SUBJECT: NAWILIWILI CORAL FILL INDUSTRIAL SUBDIVISION

Dear Mr. Chuck:

We have reviewed your Environmental Impact Statement Preparation Notice and have the following comment:

Power is available to this project in accordance with our Rule 13 which states that the developer will have to advance the total cost of the line extension.

Very truly yours,

BOYD T. TOWNSLEY
Manager

BTT: kk
October 4, 1977

Mr. Boyd T. Townsley  
Manager, Kauai Electric  
Citizens Utilities Company  
P. O. Box 278  
Elelele, Hawaii 96705

Dear Mr. Townsley:

EIS Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision, Kauai

Thank you for the information on your power capabilities by letter dated July 20, 1977. We will continue to coordinate our plans with you.

Very truly yours,

Robert T. Chuck  
Manager-Chief Engineer

HS: jes  
bcc: Land Management  
VTN-Pacific, Inc.
State of Hawaii
Department of Land and Natural Resources
Division of Water and Land Development
P. O. Box 373
Honolulu, Hawaii 96809

Attention: Mr. Robert T. Chuck
Manager-Engineer

Gentlemen:

Environmental Impact Statement Preparation Notice
for Job No. 50-KL-13, Nawiliwili Coral Fill
Industrial Subdivision, Lihue, Kauai

Thank you for the opportunity to comment on the Environmental Impact Statement Preparation Notice for the Nawiliwili Coral Fill Industrial Subdivision in Lihue, Kauai.

We presently occupy a lot in the proposed coral landfill industrial subdivision and when we acquired the lot, we were given the impression that a road would adjoin our lot on the west side. Because of this, we have located our propane storage tanks 15 feet from our westerly boundary. The tanks must be 50 feet from any important structure (building, warehouse, etc.); and with the consideration of the adjoining road, we allowed 35 feet adjacent to our boundary as part of the required 50-foot clearance. No structure can be built on this area according to American Petroleum Institute Standard 2510, "Design and Construction of LPG Installations at Marine and Pipeline Terminals, Natural Gas Processing Plants, Refineries, and Tank Farms."

Please note that Section III, page 3, states that "A small portion of the project site is presently used for industrial purposes, including a lot used by Gasco, Inc. for storage of natural gas." The last clause should be modified to read: "... including a lot used by Gasco, Inc., for an operating yard and propane storage tank farm."

August 3, 1977
State of Hawaii  
Department of Land and  
Natural Resources  

We would appreciate your consideration of this requirement when you do subdivide the land.

Also, Gasco has plans to request from the State Department of Land and Natural Resources an additional 45-foot strip of land along the southerly boundary to provide for construction and setback requirements of a future LPG storage tank.

Should there be a future road, 45 feet or wider, planned along and abutting our southerly boundary, there would not be any need for our requesting additional land since the future road (45+ feet in width) will meet the setback requirements.

We thank you for the opportunity to comment on your Environmental Impact Statement Preparation Notice.

Very truly yours,

GASCO, INC.

Bruce D. Walker  
Vice President
Gasco, Inc.
P. O. Box 3379
Honolulu, Hawaii 96842

Gentlemen:

Nawiliwili Coral Fill Industrial Subdivision
Lihue, Kauai (Job No. 50-KL-13)

Thank you for your letter of August 3, 1977 commenting of the layout of the proposed industrial subdivision at the Nawiliwili Coral Fill.

We are studying your comments and as soon as we decide on a plan we will notify you.

Very truly yours,

[Signature]
ROBERT T. CHUCK
Manager-Chief Engineer

ES: In
cc: Land Management
     Mr. Sam Lee, Kauai
     VTN Pacific Inc.
## APPENDIX B

### Agencies and Organizations Commenting on the EIS

<table>
<thead>
<tr>
<th>Federal Government</th>
<th>Response to Draft EIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. of Army (Facilities Engineering)</td>
<td>* 11/16/77</td>
</tr>
<tr>
<td>Fourteenth Naval District (Engr. Sect)</td>
<td>* 11/18/77</td>
</tr>
<tr>
<td>U.S. Fish &amp; Wildlife Service</td>
<td>11/18/77</td>
</tr>
<tr>
<td>U.S. Soil Conservation Service</td>
<td>* 12/5/77</td>
</tr>
<tr>
<td>Dept. of the Air Force (Engineering Construction and Environmental Planning Division)</td>
<td>* 12/27/77</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. of Defense</td>
<td>* 11/16/77</td>
</tr>
<tr>
<td>Dept. of Accounting &amp; General Services</td>
<td>* 11/17/77</td>
</tr>
<tr>
<td>Dept. of Social Services &amp; Housing</td>
<td>* 11/22/77</td>
</tr>
<tr>
<td>Dept. of Planning &amp; Economic Development</td>
<td>* 12/12/77</td>
</tr>
<tr>
<td>Dept. of Land &amp; Natural Resources (Historic Preservation Officer)</td>
<td>* 12/13/77</td>
</tr>
<tr>
<td>Dept. of Health</td>
<td>12/15/77</td>
</tr>
<tr>
<td>University of Hawaii</td>
<td>* 12/21/77</td>
</tr>
<tr>
<td>Office of Environmental Quality Control</td>
<td>12/23/77</td>
</tr>
<tr>
<td>Dept. of Transportation</td>
<td></td>
</tr>
</tbody>
</table>

| County of Kauai                                                                          |                        |
| Dept. of Public Works                                                                    | 11/27/77              |
| Dept. of Water                                                                           | * 11/30/77            |
| Planning Dept.                                                                           | 12/2/77               |

| Private Organizations                                                                    |                        |
| Citizens Utilities Company                                                               | 11/15/77              |

* Indicates no response necessary.
DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY SUPPORT COMMAND, HAWAII
FORT SHAFTER, HAWAII 96858

AF7V-PE-8E

NOV 16 1977

Office of the Governor
State of Hawaii
Environmental Quality Commission
550 Hualalai Street, Room 301
Honolulu, Hawaii 96813

Gentlemen:

Environmental Impact Statement (EIS) for Nawiliwili Coral Fill Industrial Subdivision, Hiualu, Kauai, Hawaii, has been reviewed and we have no comments. There are no Army installations on the Island of Kauai.

The opportunity to review the EIS is appreciated. It is returned in accordance with your request.

Sincerely,

[Signature]

1 Incl
As stated

CARL P. ROOLOPH
Colonel, CZ
Director of Facilities Engineering

Copies furnished: (wo incl)
Office of the Governor
State of Hawaii
Environmental Quality Control
550 Hualalai Street, Room 301
Honolulu, Hawaii 96813

State Department of Land
and Natural Resources, DwLD
1131 Punchbowl Street
Honolulu, Hawaii 96813
Environmental Quality Commission
Office of the Governor
State of Hawaii
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Gentlemen:

Navilaiwili Coral Fill Industrial Subdivision
Environmental Impact Statement

The Environmental Impact Statement for Navilaiwili Coral Fill Industrial Subdivision forwarded by your letter of 8 November 1977 has been reviewed and the Navy has no comments. As requested, the subject EIS is returned.

Thank you for the opportunity to review the EIS.

Sincerely,

Encl

Copy to:
OEQC
State DLNR, DVLID
Reference: ES

November 18, 1977

Environmental Quality Commission
State of Hawaii
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Re: Environmental Impact Statement
Nawiliwili Coral Fill Industrial Subdivision, Niulaulu, Kauai

Dear Sir:

We have reviewed the subject document and have the following comments:

Page 6. Last Paragraph

Surface runoff is to be directed into Niulaulu Stream and the small boat harbor. While under existing conditions this sort of drainage may not be detrimental to the marine environment, the planned establishment of industrial activities on the site doubtlessly will increase the amount of petrochemicals entering the harbor area. In view of the enclosed nature of the small boat harbor, and the use of the mudflat at the mouth of Niulaulu Stream for crabbing (page 11, paragraph 4) we believe the introduction of additional pollutants to these areas to be inappropriate, environmentally degrading, and contrary to the objective of the State Coastal Zone Management Plan to protect valuable resource areas. We believe that such runoff should be collected and properly treated prior to disposal. The disposal methodology described in the EIS will lead to water quality degradation within the small boat harbor, and is a public health menace to individuals crabbing in the...
adjacent area.

Page 11, Paragraph 4

This paragraph should be expanded to include a description of the fish and wildlife uses of the impacted area. The species of birds, fish and shellfish inhabiting the small boat harbor the mudflat at the mouth of Niulalu Stream should be described. Particular attention should be given to the migratory requirements of native diadromous shrimp and gobies in the stream, and the use of the area, if any, by endangered species, Figure 5 and the existing text does not suffice in this regard.

Page 13, Paragraph 3

The determination that, "the storm drain will not adversely affect the aquatic life near the discharge" is in error as indicated above.

Page 13, Paragraph 4

As stated in our previous letter of August 10, 1977 "We noted that a future 'fill and' park was identified in Figure 2. The need for this action and the source of this material should be identified in the environmental impact statement. Please note that it is this Service's policy to discourage non-marine oriented development such as this."

Page 16, Paragraph 2

In view of the continuing need for waterfront location (or near waterfront location) for marine oriented purposes, we recommend that activities at the project site be limited to those with a need for such siting. Examples of these activities are container handling facilities, boat repair, and supply yards, etc. We do not consider restaurants, parking lots and most manufacturing operations to fit within this category.

We appreciate the opportunity to comment on the proposed project.

Sincerely yours,

Maurice H. Taylor
Field Supervisor

cc: HA
NMFS
HDF&G
February 8, 1978

Mr. Maurice H. Taylor
Field Supervisor
U.S. Dept. of the Interior
Fish & Wildlife Service
Div. of Ecological Services
300 Ala Moana Blvd., Rm 5302
P. O. Box 50167
Honolulu, Hawaii 96850

Dear Mr. Taylor:

Comments on Environmental Impact Statement for the Proposed Nawiliwili Coral Fill Industrial Subdivision, Lihue, Kauai

Thank you for your comments on the subject EIS by letter dated November 18, 1977. Our responses follow:

1. The revised drainage plan for the Nawiliwili Coral Fill Industrial Park now discharges surface runoff collected by the roadway drainage system into the inner harbor rather than the mudflats area of the Niulau Stream mouth. Therefore, potential adverse impacts on the marine environment and users of the mudflats area are minimized.

2. The referenced paragraph has been expanded to include a discussion of project area wildlife as requested.

3. The revised storm drainage discharge plan and the relative insignificance of project site surface runoff to other sources of runoff support the conclusion that no significant adverse impacts on inner harbor aquatic life will occur with the possible exceptions of the immediate area by the drain discharge.

4. Refer to paragraph 4, page 15.

5. As specified in the Lihue Development Plan prepared for the County of Kauai (EDAW & Muroda & Associates, Inc. 1976) the
industrial sites provided adjacent to Nawiliwili Harbor are intended to be used to satisfy the growing demand for port-related industrial land in this area.

Very truly yours,

[Signature]

ROBERT T. CHUCK
Manager-Chief Engineer

HS:jes
cc: Office of Environmental Quality Control
December 5, 1977

Mr. William Y. Thompson
Chairman of the Board
Department of Land &
Natural Resources
1151 Punchbowl Street
Honolulu, Hawaii 96813

Dear Mr. Thompson:

Subject: Environmental Impact Statement for the Nawiliwili Coral Fill Industrial Subdivision, Niulolo, Kauai

We have reviewed the above-mentioned document and have no comments to offer.

Thank you for the opportunity to review this document.

Sincerely,

Jack P. Kanalz
State Conservationist

cc: Dr. Richard E. Marland, Office of Environmental Quality Control, 550 Halekauwila St., Honolulu, HI 96813
REPLY TO ATTN OF: DEEV (Mr. Nakashima, 4491831) 3-27 DEC 1977

SUBJECT: Environmental Impact Statement (EIS) for the Nawiwi Coral Fill Industrial Subdivision, Niulalu, Kauai, Hawaii

To: Governor, State of Hawaii (Office of Environmental Quality Control)
550 Halekauwila Street
Room 301
Honolulu, Hawaii 96813

1. This headquarters has reviewed the subject EIS and has no comment to render relative to the proposed project.

2. We greatly appreciate your cooperative efforts in keeping the Air Force apprised of your project and thank you for the opportunity to review the EIS.

ROBERT Q. K. CHING
Chief, Engineering, Construction and Environmental Planning Div
Directorate of Civil Engineering

Atch: EIS

Cy to: State Dept of Land and Natural Resources
1151 Punchbowl St.
Honolulu, Hawaii 96813
HIENG

Governor, State of Hawaii
Office of Environmental Quality Control
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Dear Sir:

Nawiliwili Coral Fill Industrial Subdivision
Niumalu, Kauai

Thank you for sending us a copy of the "Nawiliwili Coral Fill Industrial Subdivision" Environmental Impact Statement. We have received the publication and have no comments to offer.

Yours truly,

Frederic W. Hanch
WAYNE R. TOMOYASU
Captain, CE, HARNG
Contr & Engr Officer
Dr. Richard E. Marland  
Director  
Office of Environmental Quality Control  
550 Halsekauwila Street, Room 301  
Honolulu, Hawaii  

Dear Dr. Marland:

Subject: Environmental Impact Statement for Nawaiwili Coral Fill Industrial Subdivision

The subject project will not have any adverse environmental impact on any existing or planned facilities serviced by our department.

Thank you for this opportunity to comment.

Very truly yours,

HIDEO MURAKOMI  
State Comptroller

LT: rdr  
cc: V'DLINR, Division of Water and Land Department
MEMORANDUM

TO: Environmental Quality Commission
    550 Halekaua St., Room 301
    Honolulu, Hawaii 96813

FROM: Andrew I. T. Chang, Director
      Department of Social Services and Housing

SUBJECT: Environmental Impact Statement - Nawiliwili Coral Fill Industrial Subdivision

Subject EIS has been reviewed for its impact on departmental programs. We have no comment to make and we are returning the EIS for your usage. Thank you for the opportunity to review and comment.

Attachment
cc: Governor (Office of EQC)
    Dept. of Land & Natural Resources
December 12, 1977

Mr. Robert T. Chuck
Manager-Engineer
Division of Water and Land
Development
Department of Land and Natural
Resources
State of Hawaii
Honolulu, Hawaii

Dear Mr. Chuck:

Subject: Environmental Impact Statement, Nawiliwili Coral Fill Industrial Subdivision, Lihue, Kauai

We have reviewed the subject EIS and find that it has adequately assessed the major environmental impacts which can be anticipated from the implementation of this project.

Our previous comments made in regard to the EIS preparation notice were satisfactorily addressed in this document.

Thank you for the opportunity to review this project.

Sincerely,

HIDETO KONO

cc: Office of Environmental Quality Control
Environmental Quality Commission
550 Halekauwila Street
Room 301
Honolulu, Hawaii

Dear Sirs:

Subject: EIS, Nawiliwili Coral Fill Industrial Subdivision, Ni'ihau Island

This office has no further comment to offer on the above undertaking.

Sincerely yours,

[Signature]

Jane L. Silverman
Historic Preservation Officer
State of Hawaii

cc: Div. of Water and Land Development
MEMORANDUM

To: Mr. William Thompson, Chairman
Department of Land & Natural Resources

From: Deputy Director for Environmental Health

Subject: Environmental Impact Statement (EIS) for Nawiliwili Coral Fill
Industrial Subdivision, Niulamu, Kauai

December 15, 1977

Thank you for allowing us to review and comment on the subject EIS. On the basis that the project will comply with all applicable Public Health Regulations, please be informed that we have no objections to this project. We submit the following comments for your consideration:

1. Wastewater Disposal: We endorse the recommendation to connect to the municipal sewer system.

2. Solid Waste Disposal: Grub materials from clearing of the ironwood trees and other clearing work shall be properly disposed of at an approved County landfill. There shall be no burning of grub materials at the job site or anywhere else. Open burning of grub material, debris and other solid waste materials is prohibited under the Department of Health regulations.

3. Dust and Soil Erosion: Dust and soil erosion control measures shall be implemented in accordance with guidelines devised under the County Grading Ordinance.

We realize that the statements are general in nature due to preliminary plans being the sole source of discussion. We, therefore, reserve the right to impose future environmental restrictions on the project at the time final plans are submitted to this office for review.

JAMES S. KUMAGAI, PH.D.

cc: Environmental Quality Commission
Office of Environmental Quality Control
DHO, Kauai
February 8, 1978

Dr. James S. Kumagai
State of Hawaii
Department of Health
P. O. Box 3378
Honolulu, Hawaii 96801

Dear Dr. Kumagai:

Comments on Environmental Impact Statement for the Proposed Nawiliwili Coral Fill Industrial Subdivision, Lihue, Kauai

Thank you for your comments regarding the subject EIS by letter dated December 15, 1977. Preparation of the site for industrial uses will be done in compliance with all Department of Health and local government ordinances and regulations regarding solid waste disposal and erosion control.

Very truly yours,

[Signature]

W. Y. THOMPSON
Chairman of the Board

cc: Office of Environmental Quality Control
December 21, 1977

Office of Environmental Quality Control
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Dear Sir:

Subject: Nawiliwili Coral Fill Industrial Subdivision

We have reviewed the Nawiliwili Coral Fill Industrial Subdivision EIS and have no critical comments. We are retaining the EIS for our files. Thank you for the opportunity to participate in this EIS review.

Sincerely,

[Signature]

Reginald H. F. Young
Asst. Director, WRRC

RHFY:jmn
Enclosure
cc: DLNR
    D. Thuet, Env. Ctr
MEMORANDUM

TO: William Thompson, Director
Department of Land and Natural Resources

FROM: Richard E. Marland, Director
Office of Environmental Quality Control

SUBJECT: Environmental Impact Statement for Nawiliwili Coral Fill
Industrial Subdivision, Nawiliwili, Kauai

As of this date, this Office has received eleven comments
on the above subject. An attached sheet lists the responding agencies
and/or organizations.

In our review of the environmental impact statement we have
found several areas in which the document should expanded discussion.
We offer the following comments:

   The EIS indicates that overhead utility lines will be
   used. To lessen the visual impacts, have underground
   power lines been considered?

   The statement, "storm drain will not adversely affect
   aquatic life near the discharge," needs further discussion.
   Since the outlet will be located on the freshwater side
   of the coral fill peninsula, urban runoff from industrial
   uses may lead to the degradation of water quality. For
   example, petrochemicals and urban waste may affect diadromous
   species. (See comment by U.S. Fish and Wildlife) In
   addition, it is also important to note street surface
   contaminants include chemicals and oils from pavement
material (such as ground up asphalt and cement and worn out paint), motor vehicles (such as oils, gasoline, tire particles, exhaust emission, dirt, rust, and brake linings), air pollution fallout, runoff (such as eroded soil, oils and grease from parking lots), and litter (such as cigarette butts, newspapers, and cans). When these organic and inorganic materials reach water, the organic matter metabolizes oxygen in the water thus creating an oxygen demand. Unless proper mitigating measures are initiated such as street sweeping or treating the runoff prior to disposal, there may be a water quality problem.


Although the EIS mentions that a sewer system line will be placed within the right-of-way of existing streets, there should be further consideration regarding attendant pressures to develop adjacent lands. (Also see comment by Department of Public Works)

4. Pages 13-17.

As pointed out in the last paragraph, new utilities and offsite water and sewer lines will probably create pressure for urbanizing adjacent lands. However, the surrounding land and its relationship to the proposed action has not been discussed. We recommend a discussion of secondary impacts and the neighboring areas be addressed in the EIS.

5. During the consultation period, the county's Planning Department commented that a densely planted landscaped buffer may help mitigate adverse visual and noise impact. However, the EIS does not address this idea. This should be included in the EIS.

Since the EIS Regulations permit the accepting authority to consider responses beyond the fourteen day response period, our Office will consider responses received beyond that time.

We trust that these comments will be helpful to you in preparing the revised EIS. We thank you for the opportunity to review the EIS. We look forward to the revised EIS.

Attachment
List of Responding Agencies and Organizations

Federal
*Dept. of the Army (Facilities Engineering) November 16, 1977

**U.S. Fish and Wildlife Service November 18, 1977

State
Dept. of Defense November 16, 1977

*Dept. of Accounting and General Services November 17, 1977

*Dept. of Social Services and Housing November 22, 1977

*Dept. of Planning and Economic Development December 12, 1977

*Dept. of Land and Natural Resources (Historic Preservation Office) December 13, 1977

County of Kauai
Dept. of Public Works November 27, 1977

Dept. of Water November 30, 1977

Planning Dept. December 2, 1977

Private Organizations
*Citizens Utilities Company November 15, 1977

* Indicates comment forwarded previously by reviewer

** Comment forwarded by the Environmental Quality Commission
February 8, 1978

Mr. Richard O'Connell
Director
Office of Environmental Quality Control
State of Hawaii
550 Halekauwila St., Room 301
Honolulu, Hawaii 96813

Dear Sir:

Comments on Environmental Impact Statement
for the Proposed Nawiliwili Coral Fill
Industrial Subdivision, Lihue, Kauai

Thank you for your comments on the subject EIS by letter
dated December 23, 1977. Our responses follow:

1. Since overhead utility lines are already in existence in
areas immediately adjacent to the project site, the
aesthetic benefits resulting from placing the utility
lines underground would probably not be significant
enough to offset the increased development costs.

2. Refer to statement 1 through 3 in the letter of responses
to the US Department of Interior, Fish and Wildlife
Service comments.

3/4. Since the public facility system included in the proposed
Nawiliwili Coral Fill Industrial Subdivision is designed
to accommodate planned development within its service
area (in addition to the industrial park site and small
boat harbor), the project will be growth inducing. The
present zoning classifications of the service area of the
proposed facilities were used to determine the design
capacity of the sewer trunk line. Therefore, the proposed
sewer facilities will accommodate both existing land use
activities which conform to present zoning and potential
land uses specified under the existing zoning for undeveloped
or underdeveloped parcels. The project will not induce
growth which is incompatible with the zoning and general
plans for the project area. In fact, by providing the
necessary public facilities to accommodate urban development in this area, the project may lessen pressures for development in other area where it is neither planned for, nor are public facilities available to serve it. In other words, the proposed project can be viewed as a tool for fulfilling community goals for growth and development as outlined in existing plans.

5. On page 15 of the EIS, it is indicated that a 40-foot strip of existing ironwood trees on the eastern perimeter will be maintained for aesthetic purposes. The small boat harbor development will provide landscaping on the southerly boundary, and along the westerly boundary is a dense growth of mangrove which separates the proposed industrial lots from Niumalu Park. Additional landscaping will be the responsibility of the tenants, but they will be required to design in accordance with the guidelines of the "Kauai Urban Design Plan".

We are transmitting for your files copies of our response to the various agencies that commented on the EIS.

Very truly yours,

W. Y. THOMPSON
Chairman of the Board

Enc.
Dr. Richard Marland  
Office of Environmental Quality Control  
550 Halekauwila St., Room 301  
Honolulu, Hawaii 96813  

Dear Dr. Marland:

Subject: EIS- Nawiliwili Coral Fill  
Industrial Subdivision

We wish to acknowledge the excellent cooperation extended to us by DOWAD, DINR, regarding the coordination of the subdivision project with our Division. After reviewing the subject EIS, we offer the following:

Wherever the term "Harbors Division" appears in the statement it should be corrected to read "Water Transportation Facilities Division." On page 10, under item E, Related Projects, our Division does not anticipate initiating development of the docks and other facilities in 1977. Consequently, we suggest changing the second sentence to read, "...for the phased development of docks and other facilities for the small boat harbor."

We have no further comments.

Sincerely,

[Signature]

E. Alvey Wright  
Director
February 8, 1978

Honorable Ryokichi Higashionna
Director, Dept. of Transportation
State of Hawaii
869 Punchbowl St.
Honolulu, Hawaii 96813

Dear Sir:

Comments on Environmental Impact Statement
for the Proposed Nawiliwili Coral Fill
Industrial Subdivision, Lihue, Kauai

Thank you for your comments on the subject EIS.
The requested changes have been incorporated into the
revised report.

Very truly yours,

W. Y. THOMPSON
Chairman of the Board

cc: Office of Environmental Quality Control
Honorable Albert Q. Y. Tom, Chairman
ENVIRONMENTAL QUALITY COMMISSION
Office of the Governor
State of Hawaii
550 Halekauwila Street - Room 301
Honolulu, Hawaii 96813

Dear Mr. Tom:

RE: ENVIRONMENTAL IMPACT STATEMENT (EIS) NAWILIWILI CORAL FILL INDUSTRIAL SUBDIVISION - NIUMALU, KAUAI

Thank you for allowing us to review and comment on the subject EIS.

With regards to sewage disposal, the EIS recommends that sewage be disposed via the municipal sewer system and further states that the offsite sewer system (from the subdivision to the County's SPS at Kauai Surf) will be funded by the State. The following comments are offered relative to the recommendation and statements made in the EIS regarding sewers:

1. The capacity of the existing 0.5 mgd Lihue Wastewater Treatment Plant will shortly be expanded to handle an average sewage flow of 1.5 mgd, which capacity upon completion will be one-third of the projected ultimate capacity of the plant. The sewerable area of the Lihue Wastewater Management System includes the proposed subdivision; however, service to said development was not considered under the current 1.0 mgd expansion project.

It is noted in the EIS (Temporary Private System, pg. 19) that the proposed subdivision would require a 100,000 gpd sewage treatment plant. This amount
of sewage, if allowed to flow into the 1.5 mgd Lihue Wastewater Treatment Plant, will have a major impact on our current plan of sewer ing all of the already developed residential and commercial areas within Lihue and Hanamaulu. The equivalence of 250 residential units would be affected by a decision to provide sewer service to the proposed subdivision.

2. It is noted that the offsite sewer system, which include a gravity interceptor sewer, sewage pump station and force main to the County's sewage pump station located on the grounds of the Kauai Surf Hotel, will be financed by the State. We presume that the offsite sewer system will be sized to handle not only flows from the proposed subdivision, but all of the flows as projected in the County's Water Quality Management Plan for the Nawiliwili tributary area. If this is the case, the County has no objection to the full State financing and construction of the offsite sewer system. However, the improvements must be constructed to County standards and the plans must be approved by us.

3. Construction of the offsite sewer system from the proposed subdivision to the Kauai Surf Pump Station will undoubtedly create pressures upon the County by developers of lands adjacent to the sewer lines. This would be undesirable due to the lack of sewage treatment capacity.

4. The EIS mentions permitted uses within the proposed subdivision. Our Lihue Wastewater Treatment Plant Expansion project is being financed under an EPA grant which requires capital cost recovery for treatment plant improvements from certain types of industries connected to the system. Some of the industries listed may fall in the capital cost recovery category.
Further, for some of the industries listed, pre-treatment of sewage may be required before discharge into the municipal system.

We suggest that a meeting be held between State and County authorities to discuss and decide on the sewage problem associated with the proposed subdivision.

Very truly yours,

HENRY S. MORITA
County Engineer

KM:hs
February 8, 1978

Mr. Henry Morita
County Engineer
County of Kauai
Dept. of Public Works
4396 Rice St.
Lihue, Kauai 96766

Dear Mr. Morita:

Comments on Environmental Impact Statement for the Proposed Nawiliwili Coral Fill Industrial Subdivision, Lihue, Kauai

Thank you for your comments on the subject EIS by letter dated November 27, 1977. Our responses follow:

1. The sewage flow of 100,000 gpd was based on the Division of Sewers standards of 6,000 gpd and will be retained for design purposes. However, an investigation into the water usage for the Lihue Industrial Subdivision shows that the average consumption is approximately 1,850 gpd. Based on this figure and assuming that 100 percent of water use enters the sewer, sewage flows from the proposed subdivision is expected to be closer to 30,000 gpd. Since sewage flows are based on the year 1990, at which time the plant should be expanded to its maximum capacity, the flows from the proposed industrial area should have minimum impact on the sewage treatment plant.

2. The offsite sewer system has been sized to handle the flows as projected in the County's Water Quality Management Plan for the Nawiliwili tributary area. All improvements will be constructed in accordance with the standards of the County of Kauai.

3. Since the public facility system included in the proposed Nawiliwili Coral Fill Industrial Subdivision is designed to accommodate planned development within its service area (in addition to the industrial park site and small boat harbor), the project will be growth inducing. The present zoning classifications of the service area of the proposed facilities
were used to determine the design capacity of the sewer trunk line. Therefore, the proposed sewer facilities will accommodate both existing land use activities which conform to present zoning and potential land uses specified under the existing zoning for undeveloped or underdeveloped parcels. The project will not induce growth which is incompatible with the zoning and general plans for the project area. In fact, by providing the necessary public facilities to accommodate urban development in this area, the project may lessen pressures for development in other areas where it is neither planned for, nor are public facilities available to serve it. In other words, the proposed project can be viewed as a tool for fulfilling community goals for growth and development as outlined in existing plans.

4. All leasees of the proposed industrial subdivision will be required to conform to the requirements of the County of Kauai.

Very truly yours,

W. Y. THOMPSON
Chairman of the Board

cc: Office of Environmental Quality Control
November 30, 1977

Governor, State of Hawaii
Office of Environmental Quality Control
550 Halekauwila Street, Room 301
Honolulu, Hawaii 96813

Re: Environmental Impact Statement for the Nawiliwili Coral Fill Industrial Subdivision; Niulaulu, Kauai

The two segments of 12-inch water line along Waapa Road, designated in Figure 4 as "12-Inch Water Main under Construction," have been completed and are in operation. We can provide water service to the proposed subdivision through the new 12-inch instead of the inadequate 2-1/2-inch water line.

Thank you for the opportunity to comment on this E.I.S.

Walter L. Briant Jr.
Manager and Chief Engineer

RM:at
December 2, 1977

State of Hawaii
Environmental Quality Commission
550 Halekauwila, Room 301
Honolulu, Hawaii 96813

Re: Nawiliwili Coral Fill Industrial Subdivision
Environmental Impact Statement (EIS)

We have reviewed the subject EIS and feel it adequately discloses the environmental impacts which would result if the action took place as proposed. We have no other substantive comment at this time. Additional environmental analysis will occur through the SMA permit process.

We do note, however, that page 16 of the EIS implies that an SMA permit will be necessary for each new activity. Since the SMA process, like the EIS process, is intended to disclose the cumulative effects of a project, once an SMA permit is approved for the overall industrial subdivision and use, additional SMA permits for specific uses may be unnecessary. However, a determination will be made at that time.
Upon acceptance of the EIS, we will begin processing the SMA permit application for the proposed subdivision. A copy of our staff report will be forwarded to your office. Please notify us of the date of acceptance of the EIS and conditions of approval, if any.

BRIAN NISHIMOTO  
Planning Director

cc: /DLNR (DWLD)
February 8, 1978

Mr. Brian Nishimoto
Planning Director
County of Kauai
4280 Rice St.
Lihue, Kauai 96766

Dear Mr. Nishimoto:

Comments on Environmental Impact Statement for the Proposed Nawiliwili Coral Fill Industrial Subdivision, Lihue, Kauai

Thank you for your comments regarding the subject EIS by letter dated December 2, 1977. The revised document has been changed to indicate that additional SMA permits may be necessary for certain industries, depending on stipulations the County may attach to the Nawiliwili Industrial Park SMA permit.

Very truly yours,

W. Y. THOMPSON
Chairman of the Board

cc: Office of Environmental Quality Control
November 15, 1977

State of Hawaii
Dept. of Land & Natural Resources
Division of Water and Land Development
1151 Punchbowl Street
Honolulu, HI 96813

SUBJECT: NAWILIWILI CORAL FILL INDUSTRIAL SUBDIVISION

Gentlemen:

Thank you for the opportunity of reviewing your EIS for the subject project.

Page 7 under Electricity and Telephone of your EIS states that "all cost to provide service to the site will be borne by the utility companies".

It should be noted that costs associated with providing electric service to the site and also within the site shall be advanced by the developer. The advance may be refunded, in accordance with our Rule 13, when new permanent customers attach to the line.

The statement in the EIS is incorrect and should be clarified.

Attached please find a copy of our Rule 13 for your use.

Very truly yours,

BOYD T. TOWNSLEY
Manager

BTT:kk

Enclosure: Rule 13
cc: Office of Environmental Quality Control

KAUAI ELECTRIC
A DIVISION OF CITIZENS UTILITIES COMPANY

ELECTRIC, TELEPHONE, WATER AND GAS SERVICE TO CUSTOMERS IN OVER 550 COMMUNITIES IN MANY STATES ACROSS THE NATION
RULE NO. 13

Line Extensions

Extensions of lines necessary to furnish service to applicants for permanent service will be made by the Company in accordance with the following provisions:

A. GENERAL

The Company will construct, own, operate and maintain electric lines and equipment only under, along, upon and over public streets, roads and highways where it has the legal right to do so, and on public lands and private property across which it has otherwise obtained rights-of-way or other necessary rights satisfactory to the Company.

B. OVERHEAD EXTENSION TO SERVE INDIVIDUAL APPLICANTS

1. Extension Allowance

a. Overhead line extensions will be made by the Company at its expense provided the cost of the line required does not exceed the sixty-month estimated revenue of the applicant. The Company will install, own, operate and maintain the necessary line transformers, meters and service drops in accordance with Rule No. 14 at its expense, except where the customer requests special facilities.

b. Special Facilities: The Company will install only those facilities which it deems necessary to render service in accordance with the Tariff. Where the applicant requests facilities which are acceptable to the Company but are in addition to, or in substitution for, the standard facilities which the Company normally would install, the applicant shall make a contribution of the extra cost thereof.

2. Extensions Beyond Allowance

For overhead line extensions for which the estimated cost exceeds the sixty-month estimated revenue, the applicant shall make an advance equal to the difference between the estimated line cost and the sixty-month estimated revenue. The estimated line cost will be exclusive of line transformers, service drops and meters, and will be based on the route determined by the Company.

3. Refunds

If, within five years from the date service is first rendered, new permanent customers or additional permanent loads are added to the line for which an advance was made, a refund will be made to the customer who made the original advance equal to the line extension allowance for the new permanent customers or loads applicable to the line constructed with the advance, except that the refund for any section of the line shall not exceed the original advance for that section of the line and shall be applicable only to that section of the line used for a permanent customer or load. The line extension allowance will be calculated from a permanent customer's point of service toward the source of the supply.
RULE NO. 13

Line Extensions
(Continued)

C. OVERHEAD EXTENSION TO SUBDIVISIONS OR DEVELOPMENTS

1. Advances

Overhead line extensions to and/or in subdivisions or developments will be constructed, owned and maintained by the Company prior to applications for service by the ultimate customers when the developer or subdiviser makes an advance of the entire estimated cost of the line extension.

2. Refunds

Refunds will be made to the developer or subdiviser making the advance when permanent customers are connected to the lines in the amount of the sixty-month estimated revenue from such permanent customers. The total amount to be refunded is limited to the amount of the advance and no refund will be made after ten years from the date of the advance. No interest will be paid on these advances.

L. UNDERGROUND EXTENSIONS

1. General

The Company will install its distribution system underground only when the customer, developer or subdiviser makes a contribution of the estimated difference between the cost of the underground system and an equivalent overhead system, or when for engineering and operating reasons the Company may install the system underground at its own expense. The type of underground system that will be installed under this Rule shall meet engineering construction standards of the Company. In all cases, the Company will own, operate and maintain the underground facilities.

2. Extensions to Serve Individual Applicants

Underground extensions will be installed by the Company provided the applicant makes a contribution of the difference between the estimated underground extension cost and estimated equivalent overhead extension cost. The overhead equivalent cost allowed is subject to the limitations and conditions of Paragraph B of this Rule. When feasible, the applicant will provide the trenching, backfill and necessary duct work to meet engineering construction standards of the Company.

3. Extensions to and/or within Subdivisions or Developments in Advance of Applications for Service by the Ultimate User.

Underground lines will be installed by the Company in a subdivision or development prior to applications for service from the ultimate customer when the subdivider or developer makes a contribution equal to the difference between the estimated cost of the underground system and the estimated cost of an equivalent overhead system. The allowance for the overhead costs are subject to the limitations and conditions of Paragraph C of this Rule. When feasible, the subdivider or developer will furnish the trenching, duct work, backfill and miscellaneous construction to meet engineering construction standards of the Company.
RULE NO. 13
Line Extensions
(Continued)

4. Replacement of Overhead with Underground Facilities

When mutually agreed upon by the customer or applicant and the Company, overhead facilities will be replaced with underground facilities, provided the customer or applicant requesting the change makes a contribution of the estimated cost installed of the underground facilities less the estimated net salvage of the overhead facilities removed.

5. Special Facilities

Where the applicant requests facilities which are acceptable to the Company but are in addition to, or in substitution for, the standard facilities which the Company would normally install, the applicant shall make a contribution of the estimated extra cost thereof.
February 8, 1978

Mr. Boyd T. Townsley  
Kauai Electric  
P. O. Box 278  
Elelele, Kauai, Hawaii 96705  

Dear Mr. Townsley:

Comments on Environmental Impact Statement  
for the Proposed Nawiliwili Coral Pill  
Industrial Subdivision, Lihue, Kauai  

Thank you for your comments regarding the subject  
EIS by letter dated November 15, 1977. The text of the  
EIS has been revised as requested.

Very truly yours,

ROBERT T. CHUCK  
Manager-Chief Engineer  

HS:jes  
cc: Office of Environmental Quality Control