FINAL

Preliminary Demolition Assessment for the Former Pagoda Hilo Bay Hotel, Country Club Condominium/Hotel, and Reeds Bay Hotel

Island of Hawai'i, State of Hawai'i

VOLUME 2 OF 2 - APPENDICES

February 2018



Prepared For:

Department of Land and Natural Resources State of Hawai'i 1151 Punchbowl Street Honolulu, HI 96813



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APPENDIX A

Building Demolition Plan KAI Hawaii, Inc.

Building Demolition Plan

Country Club Condominium Hotel, Uncle Billy's Hilo Bay Hotel, and Reed's Bay Resort Hotel, Ltd. Banyan Drive, Hilo, Hawaii

> Prepared by: KAI Hawaii, Inc.

Prepared for: RM Towill Corporation

MARCH 2017

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1.0 INTRODUCTION

1.1 OVERVIEW

This Demolition Plan provides a systemic approach to the sequenced demolition, including the identification of potential hazardous materials along with planned removal / abatement procedures, loading of waste material, and disposal of all material. associated with Uncle Billy's, Country Club, and Reed's Bay in Hilo, Hawaii.

This Demolition Plan applies to all physical abatement, demolition, and waste generating activities performed as a part of the remediation and demolition activities of the project.

The outlined approach is designed to deliver safe, efficient execution while avoiding impacts to surrounding areas and operations. The work has been sequenced to optimize the schedule while taking into account the site space constraints and limitations.

1.2 Background

The Country Club Condominium Hotel was constructed in 1969, is located at 121 Banyan Drive, Hilo, Hawaii, and is currently being used as a condominium/hotel. It consists of a single six-story building constructed out of cast in place concrete, masonry in-fill walls, and steel staircases which includes a lobby/office front lower level section and a restaurant/bar section that is currently not in use. The ground floor level beneath the rear section of the building is utilized as parking. Around the grounds of the property is asphaltic concrete paving, concrete walkways, and a swimming pool.

Uncle Billy's Hilo Bay Hotel was constructed in 1966-1970, is located at 87 Banyan Drive, Hilo, Hawaii, and is currently being used as a hotel. The property consists of five buildings and wings that include three four-story wings constructed out of cast in place concrete and masonry in-fill walls and two single-story wings for the restaurant and lobby/office area primarily of timber construction. Around the grounds of the property is asphaltic concrete paving, concrete walkways, and a swimming pool.

Reed's Bay Hotel is located at 175 Banyan Drive, Hilo, Hawaii, and is currently being used as a hotel and sub-lease of rooms. The year of construction is unknown, however, the earliest records of alterations to the buildings state 1969. The property consists of two wings that include a four-story building constructed out of cast in place concrete and masonry in-fill walls, a restaurant wing that was originally a two-story structure but due to a fire, is now a single-story structure out of cast in place concrete and steel roof framing, and a lobby structure connecting the two wings, primarily of timber and concrete. Around the grounds of the property is asphaltic concrete paving, concrete walkways, a swimming pool, and a concrete and masonry lined drainage channel.

1

2.0 SEQUENCE OF OPERATIONS

This plan provides an overall strategy for both the abatement and demolition activities. Work should be sequenced in a safe and efficient manner. General sequence of work should include:

2.1 Pre-Demolition Activities:

- Utility abandonment procedures
- Structural Engineering Survey
- Identification of potential hazardous materials including planned removal procedures, potential ACM and LBP and contaminated surfaces
- Development of drawings and calculations to substantiate work procedures, including temporary supports required to avoid catastrophic collapse of building
- Fire safety procedures
- Debris Removal

2.2 DETAILED DESCRIPTION OF DEMOLITION PROCESS

- Measures to protect existing structures, facilities, utilities etc.
- Demolition sequence
 - Isolation of Utilities
 - o Abatement
 - o Demolition of low rise building sections
 - o Demolition of high rise building sections

2.3 CONTROL MEASURES

- Entry and Exit Procedures
- Decontamination facilities
- Engineering Controls
- Dust Control
- Surface water runoff control methods

2.4 RIGGING AND LIFTING

A rigging plan should be drafted for all lifts, regardless of weight.

3.0 SITE MOBILIZATION

The contractor shall conduct a pre-demolition inspection and retain video/photographic documentation of the existing site conditions prior to commencement of any on-site work. Site mobilization should begin only after all pre-mobilization planning and submittals have been reviewed and approved by the owner.

3.1 EQUIPMENT

We anticipate that the contractor will be mobilizing the following, or similar, major equipment for the demolition project:

- High Reach Excavator with Shear and Pulverizer Attachments
- Excavator with Grapple, Hammer, and Shear Attachments
- Man lifts
- Conventional Cranes
- Bobcat
- Scissor Lift
- Conex Box for storage
- Hot Work supplies and Sundries
- Pickup trucks
- Dust Control Equipment
- Rigging Equipment (multiple)
- Temporary lighting (multiple)
- 2-Hepa Filtered Negative Air Machines
- 4-Hepa-Filtered Vacuums
- Decontamination Trailer
- Filtration units
- Holding tank for the collection of water to be sampled
- Fire Protection Supplies
- Generator
- Waste Containers

4.0 PRE-DEMOLITION ACTIVITIES

4.1 UTILITY ABANDONMENT

The contractor should perform a geophysical survey to locate all underground utility lines within the work perimeter prior to the start of demolition to verify that all utilities to the buildings have been terminated. Isolation of utilities should be performed/verified as required or as site conditions dictate.

If located and not terminated, the underground utility lines (gas, electric, water, sewer, telephone, etc.) should be shown on a drawing that should be presented to the owner. After owner acceptance, the contractor should disconnect and properly terminate all existing utility lines as required for building demolition.

4.2 BUILDING STRUCTURAL INTEGRITY EVALUATION

The contractor should retain a professional structural engineer, licensed in the State of Hawaii, to evaluate the integrity of the buildings. The engineering assessment should be performed in accordance with:

- SEI/ASCE 11-99 Guideline for Structural Assessment of Existing Buildings.
- ANSI A1-.6 Safety Requirements for Demolition Operations,
- 29 CFR 1926.850- Safety and Health Regulations for Construction, Preparatory Operations.

The evaluation should include the current condition of the buildings and the recommended approach/sequencing for building demolition and measures to be taken to prevent inadvertent/unplanned collapse.

4.3 HAZARDOUS MATERIALS CHARACTERIZATION

Characterization, through the use of sampling, analysis, and historical knowledge should be conducted to identify hazardous conditions that should be encountered during the demolition project.

Prior to the start of demolition activities, the contractor should identify and quantify hazardous materials including lead, light ballasts, fluorescent light fixtures, mercury/sodium vapor lights, capacitors, thermostats, and ACM. Once identified, these wastes should be removed and should be segregated and packaged separately from other building debris.

The removed materials should be characterized using process knowledge combined with sampling and analysis to determine proper disposal requirements. These materials should be removed from the properties prior to any demolition activities, staged, and transported for disposal.

4.4 Pre-Demolition ACM Survey

A pre-demolition asbestos survey should be performed by a Hawaii State certified and licensed asbestos inspector on both the interior and exterior of the building. The objective of this inspection should be to evaluate, correlate, and quantify all asbestos containing materials and provide guidance for removal prior to building demolition. Hazardous controls should be established prior to the start of the survey. Suspect materials used in the construction of the buildings such as floor, wall, and ceiling materials, surfacing materials, thermal systems insulation, roofing, caulks, and miscellaneous materials should be sampled.

5.0 HAZARDOUS MATERIAL IDENTIFICATION AND REMOVAL

The contractor should visually inspect and identify the presence of potentially hazardous materials and clearly mark for removal prior to demolition. Expected material to be removed includes:

- Mercury-containing thermostats
- PCB containing capacitors and light ballasts
- Mercury containing light fixtures
- Mercury sodium vapor lights
- Any loose hazardous waste as identified.

During the ACM abatement phase of the project, the contractor should concurrently collect all batteries, fluorescent bulbs, high intensity lighting, related PCB containing ballasts and capacitors, mercury containing devices, smoke detectors and miscellaneous chemicals from the structure. All of the above related items should be placed in approved disposal containers and manifested for legal disposal or recycling.

5.1 LEAD BASED PAINT(LBP)

The contractor should be aware that some of the existing paint may contain lead. Lead based paint may not require removal prior to demolition, but in specific cases where hot work cutting techniques should be used to segment material with LBP, lead should be abated or engineering controls should be implemented prior to any cutting.

6.0 BUILDING PREPARATIONS

6.1 Premature Collapse

The contractor should retain a structural engineer, licensed in the State of Hawaii, if a change of predicted events during demolition or a potential hazardous condition that was not expected occurs that might impact the structural integrity of the building and increase the potential for unintended premature collapse of the structure.

If required as a result of hazardous material removal, temporary shoring, approved by the licensed Structural Engineer, should be installed. The contractor's structural engineer should inspect the buildings and determine if modifications to the structure prior to or during mechanical demolition are anticipated.

6.2 FIRE SAFETY PROCEDURES / PREVENTION

To reduce the risk of fire, the following fire prevention requirements should be implemented. Fire prevention should be achieved by:

- Maintaining good housekeeping, removing combustible materials routinely
- Locating combustible storage piles away from ignition sources
- Minimizing the storage of fuels and lubricants on site.
- Locating internal combustion engine exhausts away from combustible materials and air intakes
- Allowing combustion engine equipment, such as generators to cool prior to refueling

Fire extinguishers should be available at the work site and stationed on all heavy equipment, whether driven or not.

7.0 DEMOLITION ACTIVITIES

7.1 Dust Control Methods

Dust control measures should be implemented during demolition to prevent the spread of contamination as well as maintaining the particulate level at the permissible exposure level. The dust control program should consist of both dust suppression measures and ambient air monitoring to verify the success of dust suppression.

Conventional methods should be used to suppress dust generated during demolition, including:

- Wetting demolition equipment and active demolition areas as required
- Covering waste/debris piles
- Hauling wastes/debris leaving the site in covered or closed containers
- Keeping vehicles speeds below 10 miles per hour on unpaved surfaces
- Applying a water spray during waste/debris handling and to unpaved vehicle access routes at the site, as required.

A spray nozzle and pump system should be used to suppress fugitive dust while preventing overly wet conditions, avoiding ponding and runoff, and conserving water.

Project activities that could potentially cause the release of dust, such as building demolition, waste/debris piles, loading wastes/debris, transport of waste/debris, should be monitored for dust particulates.

7.2 STRUCTURE DEMOLITION

Demolition of the various building structures may begin with the removal of the low rise, singlestory portions attached to the main high rise sections of the facilities. This removal action may be performed by an excavator with shear attachment. Generally speaking, the low rise additions may be removed and size reduced from within the footprint of the facilities where possible.

Work may proceed from the top of the structures downward proceeding bay by bay through the facilities. The roof structures attached to the main structure may first be removed. Then the roof truss on the opposite ends may be removed. Roofing may be lowered along with truss sections. Once removed from place the trusses and debris generated may be allowed to accumulate on the building slab. Beams may then be removed via shear followed by vertical columns which may be bent over and sheared at the bottom. All debris generated from removal actions may be directed onto the building slab for segregation, size reduction, and load out.

Demolition of the high rise building sections may be accomplished utilizing the track hoe with shearer attachment.

The upper portions and levels of the high rise buildings may be dismantled bay by bay in a fully controlled manner, one slab section at a time, and wall by wall. The first portion of each bay to be removed may be the roof. The high reach operator may approach and force the first roof slab section downward and collapse onto the floor below. The loose slab sections may then be lowered to grade for size reduction and load out. Debris generated may then be raked off of the floor below and direct to grade for processing and load out below. The vertical columns and/or walls of the bay may then be bent inward and sheared from place. Once separated, the vertical walls and/or columns may then be lowered to grade for further processing and load out.

The bays on either side of the removed bay may then be dismantled using identical demolition techniques. A step backed approached may be used where the closest bay is to be removed two levels prior to the second bay of the highest level.

High reach demolition may be performed on the uppermost three to four stories of the various buildings. The demolition of the lowest two stories can be demolished in a similar manner to the previously mentioned low rise sections of the facility.

DISCLAIMER

The information contained in this demolition section is for the reader's information only. Any guidelines or instructions contained herein are presented for the contractor's consideration only. All means and methods for the demolition of the buildings is the sole responsibility of the contractor. KAI Hawaii, Inc. shall not be responsible for any loss or damage to adjacent properties, utilities, or personal injury arising from the demolition of buildings.

8.0 DUST CONTROL

During building demolition, a fine water mist should be applied by elevated fire hose equipment with misting nozzle or a ground based misting nozzle manned by a demolition worker. Measures should be taken to minimize the creation of excessive run-off. Visible particulate should be suppressed as required by the manned or stationary mounted misting nozzle during all demolition operations. Dust monitors should be placed around work area perimeter locations considering work activity locations as well as prevailing wind direction.

9.0 STOCKPILING AND SEGREGATION

Sizing operations for the structural steel components should include the use of the hydraulic shear on smaller scrap pieces or torch cutting on items that exceed the capacity of the shear.

The segregation and stockpiling of masonry and non-metallic debris should be an ongoing operation working simultaneously with demolition. Both live loading of trucks as well as loading of dropped roll off containers should be utilized on the project. Stockpiling of debris should be avoided to the extent possible and loading of debris on the day of creation would be preferred. Any material requiring stockpiling overnight should be covered as required by the project documents.

10.0 SURFACE WATER/POLLUTION PREVENTION

The use of good construction management techniques should be used to control storm water from carrying soils or vegetation into the nearby waterways. It is the intent to contain all run-off water that comes in contract with building debris, waste stockpiles or potentially contaminated material.

In addition to controls put in place to maintain run-off to the work area, if ground area outside the building footprints have the potential to be disturbed, silt fences should be used to interrupt the down-gradient flow of storm water, reducing or eliminating the deposition of silt in waterways. Regular inspections, particularly prior to and after significant storm events, should be made and repairs initiated as needed. Additional considerations should be investigated for sheet flow runoff and seasonal deposits of suspended water.

Demolition of the facilities and other soil disturbances should expose the site to storm water runoff. The contractor should use Best Management Practices in installing and maintaining such controls, above, during site work and until re-vegetation provides adequate cover to prevent erosion.

11.0 POST DEMOLITION ACTIVITIES

11.1 CLEANUP

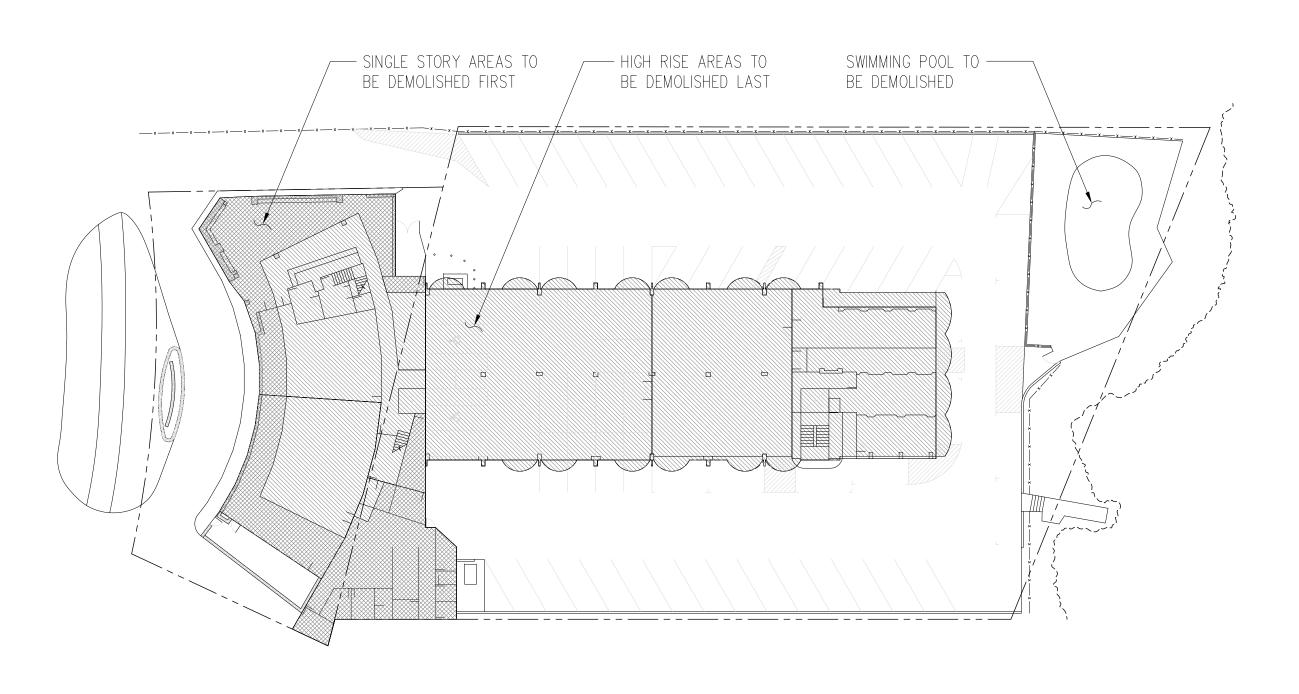
The contractor should remove all debris/waste from the project site. The debris/waste should be sent to the appropriate landfill.

11.2 SITE RESTORATION

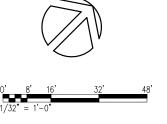
Disturbed areas should be restored to pre-demolition condition at the completion of cleanup.

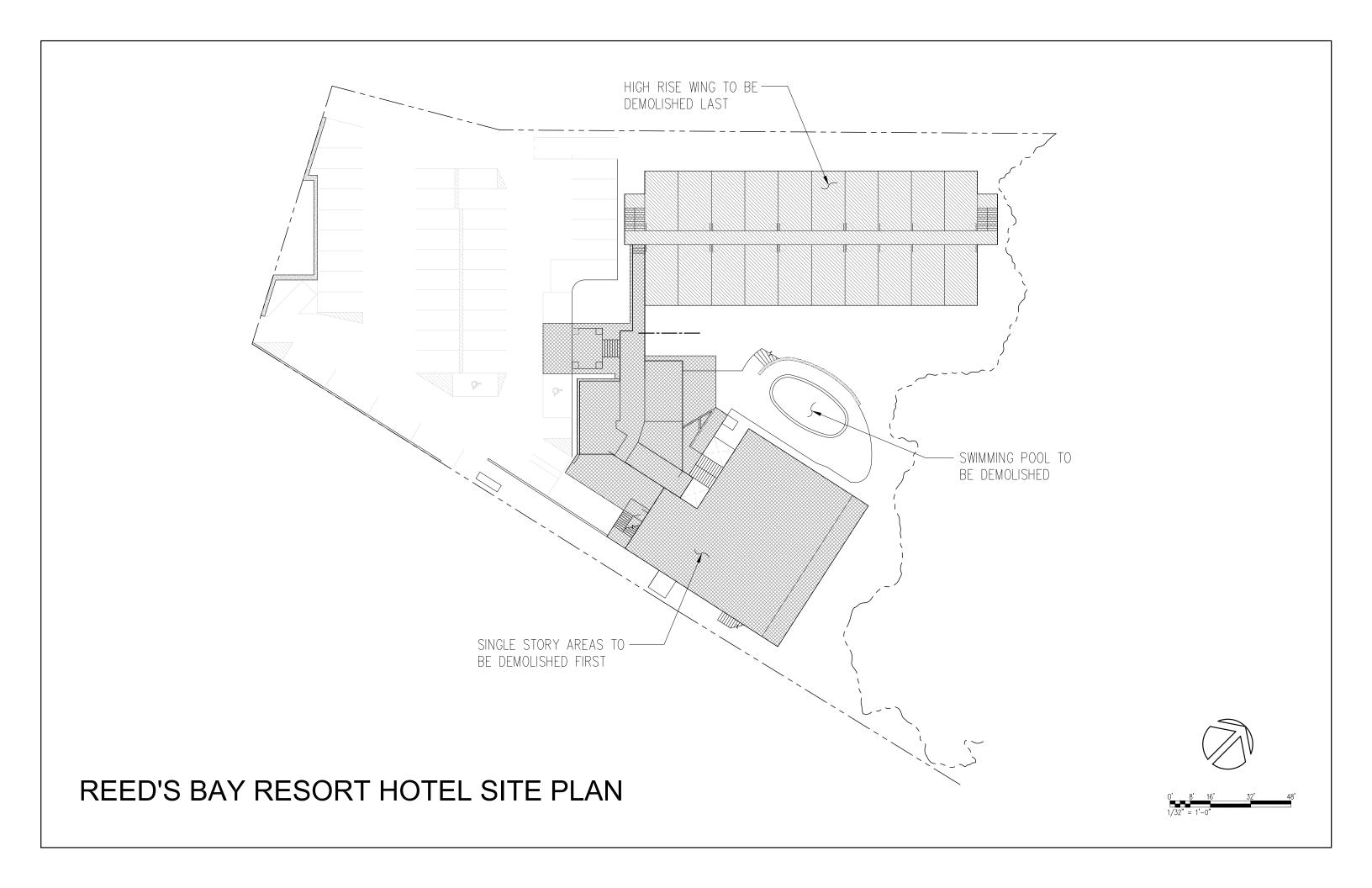
DISCLAIMER

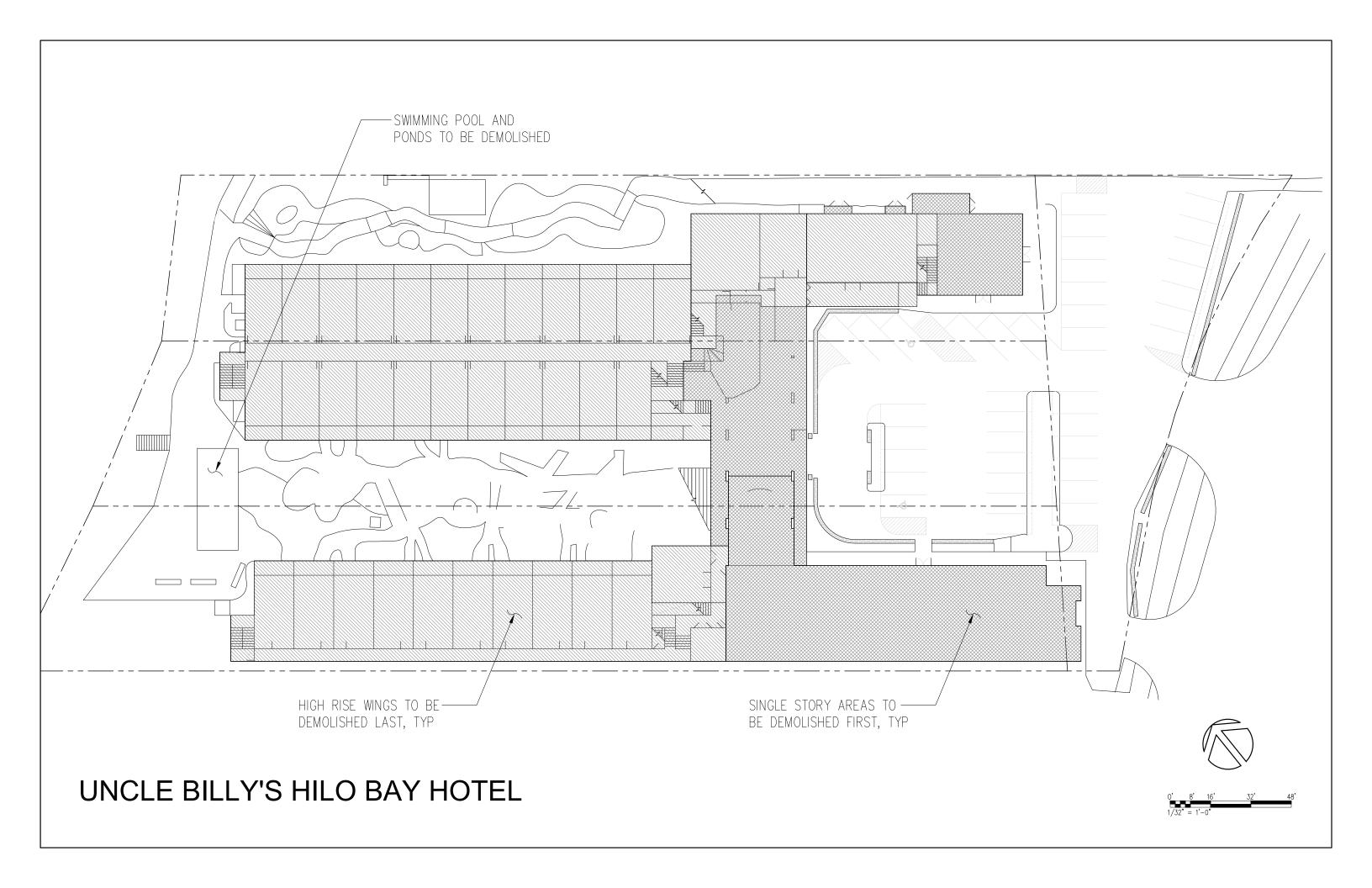
The information contained in this report is for the reader's information only. Any guidelines or instructions contained herein are presented for the contractor's consideration only. All means and methods for the demolition of the buildings is the sole responsibility of the contractor. KAI Hawaii, Inc. shall not be responsible for any loss or damage to adjacent properties, utilities, or personal injury arising from the demolition of buildings.











APPENDIX B

Electrical Assessment Wallace T. Oki, P.E., Inc.

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES - LAND DIVISION ASSESS BANYAN DRIVE PROPERTIES - ELECTRICAL DEMOLITION OF REEDS BAY RESORT HOTEL, LTD., COUNTRY CLUB CONDOMINIUM HOTEL, AND HILO PAGODA (FORMERLY UNCLE BILLY'S)

A. SUMMARY

1. REEDS BAY RESORT HOTEL, LTD.

The existing electric service should be removed prior to demolition of structures due to location of the utility company's pad-mounted transformer adjacent to structure to be demolished. Similarly for the telephone and CATV services. The underground service ductline should be removed and capped near the front property line for future uses to include temporary power during the demolition work. See Sketches A and B.

2. COUNTY CLUB CONDOMINIUM HOTEL

The existing electric service must be removed prior to demolition of structures due to the location of the 15,000 volt electrical service metering equipment located at an interior location and due to the oil filled transformers. Similarly for the telephone and CATV services. The underground service ductline should be removed and capped near the front property line for future uses to include temporary power during the demolition work. See Sketches A and C.

3. HILO PAGODA (FORMERLY UNCLE BILLY'S)

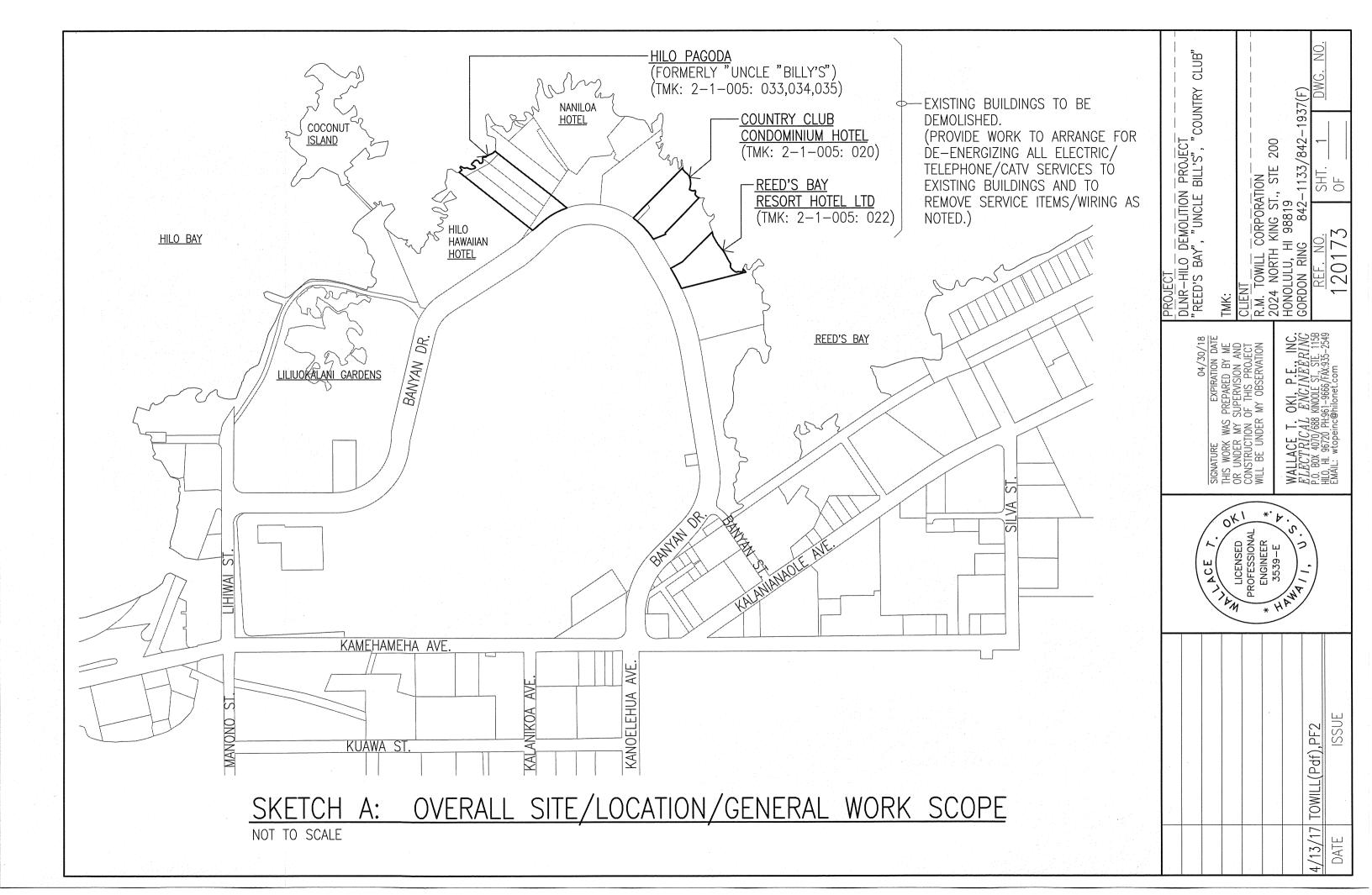
The existing electric service must be removed prior to demolition of the structures due to the location of the utility company's pad-mounted transformer in an interior room. A pathway will most likely be required prior to start of any demolition work to allow the utility company to remove its transformer. Similarly for telephone and CATV services. The underground service ductline should be removed and capped near the front property line for future uses to include temporary power during the demolition work. See Sketches A and D.

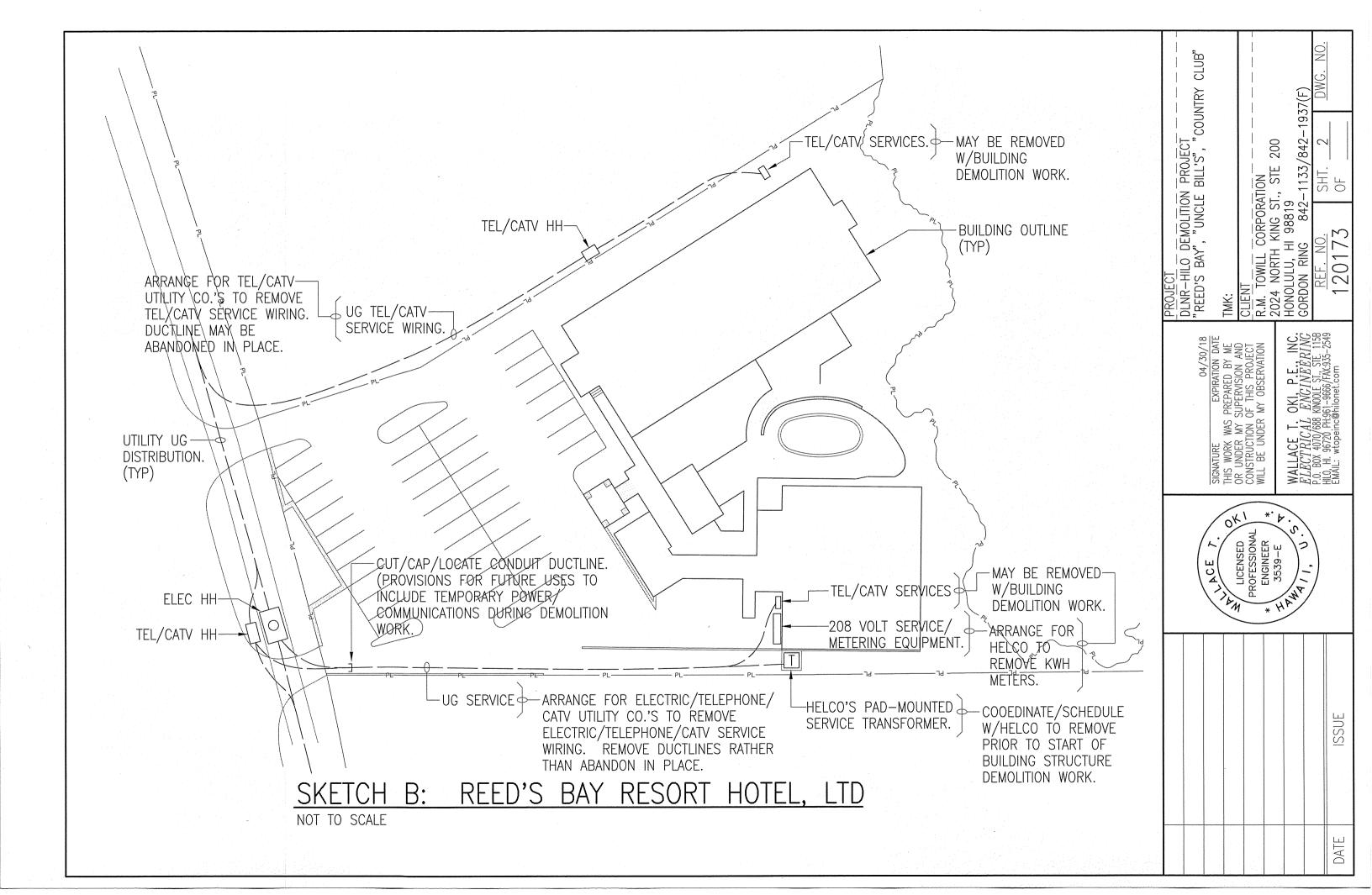
B. ESTIMATES OF PROBABLE COSTS - ELECTRICAL WORK

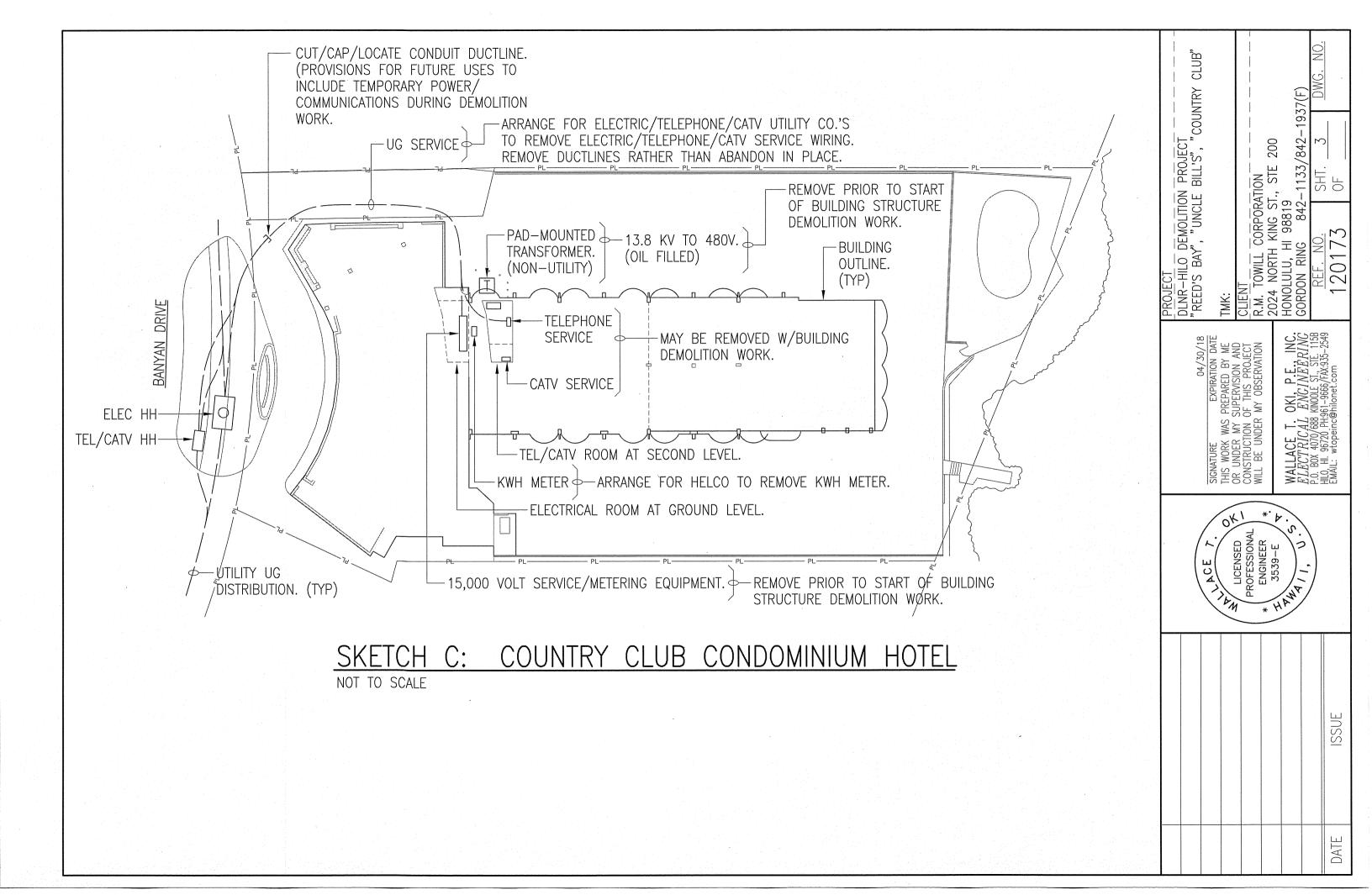
1. REEDS BAY RESORT HOTEL, LTD.: \$50,000

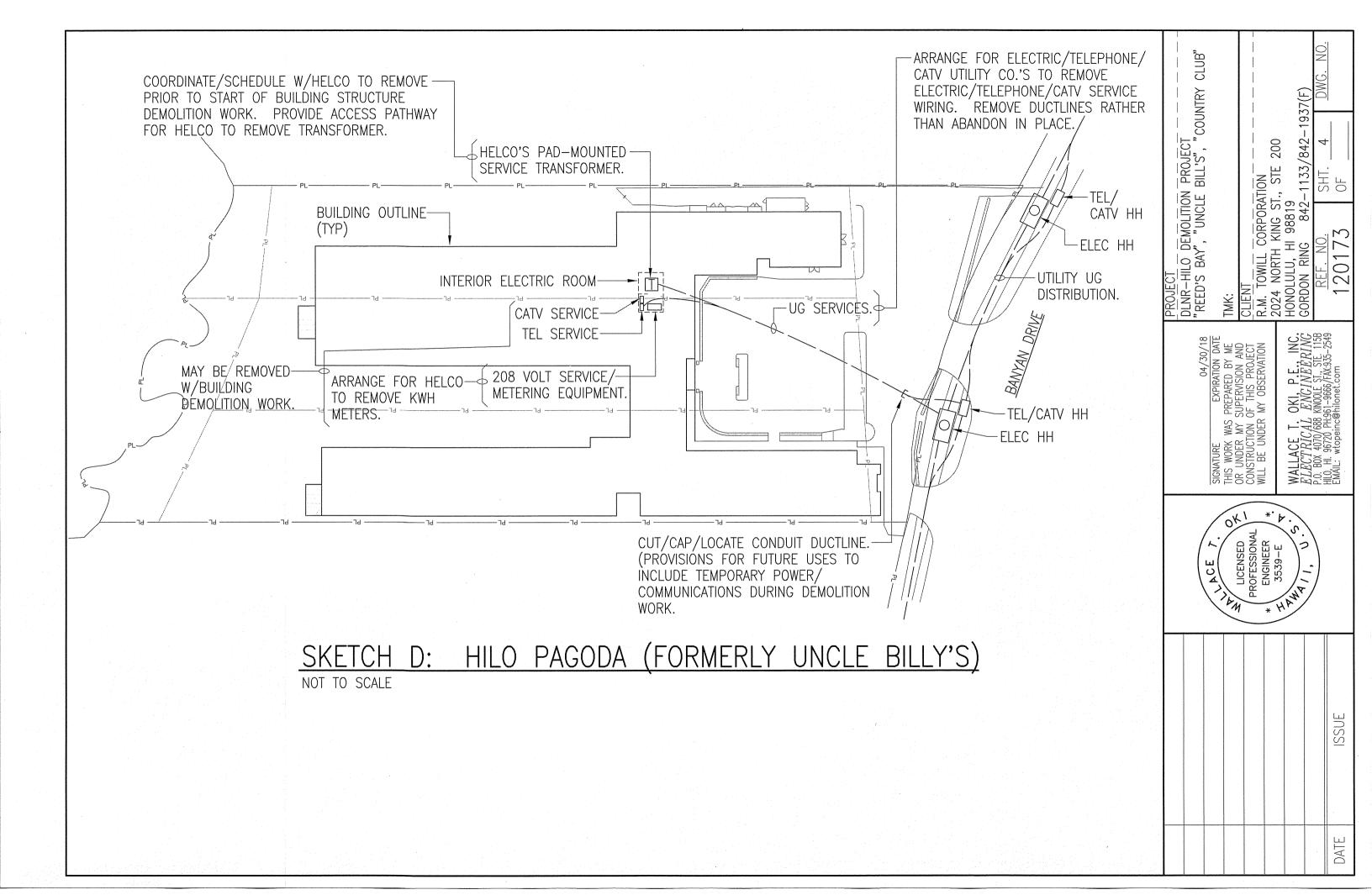
2. COUNTRY CLUB CONDOMINIUM HOTEL: \$72,000

3. HILO PAGODA (FORMERLY UNCLE BILLY'S: \$105,000









APPENDIX C

Phase I Environmental Site Assessment Element Environmental LLC

Phase I Environmental Site Assessment
Three Non-Contiguous Hotel Properties
Hilo Pagoda, Country Club Condominium Hotel, and
Reed's Bay Resort Hotel
Tax Map Key: (3) 2-1-005: parcels parcels 020, 022, 033, 034, 035, and 045 (portion)



Prepared for:

Mr. Gordon Ring, P.E., LEED AP R.M Towill Corporation 2024 North King Street, Suite 200 Honolulu, HI 96819

Prepared by:





April 26, 2017

Mr. Gordon Ring, P.E., LEED AP R.M. Towill Corporation 2024 North King Street, Suite 200 Honolulu, Hawaii 96819

Subject: Phase I Environmental Site Assessment

Three Non-Contiguous Hotel Properties

Hilo Pagoda, Country Club Condominium Hotel and

Reed's Bay Resort, and Hilo, Hawaii, Hawaii

Dear Mr. Ring:

Element Environmental, LLC (E2) has performed a Phase I Environmental Site Assessment (ESA) for three non-contiguous hotel properties located at 87, 121, and 175 Banyan Drive in Hilo, Hawaii, Hawaii; designated as Tax Map Key: (3) 2-1-005: parcels 020, 022, 033, 034, 035, and 045 (portion). The Phase I ESA is required in support of the State of Hawaii Department of Land and Natural Resources planned demolition activities.

The accompanying report summarizes our findings and relates our opinions with respect to the property and potential sources of contamination at the property. Our findings and opinions are based on information that we obtained on given dates through records review, site reconnaissance, interviews, and related activities. It is possible that other information exists or subsequently has become known, just as it is possible for conditions we observed to have changed after our observation. For these and associated reasons, E2 and many of its peers routinely advise clients for ESA services that it would be a mistake to place unmerited faith in findings and opinions conveyed via ESA reports. E2 cannot under any circumstances warrant or guarantee that not finding indicators of hazardous substances, or petroleum products means that hazardous substances or petroleum products do not exist on the property.

It has been a pleasure conducting this assessment for you. If you have questions regarding this report, please contact me on my mobile phone at 551-9552.

Respectfully submitted,

Element Environmental, LLC

alene H. Campbell

Arlene H. Campbell, L.G.

Senior Geologist

ELEMENT ENVIRONMENTAL, LLC

ENVIRONMENTAL CERTIFICATION

E2 Project No.: 170004

Report: Phase I Environmental Site Assessment, ASTM International E1527-13

Inspection Dates: February 27 through March 2, 2017

Report Date: April 26, 2017

Site: 87, 121, and 175 Banyan Drive

Tax Map Key: (3) 2-1-005: parcels 020, 022, 033, 034, 035, and 045 (portion)

Hilo, Hawaii, Hawaii

Weather Conditions: 84°, Mostly cloudy with periods of light rain

Client: R.M. Towill Corporation

ENVIRONMENTAL PROFESSIONAL CERTIFICATION

I declare that, to the best of my professional knowledge and belief, I meet the definition of *Environmental Professional* as defined in §312.10 of 40 Code of Federal Regulations (CFR) 312.

Angela Peltier

Angela Peltier, Geologist Date: April 26, 2017

alene H. Campbell

Arlene H. Campbell, L.G., Senior Geologist

DIRECTING ENVIRONMENTAL PROFESSIONAL CERTIFICATION

The *Environmental Professional* who directed this project has the specific qualifications based on education, training, and experience to assess a property of nature, history, and setting of the subject properties.

Date: April 26, 2017

We have developed and performed the all appropriate inquiries in conformance with the standards and practices outlined in 40 CFR Part 312.

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Appendix B EDR Reports

The EDR Radius Map™ Report with GeoCheck® The EDR Aerial Photo Decade Package

Certified Sanborn® Map Report

EDR Historical Topographic Map Report

The EDR-City Directory Image Report

The EDR-Property Tax Map Report

EDR Environmental Lien and AUL Search

EDR Building Permit Report

Appendix C HELCO Letter

HELCO Letter

Appendix D Qualifications of Environmental Professionals

Arlene Campbell, Licensed Geologist Angela Peltier, Geologist This page intentionally left blank.

List of Acronyms and Abbreviations

% percent

ACM asbestos-containing material AST aboveground storage tank

ASTM ASTM International

c. circa

CERCLA Comprehensive Environmental Response Compensation and Liability Act

CERCLIS Comprehensive Environmental Response Compensation and Liability Information

System

CFR Code of Federal Regulations

CORRACTS Corrective Action Sites under RCRA

CREC Controlled recognized environmental concern

CWB Clean Water Branch

CWRM Commission on Water Resources Management

DLNR State of Hawaii Department of Land and Natural Resources

DoD Department of Defense E2 Element Environmental, LLC

EDR Environmental Data Resources, Inc.

EPA Environmental Protection Agency, United States

ERNS Emergency Response Notification System

ESA Environmental Site Assessment

HDOH State of Hawaii Department of Health HELCO Hawaiian Electric Light Company, Inc.

HEER Hazard Evaluation and Emergency Response
HREC historical recognized environmental condition

IEC institutional / engineering controls
IRHB Indoor & Radiological Health Branch

LBP lead-based paint

LUST leaking underground storage tank

LUO land use ordinance mg/L milligrams per liter NFA no further action

NPL National Priorities List (Superfund sites)
NRCS Natural Resources Conservation Service

PCB polychlorinated biphenyl

RCRA Resource Conservation and Recovery Act
REC recognized environmental condition

RMTC R.M. Towill Corporation
SDWB Safe Drinking Water Branch

SEMS Superfund Enterprise Management System

SHWB Solid and Hazardous Waste Branch
SHWS solid and hazardous waste sites

List of Acronyms and Abbreviations (Continued)

SSFM International, Inc.

TMK Tax Map Key

U.S. United States of America

U.S.C United States Code

UIC underground injection control

USDA United States Department of Agriculture

USGS United States Geological Survey (U.S. Department of the Interior)

UST underground storage tank

VRP Voluntary Remediation Program

WWB Wastewater Branch

Executive Summary

Element Environmental, LLC (E2) was retained by R.M. Towill Corporation to conduct a Phase I Environmental Site Assessment (ESA) for three non-contiguous hotel properties located at 87, 121, and 175 Banyan Drive, Hilo, Hawaii, Hawaii, and designated as Tax Map Key (TMK): (3) 2-1-005: parcels 020, 022, 033, 034, 035, and 045 (portion); hereinafter referred to as "the site, the subject properties and/or the properties." The State of Hawaii is the land owner. The Phase I ESA is required in support of the State of Hawaii Department of Land and Natural Resources planned demolition activities.

The subject properties are situated within Waiakea, District of South Hilo, Island and County of Hawaii, State of Hawaii, within the Ocean View Lots within Waiakea Peninsula along Banyon Drive. The Waiakea Peninsula is surrounded by the Hilo Bay portion of the Pacific Ocean to the west, and Reed's Bay to the east.

Site reconnaissance for all three parcels was conducted on February 27th through March 2nd, 2017. The sites are currently in commercial use and have been occupied by their current structures since 1965 (Hilo Pagoda), 1969 (Country Club Condominium Hotel), and 1966 (Reed's Bay Resort Hotel).

The Phase I ESA was conducted in general conformance with ASTM International (ASTM) Practice E 1527-13, Standard Practice for Environmental Site Assessments. The purpose of a Phase I ESA is to identify recognized environmental conditions (RECs). ASTM guidance defines a REC as the presence or likely presence of any hazardous substances or petroleum products, in, on, or at the property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

Based on the site reconnaissance and review of historical information at the <u>Hilo Pagoda</u>, the following RECs, as defined by ASTM, were identified, and are further outlined in Table ES-1:

- Several releases and/or potential releases were identified at the site including an area within the
 pool pump house, the sewage lift station, and in a flammable storage locker located outside the
 building.
- It is possible that a 1,000-gallon underground storage tank (UST), used to store diesel fuel, remains in the ground at the site. If the UST is still in the ground, it poses a material threat of a future release to the environment.
- Hazardous materials in connection with identified uses are stored at the site, and it is possible
 that improper storage and/or handling of these chemicals pose a material threat of a future
 release to the environment.

Based on the site reconnaissance and review of historical information at the <u>Country Club Condominium</u> <u>Hotel</u>, the following RECs, as defined by ASTM, were identified and are further outlined in Table ES-2:

• A potential release of polychlorinated biphenyls (PCB)-contaminated oil, associated with a transformer explosion was identified at the site.

Hazardous materials in connection with identified uses are stored at the site, and it is possible
that improper storage and/or handling of these chemicals pose a material threat of a future
release to the environment.

Based on the site reconnaissance and review of historical information at the <u>Reed's Bay Resort Hotel</u>, the following RECs, as defined by ASTM, were identified and are further outlined in Table ES-3:

- A release of chlorinated water into the soil due to a fulty pool pump O-ring was identified at the site.
- Hazardous materials in connection with identified uses are stored at the site, and it is possible
 that improper storage and/or handling of these chemicals pose a material threat of a future
 release to the environment.

In addition, Historical RECs (HRECs) and potential environmental concerns were identified for all three sites. Table ES-4 summarizes Historic RECs identified for all three of the sites. Potential environmental concerns, while not considered to be RECs, were identified and are listed in Table ES-5.

Table ES-1: Recognized Environmental Conditions: Hilo Pagoda

			REC Catego	ories
Recognized Environmental Conditions (RECs)		elease	Conditions Indicative of a Release	Conditions Posing a Material Threat of a Future Release to the Environment
Hazardous Materials and Solid / Hazardous / Mixed Was	tes:			
 Standard maintenance supplies (e.g., gasoline for equipment, paint, plaster, scale and rust preventers/removers, roof repair products, cauli repair items, lubricants, oils, grease, emergency batteries) 	k, driveway			✓
 Standard industrial cleaning supplies for the kitc housekeeping, and laundry areas (e.g., disinfecta cleaners, destainers, strippers, solvents, deterge 	ants,			√
 Standard pool and pond supplies (e.g., chlorine, balancing chemicals, lime and scale removers, sa cleaners, oils, lubricants, grease) 	-			✓
 Standard industrial pest control products assume applied in accordance with manufacturer's instru (e.g., pesticides, insecticides, herbicides, rodenti 	uctions			✓
 Standard lawn maintenance supplies (e.g., gasol equipment, fertilizer, lime) 	ine for			✓
Poor housekeeping of Hazardous Materials:				
 Pool Pump House: One 100-pound container of hypochlorite leaking onto concrete 	calcium	✓		
 Sewage Lift Station: Gear oil stored in lift station water on bare soil next to the piston pump has a petroleum sheen 		✓		
 Flammable Storage Locker: Located on the east store contains exploded aerosol paint cans, pain and other hazardous materials in poor condition 	t thinner,	✓		
<u>UST:</u>				
 One 1,000-gallon diesel UST, listed as permanen use as of 28 February 1998. The location of the known, nor do we know if the UST was properly from the ground (which would include a site asse 	UST is not removed			✓
 One large above-ground storage tank (AST) local an enclosed structure on the northeast side of the associated with the sewage lift station 				✓

Table ES-2: Recognized Environmental Conditions: Country Club Condominium Hotel

		REC Catego	ories
RECs	Release	Conditions Indicative of a Release	Conditions Posing a Material Threat of a Future Release to the Environment
Hazardous Materials and Solid / Hazardous / Mixed Wastes:			
 Standard maintenance supplies (e.g., gasoline for yard equipment, paint, plaster, scale and rust preventers/removers, roof repair products, caulk, driveway repair items, lubricants, oils, grease, emergency light batteries) 			✓
 Standard industrial cleaning supplies for the kitchen, housekeeping, and laundry areas (e.g., disinfectants, cleaners, destainers, strippers, solvents, detergent) 			√
 Standard pool and pond supplies (e.g., chlorine, clarifiers, balancing chemicals, lime and scale removers, sand cleaners, oils, lubricants, grease) 			√
 Standard industrial pest control products assumed to be applied in accordance with manufacturer's instructions (e.g., pesticides, insecticides, herbicides, rodenticides) 			✓
 Standard lawn maintenance supplies (e.g., gasoline for equipment, fertilizer, lime) 			✓
Former Transformer:	-		
 A transformer previously located in the ground floor electrical room exploded and was subsequently removed from the building. It is possible that petroleum, potentially impacted by PCBs, was leaked a result of the fire. 		✓	

Table ES-3: Recognized Environmental Conditions: Reed's Bay Resort Hotel

		REC Catego	ories
RECs		Conditions Indicative of a Release	Conditions Posing a Material Threat of a Future Release to the Environment
Hazardous Materials and Solid / Hazardous / Mixed Wastes:			
 Standard maintenance supplies (e.g., gasoline for yard equipment, paint, plaster, scale and rust preventers/removers, roof repair products, caulk, driveway repair items, lubricants, oils, grease, emergency light batteries) 			✓
 Standard industrial cleaning supplies for the kitchen, housekeeping, and laundry areas (e.g., disinfectants, cleaners, destainers, strippers, solvents, detergent) 			√
 Standard pool and pond supplies (e.g., chlorine, clarifiers, balancing chemicals, lime and scale removers, sand cleaners, oils, lubricants, grease) 			√
 Standard industrial pest control products assumed to be applied in accordance with manufacturer's instructions (e.g., pesticides, insecticides, herbicides, rodenticides) 			✓
 Standard lawn maintenance supplies (e.g., gasoline for equipment, fertilizer, lime) 			✓
Poor housekeeping of Hazardous Materials:			
 Pool pump O-ring is leaking, and chlorinated water is leaking into the soil 	✓		

Table ES-4: Historic Recognized Environmental Condition

HREC Category	HREC Condition
	Hilo Pagoda:
	 On 31 August 2001, pump station failure led to an approximate 100-gallon sewage overflow on adjacent property.
	Country Club Condominium Hotel:
	 On 29 March 2003, the County of Hawaii lateral broke and released sewage in the driveway.
Historic Releases	 On 16 December 2016, water from sand filter associated with the pool discharged directly to the ocean.
	Reed's Bay Resort Hotel:
	 Unknown date, paint wash water entering drainage system from rinsing of paint equipment in parking lot area.
	 HELCO Transformer 6991 leaked 30-gallons of Shell Diala Oil and is listed by EDR as a HI SPILLS site.

Table ES-5: Potential Environmental Concerns

Potential Environmental Concern Category	Potential Environmental Concern
Residual Lead in Soil Attributable to Lead- based Paint (LBP)	LBP may have been used in the construction and/or maintenance and upkeep of current and former structures at the site. Surveying for LBP was not conducted as part of this investigation; however, previous investigations identified LBP on the subject properties. It is possible that the soil in the vicinity of current and former structures has been negatively impacted by lead as a result of normal weathering and/or renovation/demolition activities.
Residual Pesticides Attributable to Termite Treatment	It is possible that residual levels of termiticides (i.e., chlordane) are present in the soil beneath and in the vicinity of the current and former structures at the site.
Asbestos-Containing Materials (ACM)	Surveying for ACM was not conducted as part of this investigation; however, previous investigations identified ACM on the subject properties.
PCBs	Three Hotel Sites: Potential PCB-containing customer-owned transformers, electrical equipment, capacitors, and fluorescent light ballasts were identified. Hilo Pagoda: A potential PCB-containing hydraulic piston powered elevator was identified.
Unmappable Site	EDR identified seven unmappable sites. It is not known if activities conducted at the Hilo Safeway/Target, Umauma Stream Bridge, Pacific Aquaculture and Coastle Re, Hawaii County Kamehameha Avenue, Arsenic Mililani Street, Wailoa River State Recreation Area, or the Hilo Bayfront soccer field sites have impacted the subject properties.

Section 1 Introduction

1.1 Overview

Element Environmental, LLC (E2) was retained by R.M. Towill Corporation to conduct a Phase I Environmental Site Assessment (ESA) for three non-contiguous hotel properties located at 87, 121, and 175 Banyan Drive, Hilo, Hawaii, Hawaii, and designated as Tax Map Key (TMK): (3) 2-1-005: parcels 020, 022, 033, 034, 035, and 045 (portion); hereinafter referred to as "the site, the subject properties and/or the properties." The properties are owned by the State of Hawaii (County of Hawaii 2017).

The Phase I ESA is required to evaluate potential environmental issues (if any) on the subject properties as part of due diligence in support of the State of Hawaii Department of Land and Natural Resources planned demolition activities.

1.2 Purpose

The Phase I ESA was conducted in general conformance with ASTM International (ASTM) Practice E 1527-13, Standard Practice for Environmental Site Assessments. The purpose of the ASTM practice is to define good commercial and customary practice in the United States of America (U.S.) for conducting an ESA of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (42 U.S. Code [U.S.C.] §9601) and petroleum products. As such, this practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability (hereinafter, the "landowner liability protections," or "LLPs"): that is, the practice that constitutes all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary practice as defined at 42 U.S.C. §9601(35)(B).

For the purposes of this practice:

- The definition of a release includes contamination in the soil vapor phase, as well as in soil or groundwater.
- "Migrate" and "migration" refer to the movement of hazardous substances or petroleum products in any form, including solid and liquid at the surface or subsurface and vapor in the subsurface.
- Vapor migration/intrusion (excluding impacts to indoor air from releases of hazardous substances
 into the environment) <u>does not fall under the category of an Indoor Air Quality concern</u> and is not
 included in the ASTM 1527 scope of work.

ASTM guidance defines a recognized environmental concern (REC) as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment (ASTM 2013).

Controlled RECs (CRECs) are defined as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action (NFA) letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls) (ASTM 2013).

Historical RECs (HRECs) are defined as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls) (ASTM 2013).

RECs do not include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies (ASTM 2013).

1.3 Detailed Scope-of-Services

This Phase I ESA was performed under the conditions of, and, in general accordance with E2s' Proposal, dated December 16, 2016, and with the ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Designation E 1527-13). Adherence to the ASTM standard is intended to limit the liability of property owners from inherited environmental contamination.

The Phase I ESA included the following tasks:

- Review of regulatory records. E2 reviewed standard environmental record sources including the U.S. Environmental Protection Agency (EPA) Superfund Enterprise Management System (SEMS) (formerly Comprehensive Environmental Response Compensation and Liability Information System [CERCLIS]) database, EPA's Resource Conservation and Recovery Act (RCRA) database, U.S. Institutional/Engineering Controls (IEC) database, EPA's Emergency Response Notification System (ERNS) database, State of Hawaii Department of Health (HDOH) Hazard Evaluation and Emergency Response (HEER) Office site list, HDOH Underground Storage Tank (UST) list, HDOH Leaking UST (LUST) list, HDOH list of landfills and other solid and hazardous waste sites (SHWS), HDOH Voluntary Response Program (VRP) sites list, and the HDOH Brownfield sites list.
- **Review of site history.** E2 reviewed reasonably ascertainable standard historical sources including historical maps; aerial photographs; building permits, zoning records, and property tax records available online; various printed publications as well as publications posted on the internet; and documents and/or records provided by the user and user's representative.
- Review of site geology and hydrogeology. E2 reviewed reasonably ascertainable published information on surface and subsurface conditions at the site and surrounding area. E2 used this information to assess topography, drainage, surface water bodies, anticipated subsurface geology, and groundwater occurrence and usage in the area.

- Limited site reconnaissance. E2 performed a site reconnaissance of the property to note visual signs of contamination and conducted a limited assessment of portions of the neighboring properties visible from the subject properties boundaries with the exception of land designated as open space/livestock grazing. During the site reconnaissance E2 specifically looked for hazardous substances; petroleum products; aboveground storage tanks (ASTs) and USTs; odors; pools of liquid; drums; electrical and hydraulic equipment; means for heating and cooling structures; stains or corrosion; drains and sumps; pits, ponds, or lagoons; stained soil or pavement; stressed vegetation; solid waste; wastewater; wells; and septic systems.
- **Interviews.** E2 interviewed available personnel familiar with the site conditions and/or history of site use.
- **Data evaluation and report preparation.** E2 evaluated the information collected and prepared this report that documents our assessment and presents our findings, opinions, and conclusions.

1.4 Significant Assumptions

Significant assumptions include the following:

- 1) The information provided by the user and/or their representatives is complete and accurate;
- 2) The information provided by the regulatory database search service is complete and accurate; and
- 3) The responses of government agencies to public requests for information are complete and accurate.

1.5 Limitations and Exceptions

Phase I ESAs, by their very nature, are limited. E2 has endeavored to meet what it believes is the applicable standard of care and, in so doing is obliged to advise its client, RMTC, of the Phase I ESA limitations. This Phase I ESA did not assess environmental issues or conditions at the property that are outside the scope of ASTM Practice E1527-13, including, but not limited to, asbestos-containing material (ACM), biological agents, cultural and historical resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint (LBP), lead in drinking water, mold, radon, regulatory compliance, and wetlands, nor did it include any sampling or testing for biological agents and mold, radon, methane, ACM, LBP, or other environmental contaminants. Our investigation was limited to the procedures described in the Phase I ESA Standard Practice (ASTM 2013).

The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity and our interpretation of the available historical and regulatory information and documents reviewed. They are intended exclusively for the purpose outlined herein and apply only to the site location and project indicated.

The findings and opinions are based on information that E2 obtained on given dates through records review, site reconnaissance, interviews, and related activities. It is possible that other information exists

or subsequently has become known, just as it is possible for conditions E2 observed to have changed after our observation. For these and associated reasons, E2 and many of its peers routinely advise clients for ESA services that it would be a mistake to place unmerited faith in findings and opinions conveyed via ESA reports. E2 cannot under any circumstances warrant or guarantee that not finding indicators of hazardous substances or petroleum products mean that hazardous substances or petroleum products do not exist on the site.

1.6 Special Terms and Conditions

E2's services are performed, within limits prescribed by our clients, with the usual thoroughness and competence of the consulting professional in accordance with the standard for professional services at the time those services are rendered. No warranty or representation, either expressed or implied, is included or intended in the proposals, contracts, or reports.

Findings and opinions presented herein apply to site conditions existing at the time of E2's investigation and those reasonably foreseeable; they cannot necessarily apply to site changes of which E2 is not aware and has not had the opportunity to evaluate.

1.7 Data Gaps

Based on the information obtained during this ESA, it is the professional opinion of E2 that a historical data failure, as defined in the ASTM guidelines, has occurred in attempting to document the history of the subject properties back to the earlier part of 1940 or the first developed usage of the property in five-year increments, as follows:

- 1. Historical information regarding the subject properties from 1907 to 1914, 1922 to 1931, 1938 to 1953, and 2001 to 2009 was limited.
- 2. The "User" of the Phase I ESA did not complete the *User Questionnaire*.

Based on the information obtained, the lack of documentation is not deemed critical and did not affect the ability to identify potential REC(s) associated with the subject properties.

1.8 User Reliance

This report is intended for the use of RMTC and its assignees. The scope of services performed in execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or re-use of this document or the findings, conclusions, or recommendations presented herein is at the sole risk of said user.

Section 2 Site Description

2.1 Location and Legal Description

The subject properties are located within the Hilo district on the east shore of the island of Hawaii, as shown in Figure 2-1, included in Appendix A. The subject property TMKs, addresses, and owner information are shown in Table 2-1 below (County of Hawaii 2017).

TMK: **Establishment Address** Acres Owner Lessee Island Code (3) 2-1-005:035 0.495 2-1-005:034 0.531 Hilo Pagoda Savio HBH Development (formerly Uncle Billy's 2-1-005:033 87 Banyan Drive 0.586 CO LLC 2-1-005:045 Hilo Bay Hotel) 0.215 (portion) Country Club **AOAO Country Club** State of Condominium Hotel 2-1-005:020 121 Banyan Drive Hawaii Inc., Country Club 1.166 Hawaii (formerly Country Club Condominium/Hotel Apartments) Reed's Bay Resort Hotel (formerly Nalei Hotel, Reed's Bay Resort Hotel 175 Banyan Drive Pacific Polynesian 2-1-005:022 1.19 LTD, Reed's Bay Resort Hotel, and Ree's Bay Apartments)

Table 2-1: Subject Property Parcels

2.2 Site and Vicinity General Characteristics

The subject properties are situated within Waiakea, District of South Hilo, Island and County of Hawaii, State of Hawaii, within the Ocean View Lots within Waiakea Peninsula along Banyon Drive. The Hilo Pagoda fronts the Hilo Bay portion of the Pacific Ocean and the Country Club Condominium Hotel and Reed's Bay Resort Hotel front the Reed's Bay portion of the Pacific Ocean. The sites are all just above mean sea level gently slope toward the bays. The site locations are shown in Figure 2-2, included in Appendix A. The sites are described further in the following sections.

2.2.1 Hilo Pagoda

The Hilo Pagoda has a basement and four floors with a total of 145 rooms. The hotel consists of five buildings/wings; a kitchen wing, a main wing (includes the elevator), a shop wing (Leilani Room, sewing room, and a general store), the lobby/office area, and a restaurant. The building was constructed between 1966 and 1970. The hotel does not have central air; however, there are some window air conditioning units being used.

The hotel grounds consist of asphalt and/or concrete parking areas and walkways, ponds, a swimming pool, and landscaped areas.

Sewage disposal for the hotel is handled through a lift station that connects to the County of Hawaii forced main on Banyan Drive. Electricity is provided to the property by the Hawaiian Electric Light Company, Inc. (HELCO). Gas is supplied by The Gas Company. Water is supplied to the property from the County of Hawaii Department of Water Supply. Figure 2-3 included in Appendix A, shows the site layout.

2.2.2 Country Club Condominium Hotel

The Country Club Condominium Hotel is a six-story 138-unit condominium/hotel which includes the lobby/office area on the front lower level section, storage room (Halau Room), and a restaurant-bar section (former Shooters Bar & Grill) currently not in use. A portion of the ground floor level under the rear section of the hotel is utilized as parking. The hotel was constructed in 1969 and has two elevators, one in the front and another at the rear of the hotel. The hotel has a Trane chilled water unit with individual in-room air handling units.

The hotel grounds consist of asphalt and/or concrete parking areas, a swimming pool, and landscaped areas.

Sewage disposal for the hotel is through the County of Hawaii force main on Banyan Drive. Electricity is provided to the property by the HELCO. Gas is supplied by The Gas Company. Water is supplied to the property from the County of Hawaii Department of Water Supply. Figure 2-4 included in Appendix A, shows the site layout.

2.2.3 Reed's Bay Resort Hotel

The Reed's Bay Resort Hotel is a three-story 63-unit hotel separated into three major structures, the hotel wing, the restaurant wing, and a lobby structure connecting the two wings. The restaurant wing originally constructed in circa (c.) 1969 was originally two stories; however, in July 1983, a fire destroyed the entire upper level, which was never repaired. The hotel does not have central air; however, some window type air conditioning units are used.

The hotel grounds consist of asphalt and/or concrete parking areas, a swimming pool, lined drainage channel along the north property line, and landscaped areas.

Sewage disposal for the hotel is through the County of Hawaii force main on Banyan Drive. Electricity is provided to the property by the HELCO. Gas is supplied by The Gas Company. Water is supplied to the property from the County of Hawaii Department of Water Supply. Figure 2-5 included in Appendix A, shows the site layout.

2.3 Current Use of the Property

The properties are currently in commercial use and are occupied by functioning hotels and/or condominiums.

2.4 Current Uses of the Adjacent Properties

Table 2-2 lists the parcel numbers and owner/occupant activities for the adjacent properties. The adjacent properties are shown in Figure 2-2. Current uses of adjoining properties include an outdoor tour company, hotels, an apartment building, a golf course.

Table 2-2: Adjacent Properties: Hilo Pagoda

тмк:	Owner/Occupant	Owner/Occupant Activities	
Island Code (3)	Owner/Occupant	Owner/Occupant Activities	
Parcels adjacent	to the north/northeast		
2-1-005:013	State of Hawaii (Owner) WHR LLC (Lessee)		
	93 Banyan Drive	Grand Naniloa Hotel Hilo	
2-1-005:046	State of Hawaii (owner) WHR LLC (Lessee) No Associated Address	Grand Namioa Notel Tillo	
Parcel adjacent	to the east across Banyan Drive		
2-1-001:012	State of Hawaii (Owner) WHR LLC (Lessee) 1713 Kamehameha Avenue	Naniloa Country Club (golf course)	
Parcels adjacent	to the southwest		
2-1-003:005	State of Hawaii (Owner) Hilo-Hawaiian Associates (Lessee) Castle Hilo Hawaiian Hotel (Lessee) 71 Banyan Drive	Liliuokalani Gardens	
Parcels adjacent	Parcels adjacent to the northwest		
2-1-005:012	State of Hawaii No Associated Address	Beach access for the hotel.	
2-1-005:009	State of Hawaii No Associated Address	Beach access for the hotel.	

Table 2-3: Adjacent Properties: Country Club Condominium Hotel

Parcel Number	Owner/Occupant	Owner/Occupant Activities		
Parcel adjacent	Parcel adjacent to the northwest			
2-1-005:018	State of Hawaii (Owner) Hawaii Outdoor Tours Inc (Lessee)	Commercial, Vacant		
	99 Banyan Drive			
Parcel adjacent	to the southeast			
	State of Hawaii (Owner)			
2-1-005:021	Bayview Banyan Corp (Lessee)	Residential (formerly Royal Kolani)		
2 1 003.021	Bayview Banyan Apartments (Lessee)	Residential (formerly Royal Rolath)		
	161 Banyan Drive			
Parcel adjacent to the southwest across Banyan Drive				
	State of Hawaii (Owner)			
2-1-001:012	WHR LLC (Lessee)	Naniloa Country Club (golf course)		
	1713 Kamehameha Avenue			

Table 2-4: Adjacent Properties: Reed's Bay Resort Hotel

Parcel Number	Owner/Occupant	Owner/Occupant Activities
Parcel adjacen	t to the west across Banyan Drive	
2-1-001:012	State of Hawaii (Owner) WHR LLC (Lessee) 1713 Kamehameha Avenue	Naniloa Country Club (golf course)
Parcel adjacent to the south		
2-1-005:028	State of Hawaii (Owner) 211 Banyan Drive	Former Lanai Motel currently being used as a baseyard
Parcel adjacent to the northwest		
2-1-005:021	State of Hawaii (Owner) Bayview Banyan Corp (Lessee) Bayview Banyan Apartments (Lessee) 161 Banyan Drive	Residential (former Royal Kolani)

Section 3 Records Review

3.1 Standard Environmental Record Sources

3.1.1 Environmental Data Resources, Inc. Report

To identify the presence of adverse environmental conditions at the subject properties, several published sources of environmental records were reviewed. This section lists the records that were searched and the results of each search.

ASTM E1527-13 specifies search distances for specific environmental record sources. Table 3-1, identifies the record sources searched for incidents or sites within the listed search distances of the subject properties:

Table 3-1: Environmental Record Sources Searched

Standard Environmental Record Sources	Search Distance (miles)	Number of Sites Identified
Federal National Priorities List (NPL) site list	1.0	0
Federal Delisted NPL site list	0.5	0
Federal SEMS list (formerly CERCLIS)	0.5	0
Federal SEMS-Archive (formerly CERCLIS No Further Remedial Action Planned) site list	0.5	1
Federal RCRA Corrective Action Sites under RCRA (CORRACTS) facilities list	1.0	0
Federal RCRA Non-CORRACTS Treatment, Storage, and Disposal facilities list	0.5	1
Federal RCRA generators list (conditionally exempt small quantity generators, small quantity generators, and large quantity generators)	Subject and Adjacent properties	0
Federal IEC registries	Subject property only	0
Federal ERNS list	Subject property only	0
State list of SHWS identified for investigation or remediation (NPL or CERCLIS equivalents)	1.0	18
State landfill and/or solid waste disposal site lists	0.5	0
State LUST list	0.5	7
State registered UST list	Subject and Adjacent properties	0
State IEC registries	Subject and Adjacent properties	0
State VRP sites	0.5	1
State Brownfield sites	0.5	0

E2 used an online regulatory database search service, provided by Environmental Data Resources, Inc. (EDR), to review the above listed Federal and State government databases within the prescribed search distance. A copy of the EDR report is included in Appendix B.

In reviewing the environmental databases, it should be noted that the specific regulatory agencies do not instantaneously update such databases. Depending on the database and the agency, updates may be as infrequent as annually. The dates of the most recent updates for the searched environmental databases are listed in the EDR report in Appendix B.

E2 reviewed the sites identified by EDR within the search radius; the closest sites (those located within a one-eighth mile of the site) and/or those with environmental concerns, are listed in Table 3-2. Refer to the EDR report (Appendix B) for a full listing of the sites within the search radius.

Table 3-2: General Information on Sites Located within 1/8-mile of Subject Property and/or Those with Environmental Concerns

Facility/Address	Database/Lists	Location Relative to the Subject Property	Environmental Concerns/Information
HELCO Transformer 6991 175 Banyan Drive Hilo, Hawaii	HI SPILLS	Subject Property Reed's Bay Resort Hotel	Yes; Corrosion of a pad-mounted transformer 6991 caused a release of 30 gallons of Shell Diala Oil. Another request was sent to HDOH HEER Office requesting the file number 20020104-0935. According to HELCO, the removal action activities were performed in accordance with <i>Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan</i> and the <i>PCB Spill Cleanup Policy</i> set forth in the CFR. Laboratory analytical results indicated that HDOH Tier 1 Environmental Action Levels were satisfied.

Seven unmappable sites were listed in the EDR report, Umauma Stream Bridge, Hawaii County Kamehameha Avenue, Arsenic Mililani Street, and Wailoa River State Recreation Area were listed on the SHWS database; Hilo Safeway/Target was listed on the SHWS and IEC databases; Pacific Aquaculture and Coastle Re was listed on the SHWS and Brownfields databases; and Hilo Bayfront soccer field was listed on the SEMS-Archive database. Unmappable sites cannot be plotted with confidence but can be located by zip code or city name. In general, a site cannot be geocoded due to inaccurate or missing information in the environmental database record provided by its applicable agency.

3.1.2 Additional Environmental Record Sources

3.1.2.1 State and County of Hawaii

Available information obtained from the State of Hawaii, County of Hawaii, Department of Planning and Permitting, including zoning, land use, and building permits is provided below.

Zoning Land Use Ordinance (LUO) Designation

The State Land Use District is Urban (State of Hawaii 2017). County of Hawaii zoning LUO for the subject properties is V-.75 Resort-Hotel District with a required land area of 750 square feet for each dwelling unit, or for each separate rentable unit, or other similar rentable units (County of Hawaii 2017). The surrounding properties are V-.75 and Open Districts (County of Hawaii 2017).

Building Permits

The EDR Building Permit Report does not have coverage for Hilo. The building permits were requested from the County of Hawaii Public Works; however, the records have not been released as of the date of this report.

3.1.2.2 Local Electric Utility Company

HELCO was contacted regarding possible HELCO-owned transformers at the sites. Three HELCO transformers 9499 (Hilo Pagoda), 35187 (Country Club Condominium Hotel), and 34559 (Reed's Bay Resort Hotel) were identified at the sites and all have a non-polychlorinated biphenyls (PCB) status. All leaking transformers are replaced, and any associated oil spills are remediated (at the HELCO's expense) in accordance with all applicable EPA and HDOH guidelines. A letter from HELCO regarding all identified HELCO-owned transformers at the site is attached in Appendix C.

3.2 Other Information Sources

The following sections describe information obtained from other information sources.

3.2.1 State of Hawaii Department of Health File Review

E2 submitted requests to access public information for the subject and adjacent properties. Tables 3-3 through 3-5 summarize the information obtained from each of the agencies.

Table 3-3: HDOH Public Information Requests: Hilo Pagoda

HDOH Branch	Contact	Environmental Concerns/Notes:
Clean Water Branch (CWB)	Mr. Bobbie Teixeria, Environmental Health Specialist	Subject Property: -On 31 August 2001, approximately 100 gallons of sewage overflowing from pump station abutting the Naniloa Hotel property line. Adjacent Property (Liliuokalani Gardens): -On 18 May 1999, discharge from Hawaii Ice and Cold polluting ponds and Hilo Bay.
HEER Office	Ms. Ruby Dela Cruz, Office Assistant	No records for the subject or adjoining properties.
Indoor & Radiological Health Branch (IRHB)	Mr. Jeffrey M. Eckerd, Program Manager	20 records of asbestos abatement activities were identified for the sites and/or adjacent properties.

HDOH Branch	Contact	Environmental Concerns/Notes:
Safe Drinking Water Branch (SDWB)	Mr. Norris Uehara, Supervisor of the Groundwater Pollution Control Section	No underground injection control (UIC) records for the subject or adjoining properties.
	Ms. Amy Susana Liana, Planner	No records for the subject or adjoining properties.
Solid and Hazardous Waste Branch (SHWB)	Online UST/LUST Database	One 1,000-gallon diesel UST (facility identification number 9-103354) permanently out of use 28 February 1998. No additional information was available. An additional request has been sent to HDOH; however, a response has not been received as of the date of this report.
Wastewater Branch (WWB)	Ms. Lori Morikami, Planner	Subject Property: The subject property is connected to the County of Hawaii sewer service system. Adjacent Property (No associated address) TMK (3) 2-1-005:009 – 2,470-gallon capacity cesspool installed in 1971.

Table 3-4: HDOH Public Information Requests: Country Club Condominium Hotel

HDOH Branch	Contact	Environmental Concerns/Notes:
CWB	Mr. Bobbie Teixeria, Environmental Health Specialist	Subject Property: -On 29 March 2003, sewage spill from broken lateral in driveway right-of-wayOn 16 December 2016, discharge of water from hotel swimming pool into ocean. Discharge found to be from sand filter, not pool.
HEER Office	Ms. Ruby Dela Cruz, Office Assistant	No records for the subject or adjoining properties.
IRHB	Mr. Jeffrey M. Eckerd, Program Manager	20 records of asbestos abatement activities were found for the site and/or adjacent properties.
SDWB	Mr. Norris Uehara, Supervisor of the Groundwater Pollution Control Section	No UIC records for the subject or adjoining properties.
SHWB	Ms. Amy Susana Liana, Planner	No records for the subject or adjoining properties.

HDOH Branch	Contact	Environmental Concerns/Notes:
	Ms. Lori Morikami, Planner	Subject Property:
WWB		The subject property is connected to the County of Hawaii sewer service system.
5		Adjacent Property 99 Banyan Drive:
		TMK (3) 2-1-005:018 – 1,480-gallon
		capacity cesspool installed in 1961.

Table 3-5: HDOH Public Information Requests: Reed's Bay Resort Hotel

HDOH Branch	Contact	Environmental Concerns/Notes:
CWB	Mr. Bobbie Teixeria, Environmental Health Specialist	Subject Property: -Unknown date, paint wash water entering drainage system from rinsing of paint equipment in parking lot area. No other information was available.
HEER Office	Ms. Ruby Dela Cruz, Office Assistant	No records for the subject or adjoining properties.
IRHB	Mr. Jeffrey M. Eckerd, Program Manager	No records for the subject property.
SDWB	Mr. Norris Uehara, Supervisor of the Groundwater Pollution Control Section	No UIC records for the subject or adjoining properties.
SHWB	Ms. Amy Susana Liana, Planner	No records for the subject or adjoining properties.
WWB	Ms. Lori Morikami	Subject Property: The subject property is connected to the County of Hawaii sewer service system. Adjacent Property 211 Banyan Drive: TMK (3) 2-1-005:018 – 2,326-gallon capacity cesspool installed in 1990.

3.2.2 Department of Land and Natural Resources

E2 interviewed Mr. Jonas Burgon with the State of Hawaii Department of Land and Natural Resources (DLNR) Commission on Water Resources Management (CWRM) on 23 January 2017. According to the maps and documents provided by Mr. Burgon, there are no wells located on the subject properties, and no municipal wells are located within one mile of the subject properties.

3.3 Physical Setting Sources

3.3.1 U.S. Geological Survey Topographic Map Coverage

Topographic map coverage of the sites is included on the U.S. Geological Survey (USGS) 7.5-minute Hilo and Papaikou quadrangle maps, as shown in Figure 1. The properties are located at 19° 43′ 43.59″ North latitude and 155 3′ 57.46″ West longitude. The elevation of the subject property ranges from sea level to approximately five feet above mean sea level (EDR 2017a). Topographic map coverage of the subject sites is shown on Figure 1.

3.3.2 Climate

The climate in the region of the Hilo has monthly mean temperatures ranging from 63 to 84 degrees Fahrenheit (Western Regional Climate Center 2017) with an average annual rainfall of approximately 135 inches per year (Giambelluca et al. 2013).

The prevailing wind direction is from the east and northeast. Northeasterly trade winds prevail over Hawaii approximately 70 percent (%) of the time, with average wind speeds ranging from 10 to 15 miles per hour. The trade winds blow most strongly and consistently from April through November. Southerly or "Kona" winds occur roughly less than half the time during the months of December through March.

3.3.3 Geologic and Hydrogeologic Setting

E2 reviewed published geologic and hydrogeologic reports and maps to obtain information regarding subsurface conditions in the general area of the site and to evaluate the potential migration of contaminants.

3.3.3.1 Geology

The Island of Hawaii is comprised of five very young volcanic mountains. These include the Mauna Kea, Mauna Loa, Kohala, Hualalai, and Kilauea Mountains (Macdonald et al. 1983). The oldest volcano is believed to be Kohala and the youngest, Kilauea; that dates to present day (Macdonald et al. 1983). The subject property is located approximately nine miles north of Keaau, on the southeast flank of the Mauna Loa Volcano (Macdonald et al. 1983). Mauna Loa rocks are divided into the oldest Ninole Volcanic Series, then the Kahuku Volcanic Series, Pahala Ash layer, then the newest Kau Volcanic Series (Macdonald et al. 1983). The Kahuku Series is capped by Pahala Ash and is believed to be coeval with the Hilina Series of Kilauea (Macdonald et al. 1983).

The Kau Series overlies the Pahala ash and is correlative with the Puna Series of Kilauea (Macdonald et al. 1983). Lava flows of the Kau Series interfinger with the Puna Series of Kilauea interfinger along the boundary between the two volcanoes (Macdonald et al. 1983). The subject property is located on the Waiakea Peninsula on the prehistoric rocks of the Kau Volcanic Series with an age of 5,000-10,000 years before present (Macdonald et al. 1983).

3.3.3.2 Soils

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the soil in the area of the site is classified as Opihikao-Urban land complex, 2 to 20% slopes (USDA NRCS

2017). Opihikao series consists of well-drained, thin organic soils over pahoehoe lava bedrock with high runoff (USDA NRCS 2017).

3.3.3.3 Hydrogeology

The subject property is located within the Hilo Aquifer System of the Northeast Mauna Loa Aquifer Sector (Mink and Lau 1993). The aquifer is characterized as basal, unconfined, and located in flank formation. This aquifer is classified as currently used as a drinking water source, and as having a fresh salinity (<250 milligrams per liter [mg/L] chloride). The aquifer is further classified as irreplaceable with a high vulnerability to contamination (Mink and Lau 1993).

The UIC line was established by HDOH to determine groundwater utility. The UIC line is used to determine the level of protectiveness afforded an aquifer as reflected by water quality standard criteria. In general, groundwater situated mauka (inland) of the UIC line is considered a potential source of drinking water. Groundwater situated makai (seaward) of the UIC line is generally considered not to be a potential source of drinking water. The project site lies makai of the UIC line and groundwater beneath the site is not considered a potential source of drinking water.

The subsurface conditions under the subject properties are interpreted from available data and may vary. Groundwater is assumed to flow downgradient, based on topography and nearby water features, towards the bays. The depth to and direction of groundwater flow beneath the property are not definitively known. The characterization would require subsurface exploration, installation of groundwater monitoring wells, and surveys of groundwater elevations.

3.3.3.4 Surface Water

The closest surface water body to the site is the Hilo and Reed's Bay portions of the Pacific Ocean located adjacent to the northwest and northeast of the subject properties. The location of the site in relation to the bays are shown in Figures 2-1 and 2-2.

3.4 Historical Use Information

3.4.1 Standard Historical Sources

Historical use of the subject and adjacent properties was obtained by reviewing historical sources as listed in the Tables 3-6 through 3-8 below. A discussion of RECs and/or environmental concerns identified as a result of our review of standard historical sources is included in Section 6 of this report.

Table 3-6: Historical Sources Reviewed: Hilo Pagoda

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:
Aerial Photograph	1954, 1977, 1988, 1992, 2000, 2010, 2012. 2013, 2014, 2015, and 2016	EDR 2017b and Google Earth 2017.	1954: One dwelling on the site; however, aerial photo quality is poor. 1977-2016: Structure layout appears as it is today; however, in 1977 the front building was still under construction.

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:		
	1921, 1957, 1974, 1978, 1987, and 1991	EDR 2017c	1921: One dwelling on parcel 035 (234 Kilohana Road); one dwelling and two smaller sheds on parcel 033, Kilohana Road bisects the southeast portion of the site.		
Fire Insurance Maps			1957: No significant change on parcel 033 (425 Kilohana Road); two dwellings separated by a garage on parcel 034 (437 and 437A Kilohana Road); and no significant change on parcel 035 (451 Kilohana Road formerly 234 Kilohana Road).		
			1974-1991: Site redeveloped in 1965 to 1969 and is labeled "Hilo Bay Hotel" (437 Banyon Drive). Kilohana Road no longer bisects the property, and all previous structures have been removed.		
			Adjacent Property to the northeast (Parce 046):		
			1921-1957: Structure labeled "Garage" between Kilohana Road and Banyan Drive.		
		EDR 2017d.	1915/1917: Two structures located on the subject property along Kilohana Road.		
			1932: Five structures are located on the subject property along Kilohana Road.		
USGS Topo Maps (Hilo, Honomu, and	1915/1917, 1932, 1963/1966, 1981,		1963/1966: Two structures located on the subject property along Kilohana Road.		
Papaikou Quadrangles)	1995, and 2013		1981: Two of the hotel wings are located on the subject property.		
			1995: One large structure located on the subject property.		
			2013: No significant features.		
Street Directories	1002 1005 1000		2013: Hilo Bay Uncle Billys; The Plantation Kitchen LLC; and Uncle Billys		
(Banyan Drive and Kamehameha Avenue)	1992, 1995, 1999, 2003, 2008, and 2013	EDR 2017e	2008: Beretania Properties, Inc.; Hilo Bay Restaurant Inc; Resorts Hawaii Inc; Uncle Billys; and Uncle Billy's General Store at Hilo.		

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:
			2003: Hilo Bay Hotel, Resorts Hawaii, Inc.; Uncle Billys General Store; and Uncle Billys Hilo Bay Hotel
Street Directories (Banyan Drive and Kamehameha Avenue)	1992, 1995, 1999, 2003, 2008, and 2013	EDR 2017e	1999: Hilo Bay Hotel Uncle Billys; Neighbor Isle Hotel & Restaurant Supply; Polynesian Market Place Uncle Billys; and Uncle Billys Restaurant at Hilo Bay Hotel Uncle Billys
			1995: Polynesian Market Place, Uncle Billys Hilo Bay Hotel; and Uncle Billys Restaurant
Property Tax Map Report			No coverage.
	1948 and 2016	EDR 2017g	15 June 1948: Parcels 033 and 034 Lease between Territory of Hawaii by its Commissioner of Public Lands (lessor) and Bernard K. Chock (lessee) assign lease to Hilo Bay Hotel, Inc.
			15 June 1948: Parcel 035 Lease between the Territory of Hawaii, by its Commissioner of Public Lands (lessor) and Frank M. Carr & Alice Carr (lessee) assign lease to Hilo Bay Hotel Inc.
			14 August 1969: Parcel 045 Lease between State of Hawaii (lessor) and Hilo Bay Hotel, Inc. (lessee)
Land Title Records			02 March 2016: Assignment of Lease: Savio HBH Development Company, LLC (lessee) from Hilo Bay Hotel, Inc. (lessor), State of Hawaii (owner).
			Easements: (1) Parcels 033, 034, 035 a 3-foot wide Territory of Hawaii sewer easement; (2) Parcel 045 a 5-foot wide County of Hawaii sanitary sewer line easement; (3) Parcel 045 a 5-foot wide HELCO underground electric power line easement; (4) Parcel 045 a 5-foot wide County of Hawaii water pipeline easement; (5) Parcel 045 a 5-foot wide Honolulu Gas Co. gas line easement; and (6) Parcel 045 a 30-foot wide State of Hawaii road easement
Building Permit Report	1982 and 1997	County of Hawaii 2017	No environmental concerns were identified.

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:		
Historical Maps	1906	Rumsey 1906	The subject property is located within an area designated as Public Land; the Hilo Railroad is located to the southwest of the subject property.		
	1932	County of Hawaii 2017	Parcel 033, 034, 035, and 045 labeled Hilo Bay Hotel Inc.		
	1971	County of Hawaii 2017	Listed as Hilo Bay Hotel.		
	1900	_			
	1920	State of Hawaii 2017	The subject and adjoining properties were not depicted in sugarcane cultivation.		
State of Hawaii GIS	1937		not supposed in origination or an original origi		
	2014	State of Hawaii 2017	The subject and adjoining properties are not within Department of Defense (DoD) parcels.		

Table 3-7: Historical Sources Reviewed: Country Club Condominium Hotel

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:
Aerial Photograph	1954, 1977, 1988, 1992, 2000, 2010, 2012. 2013, 2014, 2015, and 2016	EDR 2017b and Google Earth 2017.	1954: Several smaller dwellings on the site with one large roughly rectangular building towards the western side of the site; however, aerial photo quality is poor. 1977-2016: Previous structures no longer present, structure layout appears as it is today.
Fire Insurance Maps	1921, 1957, 1974, 1978, 1987, and 1991	EDR 2017c	1921: Access to the parcel is through Waikalehua Lane on the southwest corner of the site, only one dwelling on the parcel. A 2-inch water pipe bisects the property (15 Waikalehua Lane or Kanakea Road). 1957: Waikalehua Land and Kanakea Road no longer present, the current Banyan Drive is present, multiple dwellings are on

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:		
			the parcel (125, 119, 113, 115, 115A, 115B, 115C, 115D, 115E, 115F, 115G, and 111 Banyan Drive).		
Fire Insurance Maps	1921, 1957, 1974, 1978, 1987, and 1991	EDR 2017c	1974-1978: Site redeveloped in 1969 with one structure labeled "Travel Lodge Motel at Hilo" (125-111 Banyan Drive).		
			1987-1991: No significant changes to structure, now labeled "Country Club Apts. Hotel"		
LISCS Tong Mans			1915/1917-1932: No significant features on the subject property.		
(Hilo, Honomu, and	1915, 1917, 1932, 1963, 1966, 1981, 1995, and 2013	66, 1981, EDR 2017d	1963/1966: Several structures are present on the subject property along Bayan Drive.		
Papaikou Quadrangles)	1333, una 2013		1981-2013: Structure layout appears as it is today.		
			2013: 321 Connect Inc., Country Club Condo Hotel, and Country Club Hawaii Condo Hotel.		
Street Directories (Banyan Drive and Kamehameha Avenue)	1992, 1995, 1999, 2003, 2008, and 2013	EDR 2017e	2008: 321 Connect Inc., Country Club Condominium Hotel, Hawaii Loa Publications, Jim Cobbs Tree Farm, Pop One Inc., and TCE Pacific Corp.		
			1999: Country Club Apartments and Country Club Condominium Hotel.		
			1995: Country Club Condominium Hotel.		
Property Tax Map Report		EDR 2017f	No coverage.		
Land Title Records	1948, 1989, 1994, and 2012	County of Hawaii 2017 and EDR 2017g	15 June 1948: Lease between Territory of Hawaii (now the State of Hawaii) and A. M. M. Osorio (lessee) 1949 until 1970. Amended on 16 November 1962 extend lease till 2015 under Country Club Hawaii, Inc. (trustee).		

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:		
			06 March 1989: Condominium Conveyance from Country Club-Hawaii, Inc. (grantor) to Anthony and Irene De Mello (grantee).		
Land Title Records	1948, 1989, 1994,	County of Hawaii 2017 and EDR 2017g	30 August 1994: Mesne Assignment of Lease Apartment 310 from Irene F. Perrerira (grantor) to Susumu Fukunishi (grantee).		
Land Title Records	and 2012		31 December 2012: Assignment of Lease to The Association of Apartment Owners of Country Club Hawaii, Inc. (lessee) Yukiko Narita, Administrator (lessor), State of Hawaii (owner).		
			Easements: (1) HELCO from Tradewind Resort Inc., and (2) ingress/egress to Apartment 310.		
Building Permit Report	1984, 1990, 1996, and 1999	County of Hawaii 2017	No environmental concerns noted.		
Historical Maps	1906	Rumsey 1906	The subject property is located within an area designated as Public Land; the Hilo Railroad is located to the southwest of the subject property.		
	1932	County of Hawaii 2017	Parcel 20 and 23 labeled as "Country Club Hawaii."		
State of Hawaii GIS	1900 1920 1937	State of Hawaii 2017	The subject and adjoining properties were not depicted in sugarcane cultivation.		
	2014	State of Hawaii 2017	The subject and adjoining properties are not within DoD parcels.		

Table 3-8: Historical Sources Reviewed: Reed's Bay Resort Hotel

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:
Aerial Photograph	1954, 1977, 1988, 1992, 2000, 2010, 2012. 2013, 2014, 2015, and 2016	EDR 2017b and Google Earth 2017.	1954: Two possibly three dwellings on the site; however, aerial photo quality is poor. 1977-2016: Structure layout appears as it is today.
Fire Insurance Maps	1921, 1957, 1974, 1978, 1987, and 1991	EDR 2017c	1921: Kanakea Road and 2-inch water pipe bisects the southwest portion of the property, no structures present.

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:
Fire Insurance Maps	1921, 1957, 1974, 1978, 1987, and 1991	EDR 2017c	1957: Kanakea Road no longer present, three dwellings and a garage are present on the site (185, 173, and 169 Banyan Drive). 1974: Site redeveloped in 1966 with two connecting structures labeled "Nalei Hotel" (175 Banyan Drive). 1978: Site name changed to "Pacific Polynesian Hotel." 1987-1991: Site name changed to "Reed's Bay Apts."
USGS Topo Maps (Hilo, Honomu, and Papaikou Quadrangles)	1915, 1917, 1932, 1963, 1966, 1981, 1995, and 2013	EDR 2017d	1915/1917-1932: No significant features. 1963/1966: Three small structures present. 1981: Site redeveloped with one rectangular structure and one square structure. 1995-2013: One "L" shaped structure is shown; however, E2 believes this is a mapping error based on review of fire insurance maps and aerial photographs.
Street Directories (Banyan Drive and Kamehameha Avenue)	1992, 1995, 1999, 2003, 2008, and 2013	EDR 2017e	1995 to 2013: Reed's Bay Resort Hotel, Ltd.
Property Tax Map Report		EDR 2017f	No coverage.
Land Title Records	1990, 1994, and 1997	County of Hawaii 2017 and EDR 2017g	06 January 1990: Assignment of Lease from Reed's Bay Resort Hotels, Ltd. (lessor) to Michael Dennis Heinbaugh (sub-sub-sublessee), Michael Joseph Kaspar, Kathleen Kaspar (sub-sublessee), and Howard Wayne Montogomery (sublessee), State of Hawaii (owner). 05 July 1994: Assignment of Interest from Michael Dennis Heinbaugh (sub-sub-sublessor) to Agnes Tait Castle (sub-sub-sublessee). 05 July 1994: Assignment of Interest from Agnes Tait Castle (sub-sub-sublessee). 26 June 1997: Quitclaim deed file no additional information was found.

Source Type	Year Reviewed	Source	Environmental Concerns/Notes:		
Building Permit Report	1980, 1982, 1984, and 1990	County of Hawaii 2017	No environmental concerns noted.		
Historical Maps		Rumsey 1906	The subject property is located within an area designated as Public Land; the Hilo Railroad is located to the southwest of the subject property.		
	1932	County of Hawaii 2017	Site has no label.		
1900 1920 State of Hawaii GIS 1937		State of Hawaii 2015	The subject and adjoining properties were not depicted in sugarcane cultivation.		
	2014	State of Hawaii 2017	The subject and adjoining properties are not within DoD parcels.		

3.4.2 Previous Environmental Reports

E2 reviewed the historical use of the subject and adjacent properties from readily available standard historical sources. A brief summary of the historical use of the area and subject and adjacent properties is provided below.

3.4.2.1 History of the Subject Properties

Hilo Pagoda

The subject property was used a residential property circa (c.) 1921 until c. 1964 and was originally accessed by Kilohana Road. Sometime after 1934, the Waiakea Peninsula roads were removed, and Banyan Drive was constructed. Between 1965 and 1969, the Hilo Bay Hotel Uncle Billy's was constructed on the site. The site consists of five buildings with 142 hotel room, garden ponds surrounded with tropical gardens and interweaving paths are located in the central area between the buildings and on the northeast side, an outdoor pool overlooking the ocean, a store, lobby, and a former restaurant. According to the Manager, the restaurant has been out of service since c. 2003. In 2016, the hotel was sold to a Honolulu-based developer Peter Savio under management of Savio Castle Resorts & Hotels as the Pagoda Hilo Bay Hotel.

Country Club Condominium Hotel

From c. 1921 to c. 1954, the subject property was in residential use. Sometime after 1934, the Waiakea Peninsula roads were removed, and Banyan Drive was constructed. By 1954, multiple dwellings were located on the site. In 1969, the site had been cleared, and a six-story 138-unit condominium/hotel called Travel Lodge Motel at Hilo was constructed that includes a lobby/office area, restaurant-bar section, ground floor level parking on the rear side of the building, and a pool overlooking the ocean. From c. 1987 to 1991, the condominium/hotel was known as the Country Club Apartments Hotel. The units are owner-occupied and/or rented for short-term or long-term purposes.

Reed's Bay Resort Hotel

In 1921, the subject property was a vacant parcel of land. Sometime after 1934, the Waiakea Peninsula roads were removed, and Banyan Drive was constructed. By 1954, multiple dwellings were located on the site, and a garage was added c. 1957. By 1966, the site had been cleared, and two connecting concrete block structures were constructed on-site, a single-story building containing a restaurant and a three-story building with 63-units called the Nalei Hotel. A small swimming pool was constructed between the buildings. From c. 1978 to 1987, the hotel was known as the Pacific Polynesian Hotel. In 1983, a fire destroyed the restaurant situated over the single-story building and was never rebuilt. From c. 1987 until present, the hotel was known as Reed's Bay Resort Hotel. The units are being used as hotel and sub-lease of rooms.

3.4.2.2 Previous Environmental Studies on the Subject Properties

Table 3-9: Summary of Previous Reports

Report	Environmental Concerns/Notes
Limited Hazardous Material Survey Report, Country Club	
Condominium Hotel, Uncle Billy's Hilo Bay Hotel, and Reed's	ACM, LBP, and lead-containing paint were
Bay Resort Hotel, Ltd., Banyan Drive, Hilo, Hawaii	noted on all three sites.
(EnviroServices & Training Center, LLC 2015).	
Draft Remaining Useful Life Determination for Uncle Billy's Hilo	Outdated electrical, termite damage, and
Bay Hotel (SSFM International, Inc. [SSFM] 2014a)	concrete quality issues.
Draft Ramaining Usaful Life Determination for Country Club	Outdated electrical, unsatisfactory air
Draft Remaining Useful Life Determination for Country Club	conditioning water chiller and exhaust fan
Condominium/Hotel (SSFM 2014b)	units, and concrete quality issues.
Draft Bonaining Heaful Life Determination for Bood's Bou Hetel	Outdated electrical, structural beams with
Draft Remaining Useful Life Determination for Reed's Bay Hotel	section loss from corrosion, and a former
(SSFM 2014c)	restaurant area closed from fire.

Section 4 Site Reconnaissance

4.1 Methodology and Limitations

The site reconnaissance was conducted on 27 February through 2 March 2017, by Ms. Arlene Campbell, Senior Geologist, Ms. Angela Peltier, Geologist, and Mr. John Ellis, Field Technician with E2. Site photographs are included in Appendix A. The site reconnaissance was limited to public and common areas of the site including kitchens, bars, serving areas, offices, maintenance rooms, laundry facilities, readily available storage rooms, and a sampling of one or two hotel rooms in each hotel.

4.2 General Observations

4.2.1 Hilo Pagoda

A short driveway leads from Banyan Drive to an asphalt covered parking area on the site. Banyan trees are present on both sides of the driveway. The Hilo Pagoda has five major structures/wings, including two hotel room wings (north and west wings), a restaurant wing fronting the west wing, a lobby/office (includes the elevator) fronting the north wing, and a shop wing (Leilani Room, sewing room, and a general store). The buildings were constructed between 1965 and 1969. The front portion of the property is mostly asphalt and/or concrete paved for parking and a few landscaped areas. The area between the north and west wings and on the northeast side of the north wing are garden ponds and tropical gardens. The pool is located on the ocean side of the building and has concrete paving surrounding it.

During the site reconnaissance, the following general observations were made:

- Poor housekeeping was observed throughout the site including but not limited to improper storage of emergency light batteries, pesticides, chemical storage, and fuels;
- Yellow gas line exposed on the surface next to the restaurant along the property boundary;
- The ponds in the central portion of the site were well maintained; however, the ponds on the northeast side of the site were dried up and not circulated properly;
- The boiler system consists of seven separate water heaters;
- A sewage lift station with adjacent AST located on the northeast side of site;
- Restaurant was abandoned with equipment left-in-place the gas has been shut-off to this wing;
- Leilani Room was being used for storage;
- Stormwater runoff coming from the building had suds in the pooling water; and
- A gas heater enclosed in a small wood building on the ocean side of the north wing showed signs
 of a former fire, according to Manager, the duct didn't have enough air flow and caused a small
 fire.

4.2.2 Country Club Condominium Hotel

The Country Club Condominium Hotel has two driveways, a U-shaped drive in the front of the building with access from Banyan Drive allowing access to the main office, and an additional driveway with shared access to the adjacent property that leads to an asphalt covered parking area. The Country Club Condominium Hotel is a six-story hotel, which includes the lobby/office area on the front lower level section and a restaurant-bar section (former Shooters Bar & Grill) currently not in use. A portion of the ground floor level under the rear section of the hotel is utilized as parking. The hotel was constructed in 1969 and has two elevators (cable run), one in the front and another at the rear of the hotel.

During the site reconnaissance, the following general observations/notes were made:

- Poor housekeeping was observed throughout the site including but not limited to improper storage of computer batteries, tires, emergency light batteries, pesticides, chemical storage, and fuels;
- The restaurant-bar section was abandoned, in poor condition, and the electricity was shut-off, so
 the site reconnaissance was conducted by flashlight. Many items from the restaurant bar
 activities were left in place;
- A transformer located in the main electrical room behind the office exploded approximately 12-15 years ago c. 2005; and
- The elevators located at the site are run by cables;
- The site currently has private units, hotel rentals, and monthly rentals.

4.2.3 Reed's Bay Resort Hotel

The Reed's Bay Resort Hotel is separated into three major structures, the hotel wing, the restaurant wing, and a lobby structure connecting the two wings. The restaurant wing originally constructed in circa (c.) 1969 was originally two stories; however, in July 1983, a fire that started at the adjacent former Royal Kolani destroyed the entire upper level, which was never repaired. The side of the site fronting Banyan Drive was used for parking. The area between the restaurant wing and the hotel wing has a small pool with concrete walkways and small landscaped areas. A concrete drainage ditch runs along the northwest side of the property that drains to the ocean.

During the site reconnaissance, the following general observations/notes were made:

- Poor housekeeping was observed throughout the site including but not limited to improper storage of pesticides, chemical storage, and fuels;
- Three stormwater outfalls were observed along the coast;
- A sewer lift system is located on the northeast side of the site;

4.3 Interior/Exterior Observations

The subject properties are all currently developed as hotels and/or condominiums. Table 4-1 summarizes conditions observed on the subject properties at the time of our site reconnaissance. A detailed discussion of the observations identified in Table 4-1 is provided in Section 4.4.

Table 4-1: Identified Environmental Concern

Source Time	Hilo P	agoda	Country Club Condominium Hotel		Reed's Bay Resort Hotel	
Source Type	Identified	Not- Identified	Identified	Not- Identified	Identified	Not- Identified
Hazardous Substances and Petroleum Products in Connection with Identified Uses	✓		✓		✓	
Hazardous Substances and Petroleum Products Containers (Not Necessarily in Connection with Identified Uses)		✓		✓		✓
Evidence of USTs (e.g., vent piping, dispensing equipment, and pavement variations) and ASTs (e.g., concrete foundations or saddles, pedestals, or steel support structures)	✓		√			✓
Any noticeable odors		✓		✓		✓
Presence of sumps	✓		✓		✓	
Presence of drums		✓		✓	✓	
Transformers, electrical equipment, and other signs of PCBs	✓		✓		✓	
Pits, ponds, and lagoons, and/or ponding	✓		✓			✓
Stained concrete, flooring, and/or pavement	✓		✓		√	
Stressed vegetation		✓		✓		✓
Solid waste		✓		✓		✓
Wastewater	✓		✓		✓	
Stockpiled soil		✓		✓		✓
Presence of wells		✓		✓		✓
Septic systems		✓		✓		✓
Dry cleaning operations		✓		✓		✓

4.4 Identified Observations

4.4.1 Hazardous Substances and Petroleum Products in Connection with Identified Uses

E2 observed the presence of hazardous substances and petroleum products associated with identified uses on the subject property during the site reconnaissance as follows:

All Sites:

- Standard maintenance supplies (e.g., gasoline for equipment, paint, plaster, scale and rust preventers/removers, roof repair products, caulk, driveway repair items, lubricants, oils, grease, emergency light batteries);
- Standard industrial cleaning supplies for housekeeping laundry areas (e.g., solvents, detergent);
- Standard pool and pond supplies (e.g., chlorine, clarifiers, balancing chemicals, lime and scale removers, sand cleaners, oils, lubricants, grease);
- Standard industrial pest control products (assumed to be applied within manufacturer instructions (e.g., pesticide, insecticide, herbicides, rodenticides); and
- Standard lawn maintenance supplies (e.g., gasoline for equipment, fertilizer, lime).

Poor housekeeping of hazardous substances was observed on all the properties. The following releases were identified during the site reconnaissance as follows:

- Hilo Pagoda:
 - One 100-pound bucket of calcium hypochlorite leaking onto bare soil inside the pool pump house and
- Reed's Bay Resort Hotel:
 - Pool pump O-ring is leaking allowing chlorinated water to leak into the soil.

4.4.2 Storage Tanks

The subject property was inspected for evidence of USTs (e.g., vent piping, dispensing equipment, and pavement variations) and ASTs (e.g., concrete foundations or saddles, pedestals, or steel support structures). E2 observed the following tanks during the site reconnaissance as follows:

- Hilo Pagoda:
 - One large AST located within an enclosed structure on the northeast side of the site associated with the sewage lift station and reportedly is used to store wastewater.
- Country Club Condominium Hotel:
 - Two small (approximate 5-pound) compressed air carbon dioxide metal cylinders for soda machines.

- Rusted unknown compressed air cylinders labeled non-flammable gas.

4.4.3 Drums

E2 observed the presence of drums on the subject property during the site reconnaissance as follows:

- Country Club Condominium Hotel:
 - Two 55-gallon plastic drums of laundry detergent.

4.4.4 Sumps

E2 observed the presence of sumps on the subject property during the site reconnaissance as follows:

- All Sites:
 - Grease traps and/or sump pumps used for greywater (gently used water from sinks) were located within the industrial kitchens. The kitchens were not currently in use.

4.4.5 Polychlorinated Biphenyls

E2 observed transformers, electrical equipment, and other signs of potential PCBs on the subject property at the time of the site reconnaissance as follows:

- All Sites:
 - Large customer-owned transformers are located throughout the buildings;
 - Industrial electrical equipment is present throughout the sites; and
 - Fluorescent light ballasts were observed throughout the structures and may contain PCBs ballasts.
- Hilo Pagoda:
 - Pad-mounted transformer 9499, according to HELCO has a non-PCB status;
 - Pad-mounted transformer 6991; HELCO confirmed the transformer had a release in 2002; no other information was provided; and
 - A piston-powered elevator that may contain PCB-contaminated hydraulic oil.
- Country Club Condominium Hotel:
 - Pad-mounted transformer labeled "ABB" with no visible identification numbers; however, according to HELCO the transformer number is 35187 and has a non-PCB-status.
- Reed's Bay Resort Hotel:
 - Pad-mounted transformer 34559, according to HELCO has a non-PCB status.

4.4.6 Pits, Ponds, or Lagoons

E2 observed ponds and/or ponding on the subject property during the site inspection as follows:

• Hilo Pagoda:

- Unmaintained garden ponds and
- Ponding water on bare soil next to the piston pump with noticeable sheen within the sewage lift station.
- Country Club Condominium Hotel:
 - Ponding occurred on the roof, parking lot, and various areas throughout the site and
 - Ponding is occurring beneath the gas boilers near the oceanside portion of the building.

4.4.7 Stained Concrete, Flooring, and/or Pavement

E2 observed stained concrete, flooring and/or pavement on the subject property as follows:

- Hilo Pagoda:
 - De minimis concrete staining was observed by the water heaters.
- Country Club Condominium Hotel and Reed's Bay Resort Hotel:
 - De minimis concrete staining was observed at the maintenance shops.

4.4.8 Wastewater

E2 observed wastewater and/or wastewater generation on the subject property during the site reconnaissance as follows:

- All Sites:
 - Connected to the County of Hawaii sewer lines.
- Hilo Pagoda and Reed's Bay Resort Hotel:
 - Sewage lift stations are present.

Section 5 Interviews

5.1 Interviewed Parties

E2 interviewed the following people listed in Table 5-1 regarding the past and current use and activities on the subject and adjacent properties.

Table 5-1: Interviewed Parties

Summary of Parties Interviewed				
Name	Affiliation	Role		
Ms. Geri Estrella	Manager of Hilo Pagoda, Castle Resorts Management Company	Owner's Representative		
Mr. Jack Hansen	Maintenance, Hilo Pagoda	Owner's Representative		
Mr. Daryl Kitamore	General Manager,	Owner's Representative		
Mr. Kevin Aoki	Former Condominium Managing Agent for Country Club Condominium Hotel, T & C Realty	Owner's Representative		
Ms. Verda Arriaga	Supervisor, Country Club Condominium Hotel	Owner's Representative		
Ms. Pearl Macomber	Former President of Association, Country Club Condominium Hotel	Owner's Representative		
Mr. Robert Hill	Maintenance, Country Club Condominium Hotel	Owner's Representative		
Mr. Donn Inouye	Owner, Reed's Bay Resort Hotel, Ltd.	Owner's Representative		
Mr. Albert Gonzalez	Maintenance, Reed's Bay Resort Hotel, Ltd.	Owner's Representative		
Mr. Bobbie Teixeria	Environmental Health Specialist for HDOH CWB	Local Government Agency File Review		
Ms. Ruby Dela Cruz	Office Assistant for the HDOH HEER Office	Local Government Agency File Review		
Mr. Jeffrey M. Eckerd	Program Manager for HDOH IRHB	Local Government Agency File Review		
Mr. Norris Uehara	Supervisor of the Groundwater Pollution Control Section, HDOH SDWB	Local Government Agency File Review		
Ms. Amy Susana Liana	Planner for the Planning & Design Section, HDOH SHWB	Local Government Agency File Review		
Ms. Lori Morikami	Planner for the Planning & Design Section, HDOH WWB	Local Government Agency File Review		
Mr. Jonas Burgon	Engineer Technician, DLNR CWRM	Local Government Agency File Review		
Mr. Chris Chun-Hoon	Environmental Compliance Coordinator, HELCO	Local Utility Company		

5.2 Interview Findings

Information obtained during interviews is included in the pertinent sections of this report.

Section 6 Findings, Opinions, and Conclusions

E2 was retained by RMTC to conduct a Phase I ESA in conformance with ASTM Practice E1527-13, Standard Practice for Environmental Site Assessments. The subject properties are located at 87, 121, and 175 Banyan Drive, Hilo, Hawaii, Hawaii and designated as TMK: (3) 2-1-005: parcels 020, 022, 033, 034, 035, and 045 (portion). Any exceptions to, or deletions from, this practice, are described in Section 1.5 of this report.

Based on the site reconnaissance and review of historical information at the <u>Hilo Pagoda</u>, the following RECs, as defined by ASTM, were identified, and are further outlined in Table 6-1:

- Several releases and/or potential releases were identified at the site including an area within the
 pool pump house, the sewage lift station, and in a flammable storage locker located outside the
 building.
- It is possible that a 1,000-gallon UST, used to store diesel fuel, remains in the ground at the site. If the UST is still in the ground, it poses a material threat of a future release to the environment.
- Hazardous materials in connection with identified uses are stored at the site, and it is possible
 that improper storage and/or handling of these chemicals pose a material threat of a future
 release to the environment.

Based on the site reconnaissance and review of historical information at the <u>Country Club Condominium</u> Hotel, the following RECs, as defined by ASTM, were identified and are further outlined in Table 6-2:

- A potential release of PCB-contaminated oil, associated with a transformer explosion was identified at the site.
- Hazardous materials in connection with identified uses are stored at the site, and it is possible
 that improper storage and/or handling of these chemicals pose a material threat of a future
 release to the environment.

Based on the site reconnaissance and review of historical information at the <u>Reed's Bay Resort Hotel</u>, the following RECs, as defined by ASTM, were identified and are further outlined in Table 6-3:

- A release of chlorinated water into the soil due to a fulty pool pump O-ring was identified at the site.
- Hazardous materials in connection with identified uses are stored at the site, and it is possible
 that improper storage and/or handling of these chemicals pose a material threat of a future
 release to the environment.

In addition, Historical RECs (HRECs) and potential environmental concerns were identified for all three sites. Table 6-4 summarizes Historic RECs identified for all three of the sites. Potential environmental concerns, while not considered to be RECs, were identified and are listed in Table 6-5.

Table 6-1: Recognized Environmental Conditions: Hilo Pagoda

	REC Categories		
Recognized Environmental Conditions (RECs)	Release	Conditions Indicative of a Release	Conditions Posing a Material Threat of a Future Release to the Environment
Hazardous Materials and Solid / Hazardous / Mixed Wastes:			
 Standard maintenance supplies (e.g., gasoline for yard equipment, paint, plaster, scale and rust preventers/removers, roof repair products, caulk, driveway repair items, lubricants, oils, grease, emergency light batteries) 			✓
 Standard industrial cleaning supplies for the kitchen, housekeeping, and laundry areas (e.g., disinfectants, cleaners, destainers, strippers, solvents, detergent) 			√
 Standard pool and pond supplies (e.g., chlorine, clarifiers, balancing chemicals, lime and scale removers, sand cleaners, oils, lubricants, grease) 			√
 Standard industrial pest control products assumed to be applied in accordance with manufacturer's instructions (e.g., pesticides, insecticides, herbicides, rodenticides) 			✓
 Standard lawn maintenance supplies (e.g., gasoline for equipment, fertilizer, lime) 			✓
Poor housekeeping of Hazardous Materials:			
 Pool Pump House: One 100-pound container of calcium hypochlorite leaking onto concrete 	✓		
 Sewage Lift Station: Gear oil stored in lift station, ponding water on bare soil next to the piston pump has a noticeable petroleum sheen 	✓		
 Flammable Storage Locker: Located on the east side of the store contains exploded aerosol paint cans, paint thinner, and other hazardous materials in poor condition 	✓		
Underground Storage Tank (UST):			
 One 1,000-gallon diesel UST, listed as permanently out of use as of 28 February 1998. The location of the UST is not known, nor do we know if the UST was properly removed from the ground (which would include a site assessment) 			✓
 One large above-ground storage tank (AST) located within an enclosed structure on the northeast side of the site associated with the sewage lift station 			√

Table 6-2: Recognized Environmental Conditions: Country Club Condominium Hotel

		REC Categories		
RECs	Release	Conditions Indicative of a Release	Conditions Posing a Material Threat of a Future Release to the Environment	
Hazardous Materials and Solid / Hazardous / Mixed Wastes:				
Standard maintenance supplies (e.g., gasoline for yard equipment, paint, plaster, scale and rust preventers/removers, roof repair products, caulk, driveway repair items, lubricants, oils, grease, emergency light batteries)			✓	
 Standard industrial cleaning supplies for the kitchen, housekeeping, and laundry areas (e.g., disinfectants, cleaners, destainers, strippers, solvents, detergent) 			√	
 Standard pool and pond supplies (e.g., chlorine, clarifiers, balancing chemicals, lime and scale removers, sand cleaners, oils, lubricants, grease) 			√	
 Standard industrial pest control products assumed to be applied in accordance with manufacturer's instructions (e.g., pesticides, insecticides, herbicides, rodenticides) 			✓	
Standard lawn maintenance supplies (e.g., gasoline for equipment, fertilizer, lime)			✓	
Former Transformer:				
 A transformer previously located in the ground floor electrical room exploded and was subsequently removed from the building. It is possible that petroleum, potentially impacted by PCBs, was leaked a result of the fire. 		√		

Table 6-3: Recognized Environmental Conditions: Reed's Bay Resort Hotel

		REC Categories		
RECs		Conditions Indicative of a Release	Conditions Posing a Material Threat of a Future Release to the Environment	
Hazardous Materials and Solid / Hazardous / Mixed Wastes:				
 Standard maintenance supplies (e.g., gasoline for yard equipment, paint, plaster, scale and rust preventers/removers, roof repair products, caulk, driveway repair items, lubricants, oils, grease, emergency light batteries) 			✓	
 Standard industrial cleaning supplies for the kitchen, housekeeping, and laundry areas (e.g., disinfectants, cleaners, destainers, strippers, solvents, detergent) 			√	
 Standard pool and pond supplies (e.g., chlorine, clarifiers, balancing chemicals, lime and scale removers, sand cleaners, oils, lubricants, grease) 			√	
 Standard industrial pest control products assumed to be applied in accordance with manufacturer's instructions (e.g., pesticides, insecticides, herbicides, rodenticides) 			√	
Standard lawn maintenance supplies (e.g., gasoline for equipment, fertilizer, lime)			✓	
Poor housekeeping of Hazardous Materials:				
 Pool pump O-ring is leaking, and chlorinated water is leaking into the soil 	✓			

Table 6-4: Historic Recognized Environmental Condition

HREC Category	HREC Condition		
	Hilo Pagoda:		
	 On 31 August 2001, pump station failure led to an approximate 100-gallon sewage overflow on adjacent property. 		
	Country Club Condominium Hotel:		
	 On 29 March 2003, the County of Hawaii lateral broke and released sewage in the driveway. 		
Historic Releases	 On 16 December 2016, water from sand filter associated with the pool discharged directly to the ocean. 		
	Reed's Bay Resort Hotel:		
	 Unknown date, paint wash water entering drainage system from rinsing of paint equipment in parking lot area. 		
	 HELCO Transformer 6991 leaked 30-gallons of Shell Diala Oil and is listed by EDR as a HI SPILLS site. 		

Table 6-5: Potential Environmental Concerns

Potential Environmental Concern Category	Potential Environmental Concern
Residual Lead in Soil Attributable to Lead- based Paint (LBP)	LBP may have been used in the construction and/or maintenance and upkeep of current and former structures at the site. Surveying for LBP was not conducted as part of this investigation; however, previous investigations identified LBP on the subject properties. It is possible that the soil in the vicinity of current and former structures has been negatively impacted by lead as a result of normal weathering and/or renovation/demolition activities.
Residual Pesticides Attributable to Termite Treatment	It is possible that residual levels of termiticides (i.e., chlordane) are present in the soil beneath and in the vicinity of the current and former structures at the site.
Asbestos-Containing Materials (ACM)	Surveying for ACM was not conducted as part of this investigation; however, previous investigations identified ACM on the subject properties.
Polychlorinated biphenyls (PCBs)	Three Hotel Sites: Potential PCB-containing customer-owned transformers, electrical equipment, capacitors, and fluorescent light ballasts were identified. Hilo Pagoda: A potential PCB-containing hydraulic piston powered elevator was identified.
Unmappable Site	EDR identified seven unmappable sites. It is not known if activities conducted at the Hilo Safeway/Target, Umauma Stream Bridge, Pacific Aquaculture and Coastle Re, Hawaii County Kamehameha Avenue, Arsenic Mililani Street, Wailoa River State Recreation Area, or the Hilo Bayfront soccer field sites have impacted the subject properties.

Section 7 Additional Services

Although E2 was not contracted to conduct additional services; as a courtesy to the client, the following additional services were performed:

- E2 listed potential environmental concerns, which were not considered to be RECs due to a lack
 of /or limited information, for the subject and adjacent properties, based on their historical use
 and
- E2 addressed possible ACM and LBP at the subject property.

Section 8 Qualifications of Environmental Professionals

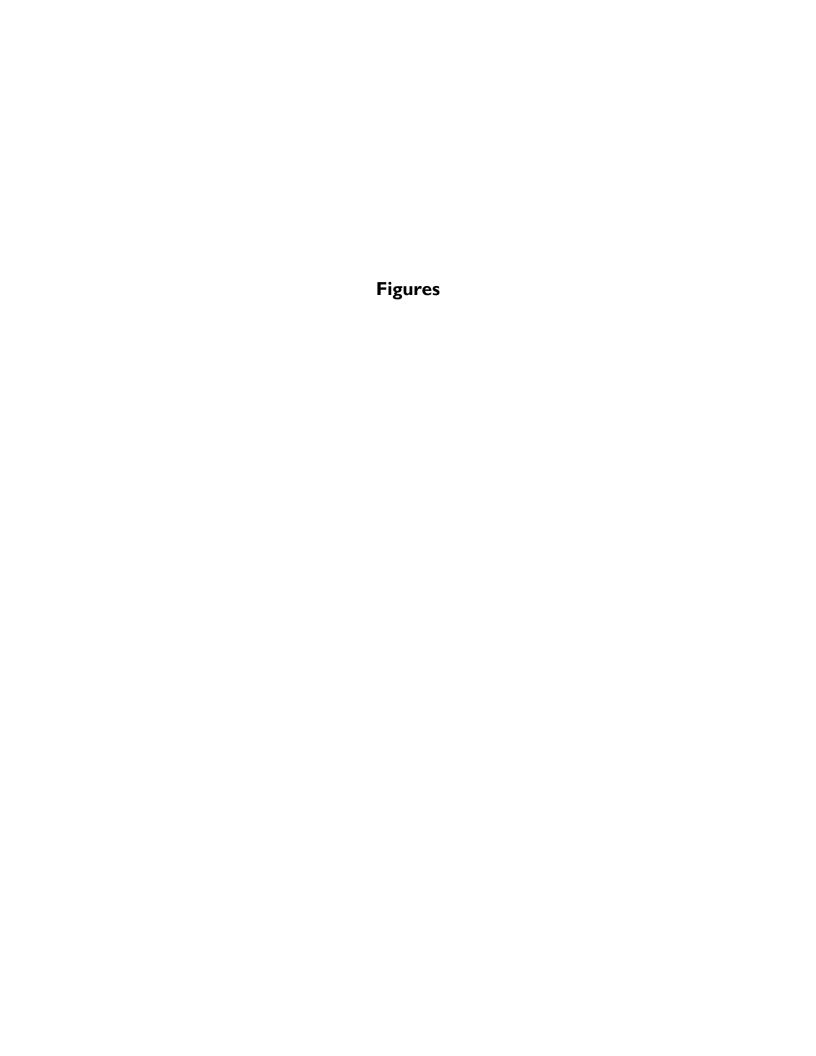
Qualifications of the Environmental Professionals are included in Appendix D.

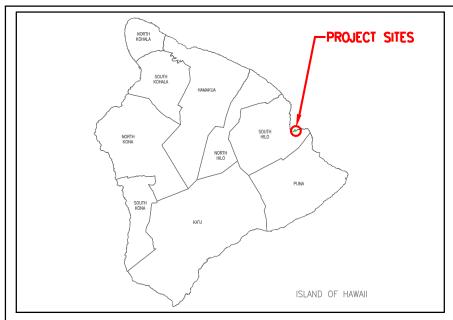
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APPENDIX A FIGURES AND PHOTOGRAPHS











HILO PAGODA

COUNTRY CLUB CONDOMINIUM HOTEL

REEDS BAY RESORT HOTEL



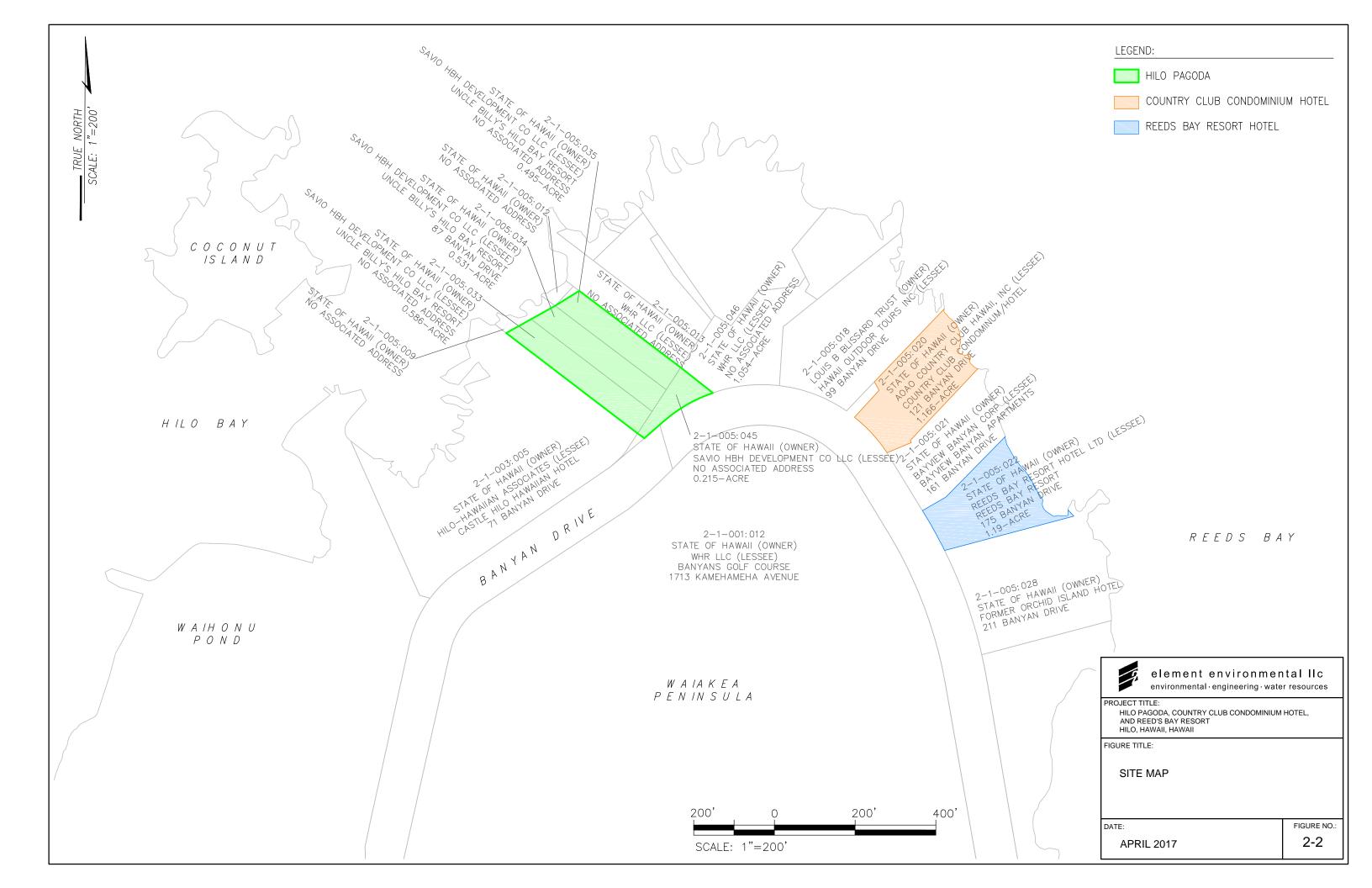
APR 2017 AND R

HILO PAGODA, COUNTRY CLUB CONDOMINIUM HOTEL, AND REED'S BAY RESORT HOTEL HILO, HAWAII, HAWAII

FIGURE TITLE:

SITE LOCATION MAP

FIGURE NO.: **2-1**







HILO PAGODA, COUNTRY CLUB CONDOMINIUM HOTEL, AND REED'S BAY RESORT HOTEL HILO, HAWAII, HAWAII APR 2017

FIGURE TITLE:

HILO PAGODA LAYOUT

FIGURE NO.: 2-3



160' SCALE: 1"=80'

APR 2017

HILO PAGODA, COUNTRY CLUB CONDOMINIUM HOTEL, AND REED'S BAY RESORT HOTEL HILO, HAWAII, HAWAII

FIGURE TITLE:

COUNTRY CLUB CONDOMINIUM HOTEL LAYOUT

FIGURE NO.: 2-4





APR 2017

HILO PAGODA, COUNTRY CLUB CONDOMINIUM HOTEL, AND REED'S BAY RESORT HOTEL HILO, HAWAII, HAWAII

FIGURE TITLE:

FIGURE NO.:

REED'S BAY RESORT LAYOUT

2-5





E2 Project No.:	Description	A 100 lb. bucket of Chlorine granules was observed seeping into soil within the pool pump and filter room.	Photo I
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	Description	Chlorine contaminated water is emptying to soil within the pool pump and filter room.	Photo 2
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	Description	A hydraulic aboveground storage tank and pump are located in the Elevator Hydraulic Room.	Photo 3
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	Description	A damaged lead-acid battery was observed within the Elevator Hydraulic Room.	Photo 4
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



	E2 Project No.:	Description	Improperly stored (open) 5 gallon drums of hydraulic oil were observed within the Elevator Hydraulic Room.	Photo 5
ı	170004	Site Name	Hilo Pagoda	Photo Date
ı	170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	Description	Flammable storage locker outside the General Store; used to store hazardous materials. Both the locker and the stored materials are in poor condition.	Photo 6
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	Description	A compressed gas cylinder (~20lbs.) of unknown content was observed along the east wall of the hotel/general store.	Photo 7
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	Description	Several types of small lead-acid batteries and light fixtures were observed in the basement maintenance shop storage area.	Photo 8
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	Description	Gasoline cans and other unidentified materials were observed stored in a flammable locker in the basement maintenance shop storage area.	Photo 9
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.: Description 5-gallon containers of chlorine tablets and paint in the basement maintenance shop storage area.		Photo 10	
170004	Site Name	Hilo Pagoda	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



	E2 Project No.: Description		Outside chemical storage area adjacent to the ground floor main electrical room.	Photo II
170004		Site Name	Country Club Condominium Hotel	Photo Date
		Client	R.M. Towill Corporation	2/28/2017



E2 Project No.: Description		Transformer ABB on a concrete pad within the parking lot. The transformer identification numbers have been painted over and the unit may contain PCBs.	Photo 12
170004	Site Name	Country Club Condominium Hotel	Photo Date
170004	Client	R.M. Towill Corporation	2/28/2017



2 Project No.:	2 Project No.: Description Non-functioning air conditioning unit with rust and metal damage located behind the restaurant. View looking south.		Photo 13
170004	Site Name	Country Club Condominium Hotel	Photo Date
170004	Client	R.M. Towill Corporation	2/28/2017



E2 Project No.: Description		The ground floor main electrical room contains two large capacitors (pictured in the left of the photo).	Photo 14
170004	Site Name	Country Club Condominium Hotel	Photo Date
170004	Client	R.M. Towill Corporation	2/28/2017



2 Project No.:	Description	The pool filter system pump is leaking water. The chlorine contaminated water drains to soil outside of the pump shed.	
170004	Site Name	Reed's Bay Resort Hotel	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	No.: Description Multiple maintenance related chemicals are stored in the former restaurant basement adjacent to the maintenance shop.		Photo 16
170004	Site Name	Reed's Bay Resort Hotel	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	E2 Project No.: Description Pest control chemicals and miscellaneous grounds maintenance supplies are stored in the former restaurant basement.		Photo 17
170004	Site Name	Reed's Bay Resort Hotel	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



		A 5-gallon bucket of roofing chemical is stored next to a heavily rusted I-gallon can of unknown contents in the vicinity of the former restaurant.	Photo 18
170004	Site Name	Reed's Bay Resort Hotel	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017



E2 Project No.:	Description	Transformer number 34559. This unit has a sticker indicating "No PCBs". View looking east.	Photo 19
170004	Site Name	Reed's Bay Resort Hotel	Photo Date
170004	Client	R.M. Towill Corporation	3/1/2017

APPENDIX B

EDR REPORTS



Hilo Hotels

Banyan Dr Hilo, HI 96720

Inquiry Number: 4831829.2s

January 19, 2017

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

BANYAN DR HILO, HI 96720

COORDINATES

Latitude (North): 19.7287760 - 19° 43′ 43.59″ Longitude (West): 155.0659610 - 155° 3′ 57.45″

Universal Tranverse Mercator: Zone 5 UTM X (Meters): 283482.2 UTM Y (Meters): 2182656.2

Elevation: 12 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5949390 HILO, HI

Version Date: 2013

MAPPED SITES SUMMARY

Target Property Address: BANYAN DR HILO, HI 96720

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	HELCO TRANSFORMER 69	175 BANYAN DR	SPILLS	Lower	1 ft.
2	HILO BAY		SPILLS	Higher	1 ft.
A3	REEDS BAY BEACH PARK	225 BANYAN DRIVE	FINDS	Lower	1 ft.
4	HELCO PIPELINE ANOMA	126 BANYAN WY	SHWS, SPILLS	Lower	1427, 0.270, SSE
B5	KAM AVE 76 (#203)	1801 KAMEHAMEHA AVE	LUST, UST, SPILLS, Financial Assurance	Lower	1643, 0.311, SSE
B6	KUMU STREET	KUMU STREET AND KAME	LUST, UST, Financial Assurance	Higher	1728, 0.327, SSE
C7	PACIFIC MACHINERY	456 KALANIANAOLE AVE	SHWS, LUST, UST	Lower	1789, 0.339, ESE
8	HAMAKUA SUGAR COMPAN	36-2622 MAMALOAHOA H	SHWS, ENG CONTROLS, INST CONTROL	Lower	1879, 0.356, SSE
D9	HARPER CAR & TRUCK R	1690 KAMEHAMEHA AVE	LUST, UST	Lower	1914, 0.363, South
D10	TESORO GAS EXPRESS 8	1672 KAMEHAMEHA AVE	LUST, UST, Financial Assurance	Lower	1930, 0.366, South
11	KUWAYE TRUCKING INC.	2055 KAMEHAMEHA AVE	LUST, UST	Higher	1950, 0.369, SE
12	SHIPMAN GENERATING S	20 BANYAN DRIVE	RCRA-TSDF, RCRA-SQG	Lower	1962, 0.372, SSW
C13	KTA/DAVIES PROPERTY	500 KALANIANAOLE HWY	SHWS, SPILLS	Lower	1963, 0.372, ESE
E14	WOOD PROTECTION CO	150 KEAA ST	SEMS-ARCHIVE, RCRA-LQG	Higher	2034, 0.385, SE
E15	WOOD PROTECTION COMP	150 KEAA ST	SHWS, SPILLS	Higher	2034, 0.385, SE
E16	ALLIED AGGREGATES CO	160 KEAA ST	LUST, UST	Higher	2144, 0.406, SE
F17	TESORO HAWAII CORPOR	595 KALANIANAOLE AVE	SHWS, SPILLS	Lower	2210, 0.419, East
F18	TESORO HAWAII CORPOR	607 KALANIANAOLE AVE	SHWS, AIRS	Lower	2364, 0.448, East
19	KUAWA STREET SOCCER	KAMEHAMEHA HWY AND M	SHWS	Lower	2520, 0.477, SSW
G20	ALOHA PETROLEUM HILO	661 KALANIANAOLE AVE	RCRA-SQG, SHWS, SPILLS, US AIRS, AIRS	Lower	2581, 0.489, East
G21	HILO TERMINAL 666 KA	666 KALANIANAOLE AVE	SHWS, SPILLS, AIRS	Lower	2710, 0.513, East
G22	TESORO HAWAII CORPOR	701 KALANIANAOLE AVE	SHWS	Lower	2724, 0.516, East
23	187 SILVA STREET	187 SILVA ST	SHWS, INST CONTROL, SPILLS	Higher	3268, 0.619, ESE
H24	BIG ISLAND ASPHALT C	794 KALANIANAOLE AVE	SHWS	Lower	3328, 0.630, East
H25	888 KALANIANAOLE AVE	888 KALANIANAOLE AVE	SHWS, ENG CONTROLS, INST CONTROL, SPILLS	Lower	3551, 0.673, East
26	UST EXCAVATED BISHOP	BISHOP ST AND KAMEHA	SHWS	Lower	4302, 0.815, WSW
27	ALOHA PETROLEUM HILO	999 KALANIANAOLE AVE	SHWS, SPILLS, AIRS	Lower	4505, 0.853, East
28	KHI INC. DBA BAYSIDE	774 KAMEHAMEHA AVE	SHWS, LUST, UST, INST CONTROL, SPILLS, Financial	. Lower	4766, 0.903, WSW
29	HELCO PIPELINE RELEA	KANOELEHUA AVE & HUA	SHWS	Higher	4894, 0.927, South

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal	NPI	site	list
i caciai	, w	3110	1131

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

Federal Delisted NPL site list

Federal CERCLIS list

FEDERAL FACILITY	Federal Facility Site Information listing
SEMS	Superfund Enterprise Management System

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA generators list

RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS	Land Use Control Information System
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROL	Sites with Institutional Controls

Federal ERNS list

ERNS	Emergency	Response N	Notification S	vstem

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Permitted Landfills in the State of Hawaii

State and	tribal	leaking	storage	tank lists
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INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

State and tribal voluntary cleanup sites

INDIAN VCP...... Voluntary Cleanup Priority Listing VCP...... Voluntary Response Program Sites

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register CDL..... Clandestine Drug Lab Listing US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS...... Hazardous Materials Information Reporting System SPILLS 90...... SPILLS 90 data from FirstSearch

Other Ascertainable Records

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR..... Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

TSCA...... Toxic Substances Control Act

TRIS....... Toxic Chemical Release Inventory System SSTS....... Section 7 Tracking Systems

RAATS_____RCRA Administrative Action Tracking System

ICIS...... Integrated Compliance Information System

FTTS......FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act)

MLTS....... Material Licensing Tracking System COAL ASH DOE...... Steam-Electric Plant Operation Data

COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER...... PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT..... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS..... Lead Smelter Sites

US AIRS...... Aerometric Information Retrieval System Facility Subsystem

US MINES..... Mines Master Index File

DOCKET HWC..... Hazardous Waste Compliance Docket Listing

Financial Assurance _____ Financial Assurance Information Listing UIC _____ Underground Injection Wells Listing

ABANDONED MINES..... Abandoned Mines

ECHO_____Enforcement & Compliance History Information

FUELS PROGRAM..... EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR Hist Auto... EDR Exclusive Historic Gas Stations
EDR Hist Cleaner. EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS...... Recovered Government Archive State Hazardous Waste Facilities List

RGA LF...... Recovered Government Archive Solid Waste Facilities List

RGA LUST...... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 10/10/2016 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WOOD PROTECTION CO	150 KEAA ST	SE 1/4 - 1/2 (0.385 mi.)	E14	25

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 09/12/2016 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SHIPMAN GENERATING S	20 BANYAN DRIVE	SSW 1/4 - 1/2 (0.372 mi.)	12	22

State- and tribal - equivalent CERCLIS

SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Health.

A review of the SHWS list, as provided by EDR, and dated 09/23/2016 has revealed that there are 18 SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WOOD PROTECTION COMP	150 KEAA ST	SE 1/4 - 1/2 (0.385 mi.)	E15	29
187 SILVA STREET	187 SILVA ST	ESE 1/2 - 1 (0.619 mi.)	23	56
HELCO PIPELINE RELEA	KANOELEHUA AVE & HUA	S 1/2 - 1 (0.927 mi.)	29	69
Lower Elevation	Address	Direction / Distance	Map ID	Page
HELCO PIPELINE ANOMA	126 BANYAN WY	SSE 1/4 - 1/2 (0.270 mi.)	4	10
PACIFIC MACHINERY	456 KALANIANAOLE AVE	ESE 1/4 - 1/2 (0.339 mi.)	C7	16
HAMAKUA SUGAR COMPAN	36-2622 MAMALOAHOA H	SSE 1/4 - 1/2 (0.356 mi.)	8	17
KTA/DAVIES PROPERTY	500 KALANIANAOLE HWY	ESE 1/4 - 1/2 (0.372 mi.)	C13	24
TESORO HAWAII CORPOR	595 KALANIANAOLE AVE	E 1/4 - 1/2 (0.419 mi.)	F17	30
TESORO HAWAII CORPOR	607 KALANIANAOLE AVE	E 1/4 - 1/2 (0.448 mi.)	F18	33
KUAWA STREET SOCCER	KAMEHAMEHA HWY AND M	SSW 1/4 - 1/2 (0.477 mi.)	19	35
ALOHA PETROLEUM HILO	661 KALANIANAOLE AVE	E 1/4 - 1/2 (0.489 mi.)	G20	35
HILO TERMINAL 666 KA	666 KALANIANAOLE AVE	E 1/2 - 1 (0.513 mi.)	G21	52
TESORO HAWAII CORPOR	701 KALANIANAOLE AVE	E 1/2 - 1 (0.516 mi.)	G22	56
BIG ISLAND ASPHALT C	794 KALANIANAOLE AVE	E 1/2 - 1 (0.630 mi.)	H24	58
888 KALANIANAOLE AVE	888 KALANIANAOLE AVE	E 1/2 - 1 (0.673 mi.)	H25	59
UST EXCAVATED BISHOP	BISHOP ST AND KAMEHA	WSW 1/2 - 1 (0.815 mi.)	26	60
ALOHA PETROLEUM HILO	999 KALANIANAOLE AVE	E 1/2 - 1 (0.853 mi.)	27	61
KHI INC. DBA BAYSIDE	774 KAMEHAMEHA AVE	WSW 1/2 - 1 (0.903 mi.)	28	65

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Health's Active Leaking Underground Storage Tank Log Listing.

A review of the LUST list, as provided by EDR, and dated 11/18/2016 has revealed that there are 7 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KUMU STREET Release ID: 000076 Facility Id: 9-603630 Facility Status: Site Cleanup Comp	KUMU STREET AND KAME bleted (NFA)	SSE 1/4 - 1/2 (0.327 mi.)	B6	15
KUWAYE TRUCKING INC. Release ID: 920188 Facility Id: 9-600652 Facility Status: Site Cleanup Comp	2055 KAMEHAMEHA AVE	SE 1/4 - 1/2 (0.369 mi.)	11	21
ALLIED AGGREGATES CO	160 KEAA ST	SE 1/4 - 1/2 (0.406 mi.)	E16	30

Release ID: 900109 Facility Id: 9-601306

Facility Status: Site Cleanup Completed (NFA)

Lower Elevation	Address	Direction / Distance	Map ID	Page
KAM AVE 76 (#203) Release ID: 980027 Release ID: 040053 Facility Id: 9-600013 Facility Status: Site Cleanup Compl	1801 KAMEHAMEHA AVE eted (NFA)	SSE 1/4 - 1/2 (0.311 mi.)	B5	11
PACIFIC MACHINERY Release ID: 950071 Facility Id: 9-600710 Facility Status: Site Cleanup Compl	456 KALANIANAOLE AVE	ESE 1/4 - 1/2 (0.339 mi.)	C7	16
HARPER CAR & TRUCK R Release ID: 960054 Facility Id: 9-603156 Facility Status: Site Cleanup Compl	1690 KAMEHAMEHA AVE leted (NFA)	S 1/4 - 1/2 (0.363 mi.)	D9	18
TESORO GAS EXPRESS 8 Release ID: 940057 Facility Id: 9-600708 Facility Status: Site Cleanup Compl	1672 KAMEHAMEHA AVE leted (NFA)	S 1/4 - 1/2 (0.366 mi.)	D10	19

State and tribal institutional control / engineering control registries

ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the ENG CONTROLS list, as provided by EDR, and dated 09/23/2016 has revealed that there is 1 ENG CONTROLS site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAMAKUA SUGAR COMPAN	36-2622 MAMALOAHOA H	SSE 1/4 - 1/2 (0.356 mi.)	8	17

Voluntary Remediation Program and Brownfields sites with institutional controls in place.

A review of the INST CONTROL list, as provided by EDR, and dated 09/23/2016 has revealed that there is 1 INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAMAKUA SUGAR COMPAN	36-2622 MAMALOAHOA H	SSE 1/4 - 1/2 (0.356 mi.)	8	17

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

SPILLS: Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988.

A review of the SPILLS list, as provided by EDR, and dated 01/14/2016 has revealed that there are 2 SPILLS sites within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HILO BAY		0 - 1/8 (0.000 mi.)	2	8
Lower Elevation	Address	Direction / Distance	Map ID	Page
HELCO TRANSFORMER 69	175 BANYAN DR	0 - 1/8 (0.000 mi.)	A1	8

Other Ascertainable Records

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 07/15/2016 has revealed that there is 1 FINDS site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
REEDS BAY BEACH PARK	225 BANYAN DRIVE	0 - 1/8 (0.000 mi.)	A3	9

Due to poor or inadequate address information, the following sites were not mapped. Count: 7 records.

Site Name Database(s)

HILO SAFEWAY/TARGET
UMAUMA STREAM BRIDGE
PACIFIC AQUACULTURE AND COASTAL RE
HAWAII COUNTY KAMEHAMEHA AVENUE IM
ARSENIC MILILANI STREET IN HILO
WAILOA RIVER STATE RECREATION AREA
HILO BAY FRONT SOCCER FIELD

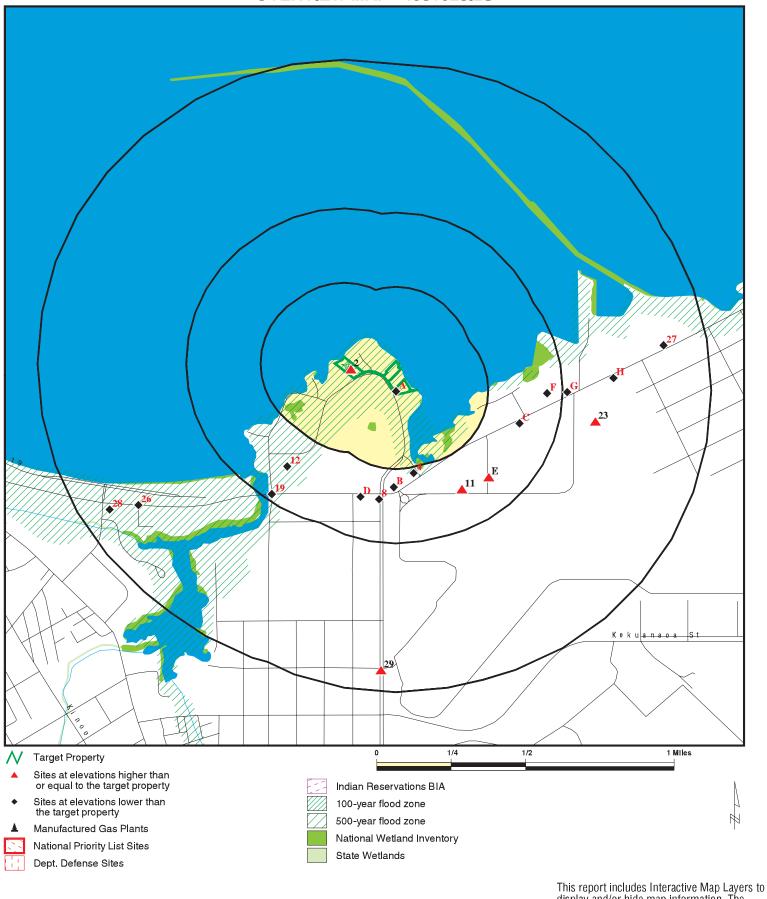
SHWS, ENG CONTROLS, INST CONTROL SHWS
SHWS, BROWNFIELDS

SHWS SHWS, SPILLS

SHWS

SEMS-ARCHIVE

OVERVIEW MAP - 4831829.2S

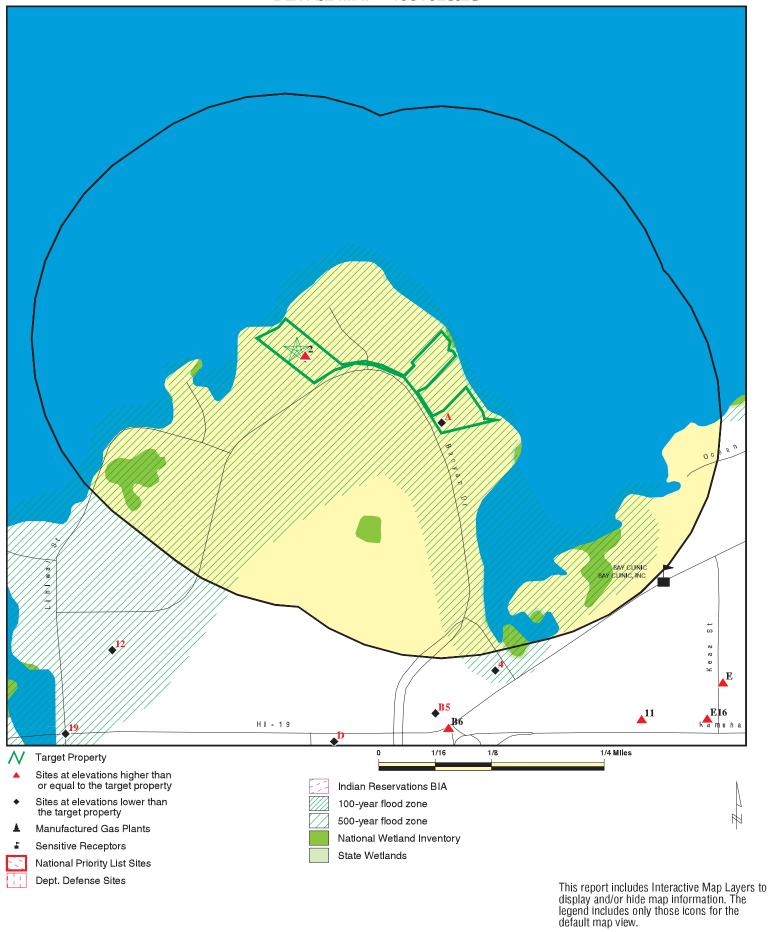


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Hilo Hotels
ADDRESS: Banyan Dr

CLIENT: Element Environmental, LLC
CONTACT: Susan Oram

Hilo HI 96720 INQUIRY #: 4831829.2s LAT/LONG: 19.728776 / 155.065961 DATE: January 19, 2017 1:05 pm



January 19, 2017 1:05 pm Copyright © 2017 EDR, Inc. © 2015 TomTom Rel. 2015.

Susan Oram

4831829.2s

Element Environmental, LLC

CLIENT: CONTACT:

INQUIRY#:

DATE:

SITE NAME: Hilo Hotels

Banyan Dr

Hilo HI 96720

19.728776 / 155.065961

ADDRESS:

LAT/LONG:

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 0.001		0 0 0	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL site	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	1	NR	NR	1
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	1	NR	NR	1
Federal RCRA generators list								
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional controls / engineering controls registries								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SHWS	1.000		0	0	9	9	NR	18
State and tribal landfill a solid waste disposal site								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST INDIAN LUST	0.500 0.500		0 0	0 0	7 0	NR NR	NR NR	7 0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST INDIAN UST	0.250 0.250		0 0	0 0	NR NR	NR NR	NR NR	0 0
State and tribal institutional control / engineering control registries								
ENG CONTROLS INST CONTROL	0.500 0.500		0 0	0 0	1 1	NR NR	NR NR	1 1
State and tribal voluntary	cleanup site	es						
INDIAN VCP VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	0 0 0 0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL CDL US CDL	0.001 0.001 0.001		0 0 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency R								
HMIRS SPILLS SPILLS 90	0.001 0.001 0.001		0 2 0	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 2 0
Other Ascertainable Records								
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION TSCA	0.250 1.000 1.000 0.500 0.001 0.001 0.250 0.001		0 0 0 0 0 0	0 0 0 0 NR NR NR 0	NR 0 0 0 NR NR NR NR	NR 0 0 NR NR NR NR	NR NR NR NR NR NR NR	0 0 0 0 0 0

	Search Distance	Target						Total
Database	(Miles)	Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Plotted
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		1	NR	NR	NR	NR	1
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
	0.125		0	0 NR	NR	NR	NR NR	0
EDR Hist Auto			0	NR NR		NR NR		0
EDR Hist Cleaner	0.125		U	INK	NR	INK	NR	U
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	0.001		0	NR	NR	NR	NR	0
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
NON LOOT	0.001		U	1417	1417	1417	1417	J
- Totals		0	3	0	20	9	0	32

Search

Distance (Miles)

Target Property

< 1/8 1/8 - 1/4

1/4 - 1/2

1/2 - 1

Total > 1 Plotted

NOTES:

Database

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

Α1 **HELCO TRANSFORMER 6991** SPILLS S106817572 N/A

175 BANYAN DR < 1/8 HILO, HI 96720

1 ft.

Site 1 of 2 in cluster A

HI SPILLS: Relative: Lower Island: Hawaii

Supplemental Loc. Text: Not reported Actual: 20020104-0935 Case Number: 4 ft. HID Number: Not reported

Facility Registry Id: Not reported HEER EP&R Lead and Program: Not reported ER:

HELCO Transformer 6991 Units:

Substances: Shell Diala Oil Less Or Greater Than: Not reported **Numerical Quantity:** 30 Gallons Units: Activity Type: Response Activity Lead: **Terry Corpus**

Assignment End Date: Not reported Result: Not reported

File Under: Hawaii Electric Light Co., Inc. (HELCO)

Latitude: Not reported Longitude: Not reported

2 **HILO BAY** SPILLS S107024355 N/A

HILO, HI 96720 < 1/8 1 ft.

HI SPILLS: Island:

Hawaii Relative: Supplemental Loc. Text: Not reported Higher Case Number: 19960120-1030 Actual: Not reported HID Number: 13 ft.

Facility Registry Id: Not reported Lead and Program: HEER EP&R ER: Not reported

Hilo Bay Hotel Swimming Pool Incident Units:

Uranine Dye Substances: Less Or Greater Than: Not reported **Numerical Quantity:** Not reported Units: Not reported Activity Type: Response Activity Lead: Terry Corpus Assignment End Date: Not reported SOSC NFA Result: Not reported File Under: Latitude: Not reported Longitude: Not reported

Island: Hawaii Supplemental Loc. Text: Not reported Case Number: 20050909-1118 HID Number: Not reported Not reported Facility Registry Id: HEER EP&R Lead and Program:

ER: Drill

Direction Distance

Elevation Site Database(s) EPA ID Number

HILO BAY (Continued) S107024355

Units: DRILL - DRILL Hilo Bay Barge "Hui Mana" DRILL DRILL

Substances: Diesel Fuel
Less Or Greater Than: Not reported
Numerical Quantity: 40
Units: Gallons
Activity Type: Drill
Activity Lead: Terry Corpus

Assignment End Date: Not reported Result: Drill File Under: Not reported Latitude: Not reported Longitude: Not reported

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 20121002-1012
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None

Units: Hydraulic oil from Cruise Ship

Substances: Hydraulic Oil
Less Or Greater Than: Not reported
Numerical Quantity: 5
Units: Drops
Activity Type: Response
Activity Lead: Adam Teekell
Assignment End Date: 2012-10-02 00:00:00

Result: SOSC NFA
File Under: Not reported
Latitude: Not reported
Longitude: Not reported

A3 REEDS BAY BEACH PARK, (COUNTY OF HAWAII, DEPARTMENT OF PARK

225 BANYAN DRIVE

HILO, HI 96720

< 1/8 1 ft.

Site 2 of 2 in cluster A

Relative: FINDS:

Lower

Registry ID: 110046208171

Actual: 4 ft.

Environmental Interest/Information System

STATE MASTER

FINDS

1015858866

N/A

EDR ID Number

Map ID
Direction

MAP FINDINGS

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

HELCO PIPELINE ANOMALY AT NORTHEAST SIDE OF SEASIDE HOTEL SHWS S111677284
SSE 126 BANYAN WY SPILLS N/A

SSE 126 BANYAN WY 1/4-1/2 HILO, HI 96720

0.270 mi. 1427 ft.

Relative: SHWS:

Lower Organization: Not reported

Supplemental Location: Seaside Hotel
Actual: Island: Hawaii

3 ft. Environmental Interest: HELCO Shipman Plant Bunker Fuel Line

HID Number:

Facility Registry Identifier:

Lead Agency:

Program:

Project Manager:

Amelia Hicks

Project Manager: Amelia Hic Hazard Priority: NFA Potential Hazards And Controls: No Hazard Island: Hawaii

SDAR Environmental Interest Name: HELCO Shipman Plant Bunker Fuel Line

HID Number: Not reported Facility Registry Identifier: Not reported Lead Agency: HEER Potential Hazard And Controls: No Hazard

Priority: NFA

Assessment: Response Necessary
Response: Response Complete

Nature of Contamination: Not reported

Nature of Residual Contamination: TPH detected at maximum concentrations of 1,800 mg/kg (below State

Unrestricted Tier 2 Environmental Action Levels (HDOH EALs). No indications of leaks or other structural failures along the pipeline

and the excavated area was backfilled.

Use Restrictions: No Hazard Present For Unrestricted Residential Use

Engineering Control: Not reported Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Not reported

Site Closure Type: No Further Action Letter - Unrestricted Residential Use

Document Date: 07/16/2012 Document Number: 2012-433-AH

Document Subject: No Further Action Determination for HELCO Shipman Plant Bunker Fuel

Line

Project Manager: Amelia Hicks

Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island: Hawaii
Supplemental Loc. Text: Seaside Hotel
Case Number: 20100323-1647
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None

Units: HELCO Shipman Plant Bunker Fuel Line

Substances: Diesel Fuel Bunker
Less Or Greater Than: Not reported
Numerical Quantity: 25
Units: Gallons
Activity Type: Response

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HELCO PIPELINE ANOMALY AT NORTHEAST SIDE OF SEASIDE HOTEL (Continued)

S111677284

Activity Lead: Liz Galvez Assignment End Date: Not reported Result: Not reported

File Under: Hawaii Electric Light Co., Inc. (HELCO)

Latitude: Not reported Longitude: Not reported

Island: Hawaii Supplemental Loc. Text: Seaside Hotel Case Number: 20100323-1655 HID Number: Not reported Not reported Facility Registry Id: HEER EP&R Lead and Program: None

HELCO pipeline anomaly Units: Substances: **Bunker and Diesel**

Less Or Greater Than: Numerical Quantity: 25 Units: Gallons Activity Type: Response Activity Lead: Liz Galvez Assignment End Date: Not reported Result: Not reported

File Under: Hawaii Electric Light Co., Inc. (HELCO)

Latitude: Not reported Longitude: Not reported

LUST U001236861 **B5** KAM AVE 76 (#203)

SSE **1801 KAMEHAMEHA AVE UST** N/A

1/4-1/2 HILO, HI 96720 **SPILLS** 0.311 mi. **Financial Assurance**

1643 ft. Site 1 of 2 in cluster B

LUST: Relative:

Facility ID: 9-600013 Lower

Facility Status: Site Cleanup Completed (NFA) Actual:

12/27/2001 Facility Status Date: 11 ft. Release ID: 980027

Project Officer: Josh Nagashima

Facility ID: 9-600013

Facility Status: Site Cleanup Completed (NFA)

02/09/2009 Facility Status Date: Release ID: 040053 Project Officer: Josh Nagashima

UST:

9-600013 Facility ID:

Owner: Mid Pac Petroleum LLC Owner Address: 1132 Bishop Street, Suite 2500

Hilo, 96720 96720 Owner City, St, Zip: 19.722850 Latitude: Longitude: -155.063640 Horizontal Reference Datum Name: NAD83 Horizontal Collection Method Name: **GPS**

Tank ID: 1

Direction Distance Elevation

ce EDR ID Number on Site Database(s) EPA ID Number

KAM AVE 76 (#203) (Continued)

U001236861

Date Installed: 01/01/1998

Tank Status: Currently In Use

Date Closed: Not reported

Tank Capacity: 12000

Substance: Gasohol

Tank ID:

Date Installed: 01/01/1998

Tank Status: Currently In Use

Date Closed: Not reported

Tank Capacity: 12000

Substance: Gasohol

Tank ID: 2A

Date Installed: 01/01/1998

Tank Status: Currently In Use
Date Closed: Not reported
Tank Capacity: 8000
Substance: Gasohol

Tank ID: 2A

Date Installed: 01/01/1998

Tank Status: Currently In Use

Date Closed: Not reported

Tank Capacity: 8000

Substance: Gasohol

Tank ID: 2B

Date Installed: 01/01/1998

Tank Status: Currently In Use

Date Closed: Not reported

Tank Capacity: 4000

Substance: Diesel

Tank ID: 2B

Date Installed: 01/01/1998

Tank Status: Currently In Use
Date Closed: Not reported
Tank Capacity: 4000
Substance: Diesel

Tank ID: R-5361-1 Date Installed: 04/15/1968

Tank Status: Permanently Out of Use

Date Closed: 12/18/1997
Tank Capacity: 8000
Substance: Gasoline

Tank ID: R-5361-1 Date Installed: 04/15/1968

Direction Distance Elevation

tance EDR ID Number vation Site Database(s) EPA ID Number

KAM AVE 76 (#203) (Continued)

U001236861

Tank Status: Permanently Out of Use

Date Closed: 12/18/1997
Tank Capacity: 8000
Substance: Gasoline

Tank ID: R-5361-2 Date Installed: 04/15/1968

Tank Status: Permanently Out of Use

Date Closed: 12/18/1997
Tank Capacity: 8000
Substance: Gasoline

Tank ID: R-5361-2
Date Installed: 04/15/1968

Tank Status: Permanently Out of Use

Date Closed: 12/18/1997
Tank Capacity: 8000
Substance: Gasoline

Tank ID: R-5361-4
Date Installed: 04/15/1968

Tank Status: Permanently Out of Use

Date Closed: 12/18/1997
Tank Capacity: 550
Substance: Used Oil

Tank ID: R-5361-4
Date Installed: 04/15/1968

Tank Status: Permanently Out of Use

Date Closed: 12/18/1997
Tank Capacity: 550
Substance: Used Oil

HI SPILLS:

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 19980209-1345
HID Number: Not reported
Facility Registry Id: 110013768155
Lead and Program: HEER EP&R

ER: No

Units: Ota's Union Service Station Hydraulic Fluid Spill

Substances: Hydraulic Fluid

Less Or Greater Than:

Numerical Quantity:

Units:

Gallons

Activity Type:

Activity Lead:

Assignment End Date:

Result:

Result:

File Under:

Latitude:

Numerical Quantity:

Curtis Martin

Not reported

Not reported

Not reported

Not reported

Latitude: Not reported Longitude: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

KAM AVE 76 (#203) (Continued)

U001236861

EDR ID Number

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 19980209-1345
HID Number: Not reported
Facility Registry Id: 110013768155
Lead and Program: HEER EP&R

ER: No

Units: Ota's Union Service Station Hydraulic Fluid Spill

Substances: Hydraulic Fluid

Less Or Greater Than: Numerical Quantity: 1 Units: Gallons Response Activity Type: Activity Lead: Bill Perry Not reported Assignment End Date: Not reported Result: TOSCO Corporation File Under: Not reported Latitude: Longitude: Not reported

HI Financial Assurance:

Alt Facility ID: 9-600013 Tank Id: 2B

Tank Status: Currently In Use

FRTYPE: Other Expiration Date: Not reported

Alt Facility ID: 9-600013
Tank Id: 8-5361-4

Tank Status: Permanently Out of Use

FRTYPE: Other Expiration Date: Not reported

Alt Facility ID: 9-600013

Tank ld:

Tank Status: Currently In Use

FRTYPE: Other

Expiration Date: Not reported

Alt Facility ID: 9-600013
Tank Id: 2A

Tank Status: Currently In Use

FRTYPE: Other Expiration Date: Not reported

 Alt Facility ID:
 9-600013

 Tank Id:
 R-5361-2

Tank Status: Permanently Out of Use

FRTYPE: Other Expiration Date: Not reported

Alt Facility ID: 9-600013
Tank Id: 8-5361-1

Tank Status: Permanently Out of Use

FRTYPE: Other Expiration Date: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

KAM AVE 76 (#203) (Continued)

U001236861

Alt Facility ID: 9-600013 R-5361-4 Tank Id:

Tank Status: Permanently Out of Use

FRTYPE: Insurance **Expiration Date:** 03/31/2015

9-600013 Alt Facility ID: Tank Id: R-5361-2

Tank Status: Permanently Out of Use

FRTYPE: Insurance **Expiration Date:** 03/31/2015

9-600013 Alt Facility ID: Tank Id:

Tank Status: Currently In Use FRTYPE: Insurance **Expiration Date:** 03/31/2015

Alt Facility ID: 9-600013

Tank Id: 2A

Tank Status: Currently In Use FRTYPE: Insurance **Expiration Date:** 03/31/2015

Alt Facility ID: 9-600013

Tank Id:

Tank Status: Currently In Use FRTYPE: Insurance **Expiration Date:** 03/31/2015

Alt Facility ID: 9-600013 R-5361-1 Tank Id:

Tank Status: Permanently Out of Use

FRTYPE: Insurance **Expiration Date:** 03/31/2015

U003732598 **KUMU STREET** LUST

SSE KUMU STREET AND KAMEHAMEHA AVE **UST** N/A

1/4-1/2 HILO, HI 96720 **Financial Assurance**

0.327 mi.

B6

1728 ft. Site 2 of 2 in cluster B

LUST: Relative:

Facility ID: 9-603630 Higher

Facility Status: Site Cleanup Completed (NFA)

Actual: 06/27/2000 Facility Status Date: 12 ft. 000076 Release ID: Project Officer: Jose Ruiz

UST:

9-603630 Facility ID:

Owner: COUNTY OF HAWAII - DEPT OF PUBLIC WORKS

Owner Address: 25 AUPUNI ST, RM 202 Owner City,St,Zip: Hilo. 96720 96720 Latitude: 19.722420 Longitude: -155.082126 Horizontal Reference Datum Name: Not reported

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

KUMU STREET (Continued) U003732598

Horizontal Collection Method Name: Not reported

Tank ID: R-1

Date Installed: Not reported

Tank Status: **Permanently Out of Use**

03/21/2000 Date Closed: Tank Capacity: 1000 Substance: Gasoline

HI Financial Assurance:

Alt Facility ID: 9-603630 Tank Id: R-1

Tank Status: Permanently Out of Use

FRTYPE: Self Insured **Expiration Date:** Not reported

SHWS **C7 PACIFIC MACHINERY** 1000252024 **ESE 456 KALANIANAOLE AVE** LUST N/A

1/4-1/2 HILO, HI 96720

0.339 mi.

1789 ft. Site 1 of 2 in cluster C

SHWS: Relative:

Organization: Not reported Lower Supplemental Location: Not reported

Actual: Island: Hawaii

8 ft. **Environmental Interest:** Pacific Machinery, Inc. Kalanianaole Avenue

> HID Number: Not reported Facility Registry Identifier: Not reported Lead Agency: **HEER** Program: State

Project Manager: Mark Sutterfield

Hazard Priority: NFA Potential Hazards And Controls: No Hazard Island: Hawaii

SDAR Environmental Interest Name: Pacific Machinery, Inc. Kalanianaole Avenue

HID Number: Not reported Facility Registry Identifier: Not reported Lead Agency: **HEER** Potential Hazard And Controls: No Hazard Priority: NFA

Assessment: Response Necessary Response Complete Response:

Nature of Contamination: Not reported

Nature of Residual Contamination: Petroleum contaminated soil

Use Restrictions: No Hazard Present for Unrestricted Residential Use

Engineering Control: Not reported Description of Restrictions: Not reported Not reported Institutional Control: Within Designated Areawide Contamination: Not reported

No Further Action Letter - Unrestricted Residential Use Site Closure Type:

Document Date: 11/05/2004 **Document Number:** 2004-464-MS

NFA for Wash Rack in Hilo **Document Subject:**

Project Manager: Mark Sutterfield

Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

UST

Direction Distance

Elevation Site Database(s) EPA ID Number

PACIFIC MACHINERY (Continued)

1000252024

EDR ID Number

LUST:

Facility ID: 9-600710

Facility Status: Site Cleanup Completed (NFA)

Facility Status Date: 10/25/1996 Release ID: 950071 Project Officer: Janet Sherrer

UST:

Facility ID: 9-600710

Owner: PACIFIC MACHINERY

Owner Address:

Owner City,St,Zip:

Latitude:

Longitude:

Hilo, 96720 96720

19.725652

-155.057680

Horizontal Reference Datum Name:

NAD83

Horizontal Collection Method Name: Address Matching

Tank ID: R-1

Date Installed: 03/27/1962

Tank Status: Permanently Out of Use

Date Closed: 03/29/1995
Tank Capacity: 1000
Substance: Gasoline

 Tank ID:
 R-2

 Date Installed:
 03/27/1962

Tank Status: Permanently Out of Use

Date Closed: 06/29/1995
Tank Capacity: 550
Substance: Other

Tank ID: R-3
Date Installed: 03/27/1962

Tank Status: Permanently Out of Use

Date Closed:03/29/1995Tank Capacity:550Substance:Diesel

HAMAKUA SUGAR COMPANY, INC - WAIPUNALEI

SSE 36-2622 MAMALOAHOA HWY

1/4-1/2 WAIPUNALEI, HI

356 mi

0.356 mi. 1879 ft.

Actual:

Relative: SHWS:

Lower Organization: Not reported

Supplemental Location: Not reported Island: Hawaii

10 ft. Environmental Interest: Waipunalei Seed Dipping Plant

HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: Site Discovery
Project Manager: John Peard
Hazard Priority: Medium

S108859918

N/A

SHWS

ENG CONTROLS

INST CONTROL

Direction Distance

Elevation Site Database(s) EPA ID Number

HAMAKUA SUGAR COMPANY, INC - WAIPUNALEI (Continued)

S108859918

EDR ID Number

Potential Hazards And Controls: Hazard Managed With Controls

Island: Hawaii

SDAR Environmental Interest Name: Waipunalei Seed Dipping Plant

HID Number: Not reported Facility Registry Identifier: Not reported Lead Agency: HEER

Potential Hazard And Controls: Hazard Managed With Controls

Priority: Medium

Assessment: Assessment Ongoing

Response: Not reported

Nature of Contamination: Found: Mercury from seed cane dipping operations

Nature of Residual Contamination: Not reported

Use Restrictions: Controls Required to Manage Contamination

Engineering Control: Engineering Control Required

Description of Restrictions: Not reported

Institutional Control: Government - Hawaii Dept. of Health Letter Issued

Within Designated Areawide Contamination:
Site Closure Type:
Document Date:
Document Number:
Document Subject:
Project Manager:

Not reported
Not reported
Not reported
Not reported
John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

ENG CONTROLS:

Supplemental Location Text: Not reported Zip Suffix: Not reported Island: Hawaii

Potential Hazards And Controls: Hazard Managed With Controls Engineering Control: Engineering Control Required

INST CONTROL:

Potential hazards and controls: Hazard Managed With Controls

Supplemental Location: Not reported Zip Suffix: Not reported Island: Hawaii

Institutional Control: Government - Hawaii Dept. of Health Letter Issued

D9 HARPER CAR & TRUCK RENTALS OF HAWAII

South 1690 KAMEHAMEHA AVE 1/4-1/2 HILO, HI 96720

0.363 mi.

1914 ft. Site 1 of 2 in cluster D

Relative: LUST:

Lower Facility ID: 9-603156

Facility Status: Site Cleanup Completed (NFA)

 Actual:
 Facility Status Date:
 06/24/2000

 9 ft.
 Release ID:
 960054

 Project Officer:
 Richard Takaba

UST:

Facility ID: 9-603156

Owner: Harper Car & Truck Rentals of Hawaii

Owner Address: 4456 KALANIANAOLE AVE

LUST

UST

U003222397

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

HARPER CAR & TRUCK RENTALS OF HAWAII (Continued)

U003222397

Owner City, St, Zip: Hilo, 96720 96720 Latitude: 19.722400 Longitude: -155.064895 Horizontal Reference Datum Name: NAD83

Horizontal Collection Method Name: Address Matching

Tank ID: R-1

Date Installed: Not reported

Tank Status: Permanently Out of Use

Date Closed: 04/02/1996 Tank Capacity: 1000 Diesel Substance:

Tank ID: R-2

Date Installed: Not reported

Tank Status: **Permanently Out of Use**

04/02/1996 Date Closed: Tank Capacity: 8050 Substance: Gasoline

D10 U003402964 **TESORO GAS EXPRESS 82** LUST **1672 KAMEHAMEHA AVE** South **UST** N/A

1/4-1/2 HILO, HI 96720 **Financial Assurance**

0.366 mi.

1930 ft. Site 2 of 2 in cluster D

LUST: Relative:

9-600708 Facility ID: Lower

Facility Status: Site Cleanup Completed (NFA) Actual: 06/19/2000

Facility Status Date: 9 ft. Release ID: 940057 Project Officer: Jeffrey Ung

UST:

Facility ID: 9-600708

Tesoro Refining & Marketing Company, LLC Owner:

Owner Address: 3450 S. 344th Way, Suite 201

Owner City, St, Zip: Hilo, 96720 96720 Latitude: 19.722237 Longitude: -155.065577 Horizontal Reference Datum Name: NAD83 Horizontal Collection Method Name: **GPS**

Tank ID: R-1

Date Installed: 05/11/1956

Tank Status: **Permanently Out of Use**

04/17/1994 Date Closed: Tank Capacity: 3000 Substance: Gasoline

Tank ID: R-2 Date Installed: 05/11/1956

Tank Status: **Permanently Out of Use**

Date Closed: 04/17/1994 Tank Capacity: 2000

Distance

Elevation Site Database(s) EPA ID Number

TESORO GAS EXPRESS 82 (Continued)

U003402964

EDR ID Number

Substance: Gasoline

Tank ID: R-5
Date Installed: 05/11/1956

Tank Status: Permanently Out of Use

Date Closed: 04/17/1994
Tank Capacity: 500
Substance: Used Oil

Tank ID: r-87
Date Installed: 04/01/1988

Tank Status: Permanently Out of Use

Date Closed: 05/04/2005
Tank Capacity: 8000
Substance: Gasoline

Tank ID: r-92
Date Installed: 04/01/1988

Tank Status: Permanently Out of Use

Date Closed: 05/04/2005
Tank Capacity: 8000
Substance: Gasoline

HI Financial Assurance:

Alt Facility ID: 9-600708 Tank Id: 8-5

Tank Status: Permanently Out of Use

FRTYPE: Guarantee Expiration Date: Not reported

Alt Facility ID: 9-600708 Tank Id: r-92

Tank Status: Permanently Out of Use

FRTYPE: Other

Expiration Date: Not reported

Alt Facility ID: 9-600708
Tank Id: r-92

Tank Status: Permanently Out of Use

FRTYPE: Guarantee Expiration Date: Not reported

Alt Facility ID: 9-600708
Tank Id: r-87

Tank Status: Permanently Out of Use

FRTYPE: Other Expiration Date: Not reported

Alt Facility ID: 9-600708
Tank Id: 8-5

Tank Status: Permanently Out of Use

FRTYPE: Other Expiration Date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

TESORO GAS EXPRESS 82 (Continued)

U003402964

EDR ID Number

Alt Facility ID: 9-600708 Tank Id: 8-2

Tank Status: Permanently Out of Use

FRTYPE: Other Expiration Date: Not reported

Alt Facility ID: 9-600708
Tank Id: 9-600708

Tank Status: Permanently Out of Use

FRTYPE: Guarantee Expiration Date: Not reported

Alt Facility ID: 9-600708
Tank Id: 8-1

Tank Status: Permanently Out of Use

FRTYPE: Other Expiration Date: Not reported

Alt Facility ID: 9-600708 Tank Id: R-1

Tank Status: Permanently Out of Use

FRTYPE: Guarantee Expiration Date: Not reported

Alt Facility ID: 9-600708 Tank Id: r-87

Tank Status: Permanently Out of Use

FRTYPE: Guarantee Expiration Date: Not reported

11 KUWAYE TRUCKING INC. SE 2055 KAMEHAMEHA AVE

1/4-1/2 HILO, HI 96720

0.369 mi. 1950 ft.

Relative: LUST:

Higher Facility ID: 9-600652

Facility Status: Site Cleanup Completed (NFA)

Actual: Site Cleanup Completed (NFA)

Og/20/1996

 Actual:
 Facility Status Date:
 09/20/1996

 19 ft.
 Release ID:
 920188

Project Officer: Janet Sherrer

UST:

Facility ID: 9-600652

Owner: KUWAYE TRUCKING INC.
Owner Address: 2055 KAMEHAMEHA AVE

Owner City,St,Zip: Hilo, 96720 96720
Latitude: 19.722743
Longitude: -155.060017
Horizontal Reference Datum Name: NAD83

Horizontal Collection Method Name: Address Matching

Tank ID: R-1
Date Installed: 05/05/1961

Tank Status: Permanently Out of Use

Date Closed: 05/19/1992

LUST

UST

U003155188

N/A

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

KUWAYE TRUCKING INC. (Continued)

U003155188

1007092162

HIT000610899

RCRA-TSDF

RCRA-SQG

Tank Capacity: 7000 Substance: Diesel

Tank ID: R-2

Date Installed: 05/05/1961

Tank Status: **Permanently Out of Use**

Date Closed: 05/19/1993 Tank Capacity: 7000 Substance: Gasoline

Tank ID: R-3 Date Installed: 05/05/1961

Tank Status: **Permanently Out of Use**

Date Closed: 12/30/1986 Tank Capacity: Not reported Substance: Used Oil

12 SHIPMAN GENERATING STATION SSW **20 BANYAN DRIVE**

HILO, HI 96720

1/4-1/2 0.372 mi. 1962 ft.

RCRA-TSDF: Relative:

Date form received by agency: 03/19/2003 Lower

Facility name: SHIPMAN GENERATING STATION

Actual: Facility address: 20 BANYAN DRIVE

8 ft.

HILO, HI 96720 EPA ID: HIT000610899

Mailing address: P.O. BOX 1027 HILO, HI 96721-1027 DONN F FUKADA Contact:

Contact address: Not reported Not reported

Contact country: US

Contact telephone: 808-543-4525 Contact email: Not reported

EPA Region: 09 Land type: Private Classification: **TSDF**

Description: Handler is engaged in the treatment, storage or disposal of hazardous

waste

Owner/Operator Summary:

Owner/operator name: HAWAII ELEC LIGHT CO

Owner/operator address: Not reported Not reported Owner/operator country:

Owner/operator telephone: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 01/01/1920 Owner/Op end date: Not reported

HAWAII ELECTRIC LIGHT COMPANY, INC. Owner/operator name:

Direction Distance Elevation

tion Site Database(s) EPA ID Number

SHIPMAN GENERATING STATION (Continued)

1007092162

EDR ID Number

Owner/operator address: Not reported

Owner/operator country: US

Owner/operator telephone: Not reported Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1920
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: Yes Used oil transfer facility: No Used oil transporter: No

Waste code: D001

. Waste name: IGNITABLE WASTE

. Waste code: D006 . Waste name: CADMIUM

Waste code: D008
Waste name: LEAD

Historical Generators:

Date form received by agency: 10/05/1993

Site name: HAWAII ELECTRIC LIGHT CO SHIPMAN GEN STE

Classification: Not a generator, verified

Date form received by agency: 07/29/1993

Site name: HAWAII ELECTRIC LIGHT CO SHIPMAN GEN STE

Classification: Not a generator, verified

Facility Has Received Notices of Violations:

Regulation violated:

Not reported

Area of violation: Generators - Pre-transport

Date violation determined: 01/18/2008
Date achieved compliance: 09/03/2008
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 01/18/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

SHIPMAN GENERATING STATION (Continued)

1007092162

S106815615

N/A

Final penalty amount: Not reported Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General

Date violation determined: 01/18/2008
Date achieved compliance: 09/03/2008
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 01/18/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 09/26/2007

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 09/03/2008 Evaluation lead agency: State

Evaluation date: 09/26/2007

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - Pre-transport

Date achieved compliance: 09/03/2008 Evaluation lead agency: State

C13 KTA/DAVIES PROPERTY SHWS
ESE 500 KALANIANAOLE HWY SPILLS

1/4-1/2 0.372 mi.

1963 ft. Site 2 of 2 in cluster C

HILO, HI 96720

Relative: SHWS:

Lower Organization: Not reported Supplemental Location: Not reported

Actual: Island: Hawaii
9 ft. Environmental Interest: KTA/De

Environmental Interest: KTA/Davies Property

HID Number: Not reported Facility Registry Identifier: 110013771908

Lead Agency: HEER Program: State

Project Manager: Mark Sutterfield Hazard Priority: NFA

Potential Hazards And Controls: No Hazard Island: Hawaii

SDAR Environmental Interest Name: KTA/Davies Property HID Number: KTA/Davies Property Not reported

Facility Registry Identifier: 110013771908 Lead Agency: HEER

Potential Hazard And Controls: No Hazard Priority: NFA

Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: TPH-D,O in soil

Direction Distance

Elevation Site Database(s) EPA ID Number

KTA/DAVIES PROPERTY (Continued)

S106815615

EDR ID Number

Nature of Residual Contamination: Petroleum contaminated soil

Use Restrictions: No Hazard Present For Unrestricted Residential Use

Engineering Control:

Description of Restrictions:

Institutional Control:

Within Designated Areawide Contamination:

Not reported

Not reported

Site Closure Type: No Further Action Letter - Unrestricted Residential Use

Document Date: 07/27/2006
Document Number: 2006-461-MS

Document Subject: NFA for petroleum contaminated soil

Project Manager: Mark Sutterfield

Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

HI SPILLS:

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 20020701-1052
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R

ER: No

Units: 500 Kalanianaole Ave, truck accident

Substances: Diesel Fuel Less Or Greater Than: Not reported Not reported **Numerical Quantity:** Units: Not reported Activity Type: Response Activity Lead: Terry Corpus Assignment End Date: Not reported Result: SOSC NFA Not reported File Under: Latitude: Not reported Longitude: Not reported

E14 WOOD PROTECTION CO SEMS-ARCHIVE 1015733383
SE 150 KEAA ST RCRA-LQG HID981164254

1/4-1/2 HILO, HI 96720

0.385 mi.

2034 ft. Site 1 of 3 in cluster E

Relative: SEMS-ARCHIVE:

Higher Site ID: 902890

EPA ID: HID981164254

Actual: Federal Facility: N

18 ft. NPL: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Following information was gathered from the prior CERCLIS update completed in 10/2013:

Site ID: 0902890

Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL

Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13037336.00000
Person ID: 9000059.00000

Direction Distance

Elevation Site Database(s) EPA ID Number

WOOD PROTECTION CO (Continued)

1015733383

EDR ID Number

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: WOOD PROTECTION INC.

Alias Address: Not reported

НΙ

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY

Date Started: / /
Date Completed: 09/14/90
Priority Level: Not reported

Action: ARCHIVE SITE

Date Started: //
Date Completed: 09/27/96
Priority Level: Not reported

Action: SITE INSPECTION

Date Started: 06/07/95 Date Completed: 09/27/96

Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: PRELIMINARY ASSESSMENT

Date Started:

Date Completed: 07/31/91

Priority Level: Higher priority for further assessment

RCRA-LQG:

Date form received by agency: 05/29/2013

Facility name: WOOD PROTECTION CO

Facility address: 150 KEAA ST HILO, HI 96720

EPA ID: HID981164254

Contact: ENVIRONMENTAL MANAGER

Contact address: 150 KEAA ST

HILO, HI 96720

Contact country: US

Contact telephone: (808) 961-4477 Contact email: Not reported

EPA Region: 09

Land type: Other land type

Classification: Large Quantity Generator

Description: Handler: generates 1,000 kg or more of hazardous waste during any

calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely

hazardous waste during any calendar month, and accumulates more than

100 kg of that material at any time

Owner/Operator Summary:

Direction Distance Elevation

on Site Database(s) EPA ID Number

WOOD PROTECTION CO (Continued)

1015733383

EDR ID Number

Owner/operator name: HAWAII PLANING MILL, LTD

Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212

Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NOT REQUIRED Owner/operator address: NOT REQUIRED

NOT REQUIRED, ME 99999

Owner/operator country:

Owner/operator telephone:

Legal status:

Owner/Operator Type:

Owner/Op start date:

Owner/Op end date:

Not reported

Not reported

Not reported

Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 02/14/1994

Site name: WOOD PROTECTION CO Classification: Large Quantity Generator

Date form received by agency: 11/26/1985

Site name: WOOD PROTECTION CO Classification: Large Quantity Generator

Facility Has Received Notices of Violations:

Regulation violated: S - 262.10-12.A Area of violation: Generators - General

Date violation determined: 11/27/2002
Date achieved compliance: 12/31/2002
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 11/27/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

WOOD PROTECTION CO (Continued)

1015733383

EDR ID Number

Enforcement lead agency:
Proposed penalty amount:
Final penalty amount:
Paid penalty amount:
Not reported
Not reported

Regulation violated: FR - 262.10-12.A Area of violation: Generators - General

Date violation determined: 04/13/1987 09/09/1993 Date achieved compliance: Violation lead agency: **EPA** Not reported Enforcement action: Enforcement action date: Not reported Enf. disposition status: Not reported Enf. disp. status date: Not reported Enforcement lead agency: Not reported Proposed penalty amount: Not reported Not reported Final penalty amount: Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 01/17/2013

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 02/06/2009

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation:
Date achieved compliance:
Evaluation lead agency:
Not reported
Not reported
State

Evaluation date: 08/23/2002

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 12/31/2002 Evaluation lead agency: State

Evaluation date: 09/09/1993

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/13/1987

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 09/09/1993 Evaluation lead agency: EPA

Direction Distance

Elevation Site Database(s) **EPA ID Number**

E15 WOOD PROTECTION COMPANY (HPM BUILDING SUPPLY) SHWS S104657437 **SPILLS** N/A

SE 150 KEAA ST 1/4-1/2 HILO, HI 96720

0.385 mi.

2034 ft. Site 2 of 3 in cluster E

SHWS: Relative:

Higher Organization: Not reported Supplemental Location: Not reported

Actual: Island: Hawaii 18 ft.

Environmental Interest: HPM Building Supply DBA-Hawaii Wood Protection, Inc. HID Number: HID981164254

Facility Registry Identifier: 110002148658 Lead Agency: **HEER** Program: State Project Manager: John Peard Hazard Priority: Low

Potential Hazards And Controls: Hazard Present

Island: Hawaii

SDAR Environmental Interest Name: HPM Building Supply DBA-Hawaii Wood Protection, Inc.

HID Number: HID981164254 Facility Registry Identifier: 110002148658

Lead Agency: **HEER**

Potential Hazard And Controls: Hazard Present

Priority: Low

Assessment: Assessment Ongoing

Response: Not reported

Nature of Contamination: Presumed: Copper, chromium and arsenic in soil.

Nature of Residual Contamination: Not reported

Use Restrictions: Controls Required to Manage Contamination **Engineering Control:** Not reported

Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Not reported Site Closure Type: Not reported **Document Date:** Not reported Not reported Document Number: Not reported **Document Subject:** Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

HI SPILLS:

Island: Hawaii Supplemental Loc. Text: Not reported Case Number: 19900722 HID Number: HID981164254 Facility Registry Id: 110002148658 Lead and Program: HEER EP&R

ER: Yes

HPM Building Supply (Wood Protection Co.) Units:

Substances: Chromated Copper Arsenate

Less Or Greater Than: Not reported **Numerical Quantity:** 4000 Gallons Units: Response Activity Type: Activity Lead: Mike Cripps Assignment End Date: Not reported Result: Refer to SDAR **EDR ID Number**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

WOOD PROTECTION COMPANY (HPM BUILDING SUPPLY) (Continued)

S104657437

File Under: **HPM Building Supply** Latitude: 19.724579

Longitude: -155.058813

E16 **ALLIED AGGREGATES CORP** LUST U001237028 UST N/A

SE 160 KEAA ST 1/4-1/2 HILO, HI 96720

0.406 mi.

2144 ft. Site 3 of 3 in cluster E

LUST: Relative:

9-601306 Facility ID: Higher

Site Cleanup Completed (NFA) Facility Status:

Actual: 01/21/1998 Facility Status Date: 20 ft. Release ID: 900109 Project Officer: Steven Okoji

UST:

Facility ID: 9-601306

Owner: ALLIED AGGREGATES CORPORATION

Owner Address: 160 KEAA St Owner City, St, Zip: Hilo, 96720 96720 Latitude: 19.722814 Longitude: -155.059021 Horizontal Reference Datum Name: NAD83

Address Matching Horizontal Collection Method Name:

Tank ID: R-1 Date Installed: 05/05/1972

Tank Status: Permanently Out of Use

Date Closed: 06/29/1990 Tank Capacity: 5000 Diesel Substance:

Tank ID: R-2 05/05/1972 Date Installed:

Permanently Out of Use Tank Status:

Date Closed: 06/29/1990 Tank Capacity: 2000 Substance: Gasoline

F17 **TESORO HAWAII CORPORATION TERMINAL DEPARTMENT - 595 KALANIAN** SHWS S106820587

East 595 KALANIANAOLE AVE SPILLS N/A

1/4-1/2 HILO, HI 96720

0.419 mi.

2210 ft. Site 1 of 2 in cluster F

SHWS: Relative:

Lower Organization: Not reported Hilo Terminal Supplemental Location:

Actual: Island: Hawaii

5 ft. Environmental Interest: Tesoro Hilo Terminal 2 Lead Contamination

> HID Number: Not reported Facility Registry Identifier: 110001412490

Lead Agency: **HEER**

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

TESORO HAWAII CORPORATION TERMINAL DEPARTMENT - 595 KALANIAN (Continued)

S106820587

Program: State Project Manager: John Peard Hazard Priority: Low

Potential Hazards And Controls: Hazard Undetermined

Island: Hawaii

Tesoro Hilo Terminal 2 Lead Contamination SDAR Environmental Interest Name:

Not reported HID Number: 110001412490 Facility Registry Identifier:

Lead Agency: **HEER**

Potential Hazard And Controls: Hazard Undetermined

Priority: Low

Assessment: Assessment Ongoing

Response: Not reported

Nature of Contamination: Found: Subsurface petroleum contamination.

Nature of Residual Contamination: Not reported Use Restrictions: Undetermined **Engineering Control:** Not reported Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Hilo Wharf Site Closure Type: Not reported **Document Date:** Not reported **Document Number:** Not reported **Document Subject:** Not reported Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

HI SPILLS:

Hawaii Island:

Supplemental Loc. Text: Hilo Terminal 2 Case Number: 20090130-1055 HID Number: Not reported Facility Registry Id: Not reported Lead and Program: HEER EP&R

ER: None

Tessoro HiloTerminal 2 Lead Units:

Substances: Lead Less Or Greater Than: Not reported

Numerical Quantity:

Units: Not reported Activity Type: Response Activity Lead: Mike Cripps

2009-06-04 00:00:00 Assignment End Date: Result: Refer to SDAR

File Under: Tesoro Hawaii Corporation

Latitude: 19.7272 -155.0562 Longitude:

Island: Hawaii Supplemental Loc. Text: Hilo Terminal 2 Case Number: 20090130-1055 HID Number: Not reported Facility Registry Id: Not reported HEER EP&R Lead and Program:

ER: None

Tessoro HiloTerminal 2 Lead Units:

Direction Distance

Elevation Site Database(s) EPA ID Number

TESORO HAWAII CORPORATION TERMINAL DEPARTMENT - 595 KALANIAN (Continued)

S106820587

EDR ID Number

Substances: Lead
Less Or Greater Than: Not reported

Numerical Quantity: 0

Units: Not reported Activity Type: Response Activity Lead: Mike Cripps

Assignment End Date: 2009-08-28 00:00:00
Result: copy of followup to SDAR
File Under: Tesoro Hawaii Corporation

Latitude: 19.7272 Longitude: -155.0562

Island: Hawaii
Supplemental Loc. Text: Hilo Terminal
Case Number: 20110302-1330
HID Number: Not reported
Facility Registry Id: 110001412490
Lead and Program: HEER EP&R
ER: Not reported

Units: Tesoro Hilo Terminal 2 Petroleum Contamination

Substances: Oil

Less Or Greater Than:
Not reported
Numerical Quantity:
Not reported
Units:
Unknown
Activity Type:
Activity Lead:
Liz Galvez

Assignment End Date: 2011-03-02 00:00:00 Result: Refer to SDAR

File Under: Tesoro Hawaii Corporation

Latitude: 19.66932 Longitude: -155.307075

Island: Hawaii
Supplemental Loc. Text: Hilo Terminal
Case Number: 19881024
HID Number: Not reported
Facility Registry Id: 110001412490
Lead and Program: HEER EP&R
ER: Not reported

Units: MS Petroleum (J. Clayton)

Substances: Gasoline Less Or Greater Than: Not reported **Numerical Quantity:** 1000 Gallons Units: Activity Type: Response Activity Lead: Not reported Assignment End Date: Not reported SOSC NFA Result:

File Under: Tesoro Hawaii Corporation

Latitude: 19.66932 Longitude: -155.307075 Map ID
Direction

MAP FINDINGS

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

F18 TESORO HAWAII CORPORATION TERMINAL DEPARTMENT - 607 KALANIAN SHWS S108008629

607 KALANIANAOLE AVE AIRS N/A

1/4-1/2 HILO, HI 96720

0.448 mi.

East

2364 ft. Site 2 of 2 in cluster F

Relative: SHWS:

Lower Organization: Not reported

Supplemental Location: Heeia Kea Boat Harbor Pier

Actual: Island: Hawaii

Engineering Control:

5 ft. Environmental Interest: TOSCO Corporation - Hilo Terminal (0276)

HID Number:

Facility Registry Identifier:
Lead Agency:
Program:
Project Manager:
Hazard Priority:

Not reported
110006645924
HEER
State
John Peard
Low

Potential Hazards And Controls: Hazard Present

Island: Hawaii

SDAR Environmental Interest Name: TOSCO Corporation - Hilo Terminal (0276)

HID Number: Not reported Facility Registry Identifier: 110006645924

Lead Agency: HEER

Potential Hazard And Controls: Hazard Present

Priority: Low

Assessment: Assessment Ongoing

Response: Not reported

Nature of Contamination: Found: Subsurface petroleum contamination.

Nature of Residual Contamination: No contamination above HDOH EALs.

Use Restrictions: Controls Required to Manage Contamination

Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Hilo Wharf Site Closure Type: Not reported **Document Date:** Not reported Not reported **Document Number:** Not reported **Document Subject:** Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

Not reported

Organization: Not reported

Supplemental Location: Hilo Terminal 607 Kalanianaole Avenue

Island: Hawaii

Environmental Interest: Tesoro Terminal 607 Kalanianaole

HID Number: Not reported
Facility Registry Identifier: 110006645924
Lead Agency: HEER
Program: State
Project Manager: Richard Palmer

Hazard Priority: NFA

Potential Hazards And Controls: Hazard Undetermined

Island: Hawaii

SDAR Environmental Interest Name: Tesoro Terminal 607 Kalanianaole

HID Number: Not reported Facility Registry Identifier: 110006645924

Lead Agency: HEER

Potential Hazard And Controls: Hazard Undetermined

Direction Distance

Elevation Site Database(s) EPA ID Number

TESORO HAWAII CORPORATION TERMINAL DEPARTMENT - 607 KALANIAN (Continued)

S108008629

EDR ID Number

Priority: NFA

Assessment: Response Necessary
Response: Response Complete

Nature of Contamination: Not reported

Nature of Residual Contamination: Release resolved below HDOH EALs in soil. Contamination at the

remainder of site is unknown.

Use Restrictions:

Engineering Control:

Description of Restrictions:

Institutional Control:

Within Designated Areawide Contamination:

Undetermined

Not reported

Not reported

Hilo Wharf

Site Closure Type: No Further Action Letter - Unrestricted Residential Use

Document Date: 08/18/2008
Document Number: 2008-541-RP

Document Subject: No Further Action determination for Release Report 19971110-0001

Project Manager: Richard Palmer

Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

AIRS:

Facility ID: 0066-03-C Island: Hawaii

Mailing Address: 607 Kalanianaole Highway

Locale: Not reported
Business Phone: 808-961-3177
Mailing City,St,Zip: Hilo, Hawaii 96720
Contact Name: Jack Clayton

Contact Title: Hili Terminal Supervisor

Description: Hilo Terminal No. 3ATTACHMENT IIA: SPECIAL CONDITIONS - EQUIPMENT IN

GASOLINE SERVICEAttachment IIA of this permit encompasses each piece

of equipment used in a system that transfers gasoline or gasoline vapors. Equipment under Attachment IIA is each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, flange or other connector in the gasoline liquid transfer, and vapor collection systems. Equipment under Attachment IIA also includes the entire vapor processing system except for exhaust port(s) or stack(s).ATTACHMENT IIB: SPECIAL CONDITIONS - STORAGE TANKS1. Attachment IIB of this permit encompasses the following storage tanks: Tank No. Capacity(gallons) Tank Description 3708420,000 internal floating roof with primary seal and optional secondary seal 4279420,000 internal floating roof with primary seal and optional secondary seal 42981,680,000 internal floating roof with primary seal and optional secondary seal4299159,600 internal floating roof with primary seal and optional secondary seal-----greater than or equal to 40,000 gallonsTanks storing volatile organic liquid with true vapor pressure equal to or greater than 1.5 psia ATTACHMENT IIC:

SPECIAL CONDITIONS - BOTTOM LOADING LOAD RACK1. Attachment IIC of this

permit encompasses the following equipment and associated appurtenances:a.Bottom loading load rack with two (2) loading stations and four (4) total combined load arms; andb. John Zink vapor collection system with 3,600 gallon per minute capacity vapor

recovery unit, model no. MR-2x184DT, job no. 99145.

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

19 KUAWA STREET SOCCER FIELDS DEVELOPMENT SITE SHWS S118422838 SSW N/A

KAMEHAMEHA HWY AND MANONO ST

1/4-1/2 HILO, HI 96720

0.477 mi. 2520 ft.

SHWS: Relative:

Organization: Not reported Lower

Supplemental Location: Not reported Actual: Island: Hawaii

3 ft. **Environmental Interest:** Kuawa Street Soccer Fields Development Site

HID Number: Not reported Facility Registry Identifier: Not reported **HEER** Lead Agency: Program: State Project Manager: John Peard Hazard Priority: Medium Potential Hazards And Controls: Hazard Present

Island: Hawaii

SDAR Environmental Interest Name: Kuawa Street Soccer Fields Development Site

HID Number: Not reported Facility Registry Identifier: Not reported **HEER** Lead Agency:

Potential Hazard And Controls: Hazard Present Medium Priority:

Assessment: Response Necessary Response: Response Ongoing

Nature of Contamination: Found: Contaminants found over Tier 1 EALs in site screening: Lead and

Arsenic Nature of Residual Contamination: Not reported

Use Restrictions: Controls Required to Manage Contamination

Engineering Control: Not reported Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Not reported Site Closure Type: Not reported Document Date: Not reported Document Number: Not reported **Document Subject:** Not reported

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

John Peard

G20 ALOHA PETROLEUM HILO WEST TERMINAL RCRA-SQG 1000288041

661 KALANIANAOLE AVE East SHWS HID000631531 HILO, HI 96720 **SPILLS** 1/4-1/2

0.489 mi. **US AIRS** 2581 ft. Site 1 of 3 in cluster G **AIRS**

RCRA-SQG: Relative:

Date form received by agency: 08/06/2015 Lower

Project Manager:

ALOHA PETROLEUM HILO WEST TERMINAL Facility name:

Actual: Facility address: 661 KALANIANAOLE AVE 6 ft.

HILO, HI 96720 EPA ID: HID000631531

Contact: KELVIN CHUN

Contact address: 661 KALANIANAOLE AVE

HILO, HI 96720

Contact country: US

(808) 935-8288 Contact telephone:

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Contact email: KCHUN@ALOHAGAS.COM

EPA Region: 09 Land type: Private

Classification: Small Small Quantity Generator

Description: Handler: generates more than 100 and less than 1000 kg of hazardous

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of

hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: ALOHA PETROLEUM LLC, A DELAWARE LLC

Owner/operator address: 1132 BISHOP ST SUITE 1700

HONOLULU, 96813

Owner/operator country: US

Owner/operator telephone: 808-373-6733
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/01/2015
Owner/Op end date: Not reported

Owner/operator name: ALOHA PETROLEUM LLC, A DELAWARE LLC

Owner/operator address: 1132 BISHOP ST SUITE 1700

HONOLULU, 96813

Owner/operator country: US

Owner/operator telephone: 808-373-6733
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 09/01/2015
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Waste code: D001

. Waste name: IGNITABLE WASTE

. Waste code: D018. Waste name: BENZENE

Historical Generators:

Date form received by agency: 07/12/2012

Direction Distance Elevation

Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Site name: ALOHA PETROLEUM HILO WEST TERMINAL

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 07/12/2010

Site name: SHELL OIL PRODUCTS US HILO TERMINAL Classification: Conditionally Exempt Small Quantity Generator

Waste code: D001

. Waste name: IGNITABLE WASTE

Waste code: D008
Waste name: LEAD

Waste code: D018

. Waste name:

Date form received by agency: 10/08/2009

Site name: SHELL OIL PRODUCTS US HILO TERMINAL

BENZENE

Classification: Small Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Waste code: D008
Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 02/22/2008

Site name: SHELL OIL PRODUCTS US HILO TERMINAL SHELL

Classification: Small Quantity Generator

Waste code: D001

. Waste name: IGNITABLE WASTE

Waste code: D008
Waste name: LEAD

Waste code: D018
Waste name: BENZENE

Date form received by agency: 03/12/2007

Site name: SHELL OIL PRODUCTS US - HILO TERMINAL

Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

. Waste code: D008 . Waste name: LEAD

Direction Distance Elevation

ance EDR ID Number ation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

. Waste code: D018. Waste name: BENZENE

Date form received by agency: 02/13/2006

Site name: SHELL OIL PRODUCTS US - HILO TERMINAL

Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

Waste code: D008
Waste name: LEAD

Waste code: D018
Waste name: BENZENE

Date form received by agency: 02/02/2004

Site name: SHELL OIL PRODUCTS US HILO TERMINAL SHEL

Classification: Large Quantity Generator

. Waste code: D001

. Waste name: IGNITABLE WASTE

. Waste code: D008 . Waste name: LEAD

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 01/14/2004

Site name: HILO TERMINAL SHELL Classification: Large Quantity Generator

Waste code: D001

Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD
. Waste code: D018

Waste name: BENZENE

Date form received by agency: 02/26/2002

Site name: EQUILON ENTERPRISES LLC Classification: Large Quantity Generator

. Waste code: D018
. Waste name: BENZENE

Date form received by agency: 02/28/1994

Site name: SHELL OIL CO-HILO PLANT Classification: Large Quantity Generator

Date form received by agency: 08/15/1993

Site name: SHELL OIL CO HILO PLANT Classification: Not a generator, verified

Direction Distance Elevation

Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Facility Has Received Notices of Violations:

Regulation violated: Not reported

Area of violation: Generators - General Date violation determined: 04/26/2012

Date violation determined: 04/26/2012
Date achieved compliance: 05/15/2012
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 04/26/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

Area of violation: TSD IS-Preparedness and Prevention

Date violation determined: 04/26/2012
Date achieved compliance: 05/15/2012
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date:

Enf. disposition status:

Enf. disp. status date:

Enforcement lead agency:

Proposed penalty amount:

Final penalty amount:

Paid penalty amount:

Not reported

Not reported

Not reported

Not reported

Not reported

Regulation violated: Not reported

Area of violation: Permits - General Information

Date violation determined: 04/26/2012
Date achieved compliance: 05/15/2012
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 04/26/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

Area of violation: Generators - Pre-transport

Date violation determined: 04/26/2012
Date achieved compliance: 05/15/2012
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 04/26/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Direction Distance Elevation

evation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Regulation violated: Not reported

Area of violation: Federal or State Statute

Date violation determined: 07/20/2007
Date achieved compliance: 09/28/2007
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 07/20/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

Area of violation: Generators - General

Date violation determined: 07/20/2007
Date achieved compliance: 09/28/2007
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 07/20/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

Area of violation: TSD IS-Preparedness and Prevention

Date violation determined: 07/20/2007
Date achieved compliance: 09/28/2007
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 07/20/2007
Enf. disposition status: Not reported Enforcement lead agency: State
Proposed penalty amount: Not reported Not reported Paid penalty amount: Not reported Not reported Not reported

Regulation violated: Not reported

Area of violation: Permits - General Information

Date violation determined: 07/20/2007
Date achieved compliance: 09/28/2007
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 07/20/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Area of violation: TSD IS-Contingency Plan and Emergency Procedures

Date violation determined: 07/20/2007
Date achieved compliance: 09/28/2007
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 07/20/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 04/03/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - Pre-transport

Date achieved compliance: 05/15/2012 Evaluation lead agency: State

Evaluation date: 04/03/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Permits - General Information

Date achieved compliance: 05/15/2012 Evaluation lead agency: State

Evaluation date: 04/03/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 05/15/2012 Evaluation lead agency: State

Evaluation date: 04/03/2012

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD IS-Preparedness and Prevention

Date achieved compliance: 05/15/2012
Evaluation lead agency: State

Evaluation date: 03/02/2007

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Permits - General Information

Date achieved compliance: 09/28/2007 Evaluation lead agency: State

Evaluation date: 03/02/2007

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - General

Date achieved compliance: 09/28/2007 Evaluation lead agency: State

Evaluation date: 03/02/2007

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Federal or State Statute

Date achieved compliance: 09/28/2007 Evaluation lead agency: State

Evaluation date: 03/02/2007

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE Area of violation: TSD IS-Contingency Plan and Emergency Procedures

Date achieved compliance: 09/28/2007 Evaluation lead agency: State

Evaluation date: 03/02/2007

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: TSD IS-Preparedness and Prevention

Date achieved compliance: 09/28/2007 Evaluation lead agency: State

SHWS:

Organization: Not reported

Supplemental Location: Aloha Petroleum Hilo West Terminal

Island: Hawaii

Environmental Interest: Equilon Enterprises LLC-Hilo Terminal

HID Number:

Facility Registry Identifier:

Lead Agency:

Program:

Project Manager:

Hazard Priority:

Not reported

110001412631

HEER

State

John Peard

Low

Potential Hazards And Controls: Hazard Present

Island: Hawaii

SDAR Environmental Interest Name: Equilon Enterprises LLC-Hilo Terminal

HID Number: Not reported Facility Registry Identifier: 110001412631 Lead Agency: HEER

Potential Hazard And Controls: Hazard Present

Priority: Low

Assessment: Response Necessary Response: Response Ongoing

Nature of Contamination: Found: Petroleum in soil and groundwater

Nature of Residual Contamination: Not reported

Use Restrictions: Controls Required to Manage Contamination

Engineering Control: Not reported Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Hilo Wharf Site Closure Type: Not reported Document Date: Not reported Document Number: Not reported **Document Subject:** Not reported Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

HI SPILLS:

Island: Hawaii
Supplemental Loc. Text: Hilo Terminal
Case Number: 19940729-10
HID Number: Not reported
Facility Registry Id: 110001412631
Lead and Program: HEER EP&R
ER: Not reported

Units: SHELL OIL CO., KALANIANAOLE AVE. 661

Substances: SEE INCIDENT DESCRIPTION

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

Less Or Greater Than: Not reported **Numerical Quantity:** Not reported Not reported Units: Response Activity Type: Activity Lead: Not reported Not reported Assignment End Date: SOSC NFA Result: Shell Oil Company File Under: Latitude: 19.727232 Longitude: -155.054762

US AIRS (AFS):

Envid: 1000288041 Region Code: 09 HI001 County Code:

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631 D and B Number: Not reported

Facility Site Name: ALOHA PETROLEUM-HILO (EQUILON-SHELL)

Primary SIC Code: 5171 NAICS Code: 424710 Default Air Classification Code: MAJ Facility Type of Ownership Code: POF Air CMS Category Code: TVM **HPV Status:** Not reported

US AIRS (AFS):

Region Code:

AIR HI0000001500100048 Programmatic ID:

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1978-02-28 00:00:00

Activity Status Date: Not reported

Activity Group: **Compliance Monitoring** Inspection/Evaluation Activity Type:

Activity Status: Not reported

Region Code: 09

AIR HI0000001500100048 Programmatic ID:

110001412631 Facility Registry ID:

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1979-03-12 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code:

AIR HI0000001500100048 Programmatic ID:

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Activity Date: 1980-02-20 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1981-02-03 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1982-03-11 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1983-03-09 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2001-02-01 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 1998-03-30 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 1999-03-30 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2000-03-30 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2001-02-01 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2001-10-05 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2002-12-09 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2002-12-10 00:00:00
Activity Status Date: Not reported

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2003-12-15 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2003-12-16 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2004-12-09 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring

EDR ID Number

1000288041

Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2004-12-10 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2005-11-30 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2005-12-01 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2006-03-30 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Activity Date: 2006-11-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2006-12-01 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2007-12-11 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2007-12-12 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code:

Default Air Classification Code:

Air Program:

Activity Deta:

Ac

Activity Date: 2008-03-30 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Activity Status: Not reported

Region Code: 09

Activity Type:

Programmatic ID: AIR HI0000001500100048

Inspection/Evaluation

Facility Registry ID: 110001412631

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2008-12-22 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2008-12-23 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2009-10-27 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2009-10-28 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2010-03-30 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2010-12-20 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2010-12-21 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2011-12-27 00:00:00
Activity Status Date: Not reported

Activity Status Date: Not reported
Activity Group: Compliance Moni

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2011-12-28 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2012-12-18 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring

EDR ID Number

1000288041

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

EDR ID Number

Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR
Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2012-12-19 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2013-12-26 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 09

Programmatic ID: AIR HI0000001500100048

Facility Registry ID: 110001412631

Air Operating Status Code: OPR Default Air Classification Code: MAJ

Air Program: Title V Permits
Activity Date: 2013-12-27 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

AIRS:

Facility ID: 0072-01-C Island: Hawaii

Mailing Address: 661 Kalanianaole Avenue

Locale:Not reportedBusiness Phone:808-935-8288Mailing City,St,Zip:Hilo, Hawaii 96720Contact Name:Kelvin ChunContact Title:Terminal Manager

Description: Above Ground Petroleum Storage Tank Nos. 1, 4, 5, 6, 7, and 8 with

Internal Floating Roofs and Tank Truck Load Rack1.Attachment IIA of this permit encompasses the following petroleum storage tanks and associated appurtenances:a.Tank No. 1 - 10,000 barrel internal floating roof tank;b.Tank No. 4 - 5,500 barrel internal floating roof tank;c.Tank No. 5 - 2,400 barrel internal floating roof tank;d.Tank No. 6 - 5,600 barrel internal floating roof tank;e.Tank No. 7 - 12,700 barrel internal floating roof tank; andf.Tank No. 8 - 25,000

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

ALOHA PETROLEUM HILO WEST TERMINAL (Continued)

1000288041

AIRS

barrel internal floating roof tank.1.Attachment IIB of this permit encompasses the following equipment: a. One (1) bottom-loading petroleum tank truck load rack with three (3) gasoline or ethanol product arms and associated appurtenances, and one (1) distillate or biodiesel product arm and associated appurtenances; and b. One (1) 54 MMBtu/hr John Zink thermal oxidizer vapor combustion unit, model no. ZCT-3-8-45-X-2/8-2/8-X with a thirty-five (35) foot exhaust stack height.Attachment IIC of this permit encompasses each piece of equipment used in a system that transfers gasoline or gasoline vapors. Equipment under Attachment IIC is each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, flange or other connector in the gasoline liquid transfer, and vapor collection systems. Equipment under Attachment IIC also includes the entire vapor processing system except for exhaust port(s) or stack(s). Not reported

G21 HILO TERMINAL 666 KALANIANAOLE AVENUE SHWS S106817731 **SPILLS East** 666 KALANIANAOLE AVE N/A

1/2-1 HILO, HI 96720 0.513 mi.

2710 ft. Site 2 of 3 in cluster G

SHWS: Relative:

Organization: Not reported Lower

Supplemental Location: Not reported Actual: Island: Hawaii

7 ft. **Environmental Interest:** Hilo Terminal Chevron

HID Number: Not reported Facility Registry Identifier: Not reported Lead Agency: HEER Program: State Project Manager: John Peard Hazard Priority: Medium Potential Hazards And Controls: Hazard Present

Island: Hawaii

Hilo Terminal Chevron SDAR Environmental Interest Name:

HID Number: Not reported Facility Registry Identifier: Not reported Lead Agency: **HEER** Potential Hazard And Controls: Hazard Present

Priority: Medium Assessment:

Response Necessary Response: Response Ongoing

Nature of Contamination: Found: Petroleum in Soil, Rock and Groundwater.

Nature of Residual Contamination: Not reported

Use Restrictions: Controls Required to Manage Contamination

Engineering Control: Not reported Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Hilo Wharf Site Closure Type: Not reported Document Date: Not reported **Document Number:** Not reported **Document Subject:** Not reported Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

Direction Distance

Elevation Site Database(s) EPA ID Number

HILO TERMINAL 666 KALANIANAOLE AVENUE (Continued)

S106817731

EDR ID Number

HI SPILLS:

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 19941202-0002
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: Not reported

Units: Chevron 666 Kalanianaole Ave. Substances: trans mix - oil/gas/water

Not reported

Numerical Quantity: 10
Units: Gallons
Activity Type: Response
Activity Lead: Bill Perry
Assignment End Date: Not reported

Less Or Greater Than:

Result: SOSC NFA
File Under: Chevron Corporation

Latitude: 19.727167 Longitude: -155.054623

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 20070301-0102
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R

ER: No -

Units: Unknown Sheen Near Barge

Substances: Oil

Less Or Greater Than: Not reported **Numerical Quantity:** Not reported Units: Not reported Activity Type: Response Activity Lead: Anna Fernandez Assignment End Date: 2007-03-01 00:00:00 Result: SOSC NFA File Under: Chevron Corporation

Latitude: 19.727167 Longitude: -155.054623

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 20090428-0411
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None

Units: DRILL Discharge of jet fuel from tanker truck NRC 904069 DRILL DRILL

Substances: Jet Fuel JP-8 Less Or Greater Than: Not reported **Numerical Quantity:** 250 Gallons Units: Response Activity Type: Activity Lead: Liz Galvez Assignment End Date: Not reported Result: Not reported

Distance

Elevation Site Database(s) EPA ID Number

HILO TERMINAL 666 KALANIANAOLE AVENUE (Continued)

S106817731

EDR ID Number

File Under: Chevron Corporation

Latitude: 19.727167 Longitude: -155.054623

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 19950824-0938
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R

ER: No

Units: Hilo Terminal Chevron
Substances: Super unleaded gasoline

Less Or Greater Than:
Not reported
Numerical Quantity:
Units:
Gallons
Activity Type:
Activity Lead:
Assignment End Date:
Result:
Not reported
Not reported
SOSC NFA

File Under: Chevron Corporation

Latitude: 19.727167 Longitude: -155.054623

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 20110608-1048
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None

Units: Drill - Firearm in a Contractor's Van

Substances: Not reported Less Or Greater Than: Not reported Not reported **Numerical Quantity:** Not reported Units: Activity Type: Response Activity Lead: Liz Galvez Assignment End Date: Not reported Result: Not reported File Under: Chevron Corporation

Latitude: 19.727167 Longitude: -155.054623

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 20131001-1700
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None

Units: Hilo Chevron Port area

Substances: Oil

Less Or Greater Than: Not reported

Numerical Quantity: 0

Units: Unknown Activity Type: Response

Direction Distance

Elevation Site Database(s) EPA ID Number

HILO TERMINAL 666 KALANIANAOLE AVENUE (Continued)

S106817731

EDR ID Number

Activity Lead: Liz Galvez

Assignment End Date: 2013-10-01 00:00:00
Result: Refer to SDAR
File Under: Chevron Corporation

Latitude: 19.727167 Longitude: -155.054623

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 20141216-1519
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None

Units: Drill Chevron Hilo Terminal Earthquake Drill

Substances: Not reported
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Not reported
Activity Type: Drill

Activity Lead: Liz Galvez
Assignment End Date: 2014-12-16 00:00:00

Result: Drill

File Under: Chevron Corporation

Latitude: 19.727167 Longitude: -155.054623

AIRS:

Facility ID: 0079-01-C Island: Hawaii

Mailing Address: 666 Kalanianaole Avenue

Locale: Not reported
Business Phone: 808-961-3634
Mailing City,St,Zip: Hilo, Hawaii 96720
Contact Name: Deb Smith
Contact Title: Terminal Manager

Description: Hilo Marketing TerminalAttachment IIA:1.Attachment IIA of this permit encompasses each piece of equipment used in a system that transfers gasoline or gasoline vapors. Equipment under Attachment IIA is each

gasoline or gasoline vapors. Equipment under Attachment IIA is each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, flange or other connector in the gasoline liquid transfer, and vapor collection systems. Equipment under Attachment IIA also includes the entire vapor processing system except for exhaust port(s) or stack(s). Attachment IIB:1. Attachment IIB of this permit encompasses the following storage tanks: Tank No. Capacity (barrels) Tank Description313,092 internal floating roof with mechanical shoe primary seal9951 internal floating roof with primary wiper seal101,678 Internal floating roof with mechanical shoe primary seal1319,638 internal floating roof with mechanical shoe primary seal152,553 internal floating roof with mechanical shoe primary seal174,657 internal floating roof with mechanical shoe primary seal-------greater than or equal or 40,000 gallons (952 barrels) tanks storing volatile organic liquid with true vapor

pressure equal to or greater than 1.5 psiaAttachment IIC:1.Attachment IIC of this permit encompasses the following equipment:a.Bottom loading load rack with two (2) loading lanes and eleven (11) total combined 600 gallon permit minute capacity load arms; andb.John Zink

Direction Distance

Elevation Site Database(s) **EPA ID Number**

HILO TERMINAL 666 KALANIANAOLE AVENUE (Continued)

S106817731

EDR ID Number

vapor combustion unit, model no. ZCT-2-8-35-X-2/8-X-X, serial no. 3843-1, TAC no. 900356/800461.

G22 TESORO HAWAII CORPORATION TERMINAL DEPARTMENT - 701 KALANIAN SHWS \$108008630 **East**

701 KALANIANAOLE AVE N/A

HILO, HI 96720 1/2-1

0.516 mi.

2724 ft. Site 3 of 3 in cluster G

SHWS: Relative:

Not reported Organization: Lower Supplemental Location: Not reported

Actual: Island: Hawaii

6 ft. **Environmental Interest:** Tesoro Hawaii Corporation, Terminal Department-701 Kalanianaole

HID Number: Not reported 110013773489 Facility Registry Identifier: Lead Agency: **HEER** Program: State Project Manager: John Peard

Hazard Priority: I ow

Potential Hazards And Controls: Hazard Undetermined

Island: Hawaii

SDAR Environmental Interest Name: Tesoro Hawaii Corporation, Terminal Department-701 Kalanianaole

HID Number: Not reported 110013773489 Facility Registry Identifier:

HEER Lead Agency:

Potential Hazard And Controls: Hazard Undetermined

Priority: Low

Assessment: **Assessment Ongoing**

Response: Not reported Nature of Contamination: Not reported Nature of Residual Contamination: Not reported Undetermined Use Restrictions: **Engineering Control:** Not reported Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Hilo Wharf

Site Closure Type: Closed - Documentation Inadequate to Evaluate Risk

Document Date: 10/13/2006 Document Number: Not reported **Document Subject:** Not reported Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

187 SILVA STREET SHWS S108859616 23 **INST CONTROL ESE** 187 SILVA ST N/A

1/2-1 HILO, HI 96720

0.619 mi. 3268 ft.

SHWS: Relative:

Not reported Organization: Higher Supplemental Location: Not reported

Actual: Island: Hawaii

15 ft. **Environmental Interest:** 187 Silva Street **SPILLS**

Direction Distance

Elevation Site Database(s) EPA ID Number

187 SILVA STREET (Continued)

S108859616

EDR ID Number

HID Number:

Facility Registry Identifier:

Lead Agency:

Program:

Project Manager:

Hazard Priority:

Not reported

Not reported

State

Proported

HEER

State

John Peard

Low

Potential Hazards And Controls: Hazard Managed With Controls

Island: Hawaii

SDAR Environmental Interest Name: 187 Silva Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER

Potential Hazard And Controls: Hazard Managed With Controls

Priority: Low

Assessment: Response Necessary Response: Response Ongoing

Nature of Contamination: Found: Lead and Chlorinated Solvents in soil. Petroleum and Free

Product in Groundwater.

Nature of Residual Contamination: Not reported

Use Restrictions: Controls Required to Manage Contamination

Engineering Control: Not reported Description of Restrictions: Not reported

Institutional Control: Government - Hawaii Dept. of Health Letter Issued

Within Designated Areawide Contamination: Not reported

Site Closure Type: No Further Action Letter - Restricted Use

Document Date: 05/26/2010
Document Number: 2010-318-JP

Document Subject: No Further Action with Institutional Controls Determination at the 187

Silva St property, Hilo HI, TMK 3-2-1-010-036

Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

INST CONTROL:

Potential hazards and controls: Hazard Managed With Controls

Supplemental Location: Not reported Zip Suffix: Not reported Island: Hawaii

Institutional Control: Government - Hawaii Dept. of Health Letter Issued

HI SPILLS:

Island: Hawaii
Supplemental Loc. Text: Not reported
Case Number: 20070420-1435
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R

ER: No -

Units: Silva Street Free Product

Substances: Fuel Oil
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Unknown
Activity Type: Response
Activity Lead: Anna Fernandez
Assignment End Date: 2007-04-20 00:00:00

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

187 SILVA STREET (Continued) S108859616

Result: Refer to SDAR

File Under: Kamehameha School-Bishop Estate

Latitude: 19.725971 Longitude: -155.052956

BIG ISLAND ASPHALT CO INC SHWS S108008483 H24 N/A

East **794 KALANIANAOLE AVE** 1/2-1 HILO, HI 96720

0.630 mi.

Site 1 of 2 in cluster H 3328 ft.

SHWS: Relative:

Organization: Not reported Lower Supplemental Location: Not reported

Actual: . Hawaii Island: 9 ft.

Big Island Asphalt Company, Inc. **Environmental Interest:**

HID Number: Not reported Facility Registry Identifier: 110013779768 Lead Agency: **HEER** Program: State Project Manager: John Peard

Hazard Priority: Medium Potential Hazards And Controls: Hazard Present

Island: Hawaii

SDAR Environmental Interest Name: Big Island Asphalt Company, Inc.

Not reported HID Number: Facility Registry Identifier: 110013779768 Lead Agency: **HEER**

Potential Hazard And Controls: Hazard Present

Priority: Medium

Assessment: Response Necessary Response: Response Ongoing

Nature of Contamination: Presumed: Asphalt and heavy oil in soil and groundwater

Nature of Residual Contamination: Not reported

Use Restrictions: Controls Required to Manage Contamination

Engineering Control: Not reported Description of Restrictions: Not reported Institutional Control: Not reported Hilo Wharf Within Designated Areawide Contamination: Site Closure Type: Not reported **Document Date:** Not reported Document Number: Not reported **Document Subject:** Not reported Project Manager: John Peard

(808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo, Contact Information:

HI 96720

Direction Distance

Elevation Site Database(s) EPA ID Number

H25 888 KALANIANAOLE AVENUE SHWS S108859634

East 888 KALANIANAOLE AVE ENG CONTROLS N/A

1/2-1 HILO, HI 96720 INST CONTROL 0.673 mi. SPILLS

3551 ft. Site 2 of 2 in cluster H

Relative: SHWS:

Relative: SHWS:
Lower Organization: Not reported

Supplemental Location: Not reported

Actual: Island: Hawaii

9 ft. Environmental Interest: 888 Kalanianaole Avenue

HID Number:
Registry Identifier:
Not reported
Lead Agency:
HEER
Program:
State
Project Manager:
Hazard Priority:
Not reported
Not reported

Potential Hazards And Controls: Hazard Undetermined

Island: Hawaii

SDAR Environmental Interest Name: 888 Kalanianaole Avenue

HID Number: Not reported Facility Registry Identifier: Not reported Lead Agency: HEER

Potential Hazard And Controls: Hazard Undetermined

Priority: Not reported

Assessment: Assessment Ongoing

Response: Not reported Nature of Contamination: Not reported

Nature of Residual Contamination: soil and groundwater concerns above HDOH EALs. TPH-o 1,500 mg/kg and

Benzo(a)pyrene 7.3 mg/kg in soil 4.5 ft bgs on the NE corner and

significant petroleum "free product" floating on groundwater.

Use Restrictions: Undetermined

Engineering Control: Engineering Control Required

Description of Restrictions: Not reported

Institutional Control: Government - Hawaii Dept. of Health Letter Issued

Within Designated Areawide Contamination:
Site Closure Type:
Document Date:
Document Number:
Document Subject:
Project Manager:

Not reported
Not reported
Not reported
Not reported
Not reported
John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

ENG CONTROLS:

Supplemental Location Text: Not reported Zip Suffix: Not reported Island: Hawaii

Potential Hazards And Controls: Hazard Undetermined
Engineering Control: Engineering Control Required

INST CONTROL:

Potential hazards and controls: Hazard Undetermined

Supplemental Location: Not reported Zip Suffix: Not reported Island: Hawaii

Institutional Control: Government - Hawaii Dept. of Health Letter Issued

EDR ID Number

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

888 KALANIANAOLE AVENUE (Continued)

S108859634

SHWS

S118943724

N/A

HI SPILLS:

Island: Hawaii Supplemental Loc. Text: Not reported Case Number: 20070108-1400 HID Number: Not reported Facility Registry Id: Not reported HEER EP&R Lead and Program:

ER: No -

Units: 888 Kalanianaole Avenue Heavy oil Release

Substances: Oil

Less Or Greater Than: Not reported **Numerical Quantity:** Not reported Unknown Units: Activity Type: Response Activity Lead: Liz Galvez

Assignment End Date: 2007-01-08 00:00:00

Result: SOSC NFA

File Under: State of Hawaii, Department of Land & Natural Resources, Land Division

Latitude: Not reported Longitude: Not reported

UST EXCAVATED BISHOP AND KAMEHAMEHA

BISHOP ST AND KAMEHAMEHA AVE

HILO, HI 96720 1/2-1

0.815 mi. 4302 ft.

26

wsw

SHWS: Relative:

Organization: Not reported Lower

Supplemental Location: Not reported

Actual: Island: Hawaii 4 ft. **Environmental Interest:** UST excavated Bishop and Kamehameha

> HID Number: Not reported Not reported Facility Registry Identifier: Lead Agency: **HEER**

Program: State Project Manager: John Peard Hazard Priority: Not reported

Potential Hazards And Controls: Hazard Undetermined

Hawaii

SDAR Environmental Interest Name: UST excavated Bishop and Kamehameha

HID Number: Not reported Not reported Facility Registry Identifier: HEER Lead Agency:

Potential Hazard And Controls: Hazard Undetermined

Priority: Not reported

Assessment: Assessment Ongoing

Not reported Response: Not reported Nature of Contamination: Nature of Residual Contamination: Not reported Use Restrictions: Undetermined **Engineering Control:** Not reported Description of Restrictions: Not reported Institutional Control: Not reported Within Designated Areawide Contamination: Not reported

Site Closure Type: Not reported **Document Date:** Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

UST EXCAVATED BISHOP AND KAMEHAMEHA (Continued)

S118943724

EDR ID Number

Document Number: Not reported
Document Subject: Not reported
Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

27 ALOHA PETROLEUM HILO BULK PLANT SHWS \$105263923

East 999 KALANIANAOLE AVE SPILLS N/A 1/2-1 HILO, HI 96720 AIRS

0.853 mi. 4505 ft.

Relative: SHWS:

Lower Organization: Not reported Supplemental Location: Hilo Harbor Actual: Island: Hawaii

Actual: Island: Hawaii
8 ft. Environmental Interest: Texaco Hilo Sales Terminal

HID Number: Not reported Facility Registry Identifier: 110000888335

Lead Agency: HEER
Program: State
Project Manager: John Peard
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present

Island: Hawaii

SDAR Environmental Interest Name: Texaco Hilo Sales Terminal

HID Number: Not reported Facility Registry Identifier: 110000888335 Lead Agency: HEER

Potential Hazard And Controls: Hazard Present

Priority: Medium

Assessment: Response Necessary Response: Response Ongoing

Nature of Contamination: Found: Diesel petroleum in soil, rock and groundwater.

Nature of Residual Contamination:
Use Restrictions:
Controls Required to Manage Contamination

And reported

Engineering Control: Not reported Not reported Description of Restrictions: Institutional Control: Not reported Within Designated Areawide Contamination: Hilo Wharf Site Closure Type: Not reported **Document Date:** Not reported **Document Number:** Not reported Not reported **Document Subject:** Project Manager: John Peard

Contact Information: (808) 933-9921 Environmental Health Bldg, 1582 Kamehameha Ave, Hilo,

HI 96720

HI SPILLS:

Island: Hawaii
Supplemental Loc. Text: Hilo Harbor
Case Number: 19900213-1
HID Number: Not reported
Facility Registry Id: 110000888335
Lead and Program: HEER EP&R
ER: Not reported

Units: TEXACO, Pier 3, HILO HARBOR

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO BULK PLANT (Continued)

Substances:

UNLEADED GASOLINE

Less Or Greater Than:
Not reported
Numerical Quantity:
1000
Units:
Gallons
Activity Type:
Activity Lead:
Assignment End Date:
Result:
Not reported
Not reported
SOSC NFA

File Under: Aloha Petroleum, Ltd.

Latitude: 19.730064 Longitude: -155.048981

Island: Hawaii
Supplemental Loc. Text: Hilo Harbor
Case Number: 19960613-1225
HID Number: Not reported
Facility Registry Id: 110000888335
Lead and Program: HEER EP&R

ER: Yes

Units: Texaco Terminal Pier 2 Hilo Harbor

Substances: Gasoline
Less Or Greater Than: Not reported
Numerical Quantity: 3
Units: Gallons
Activity Type: Response

Activity Type: Response
Activity Lead: Bill Perry
Assignment End Date: Not reported
Result: SOSC NFA

File Under: Aloha Petroleum, Ltd.

Latitude: 19.730064 Longitude: -155.048981

Island: Hawaii
Supplemental Loc. Text: Hilo Harbor
Case Number: 19961204-0945
HID Number: Not reported
Facility Registry Id: 110000888335
Lead and Program: HEER EP&R
ER: Not reported

Units: Texaco Hilo Bay 4 Gallon Gasoline/Water Spill

Substances: Gasoline, Unleaded Less Or Greater Than: Not reported

Numerical Quantity: 4
Units: Gallons
Activity Type: Response
Activity Lead: Terry Corpus
Assignment End Date: Not reported
Result: SOSC NFA

File Under: Aloha Petroleum, Ltd.

Latitude: 19.730064 Longitude: -155.048981

Island: Hawaii
Supplemental Loc. Text: Hilo Harbor
Case Number: 19970710-1217
HID Number: Not reported
Facility Registry Id: 110000888335

EDR ID Number

S105263923

Direction Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO BULK PLANT (Continued)

S105263923

EDR ID Number

Lead and Program: HEER EP&R ER: Not reported

Units: Texaco Hilo Bulk Plant Pipeline Failure

Substances: Diesel Fuel #2 Less Or Greater Than: Not reported **Numerical Quantity:** Not reported Not reported Units: Response Activity Type: Activity Lead: Liz Galvez Assignment End Date: Not reported Result: Refer to ISST File Under: Aloha Petroleum, Ltd.

Latitude: 19.730064 Longitude: -155.048981

Island: Hawaii
Supplemental Loc. Text: Hilo Harbor
Case Number: 20041103-1200
HID Number: Not reported
Facility Registry Id: 110000888335
Lead and Program: HEER EP&R
ER: Off Scene

Units: Cargo Pipeline Leak - Pier 3
Substances: Gasoline, Premium Unleaded

Less Or Greater Than: Not reported Numerical Quantity: 5

Units: Gallons
Activity Type: Response
Activity Lead: Liz Galvez

Assignment End Date: 2004-11-05 00:00:00

Result: SOSC NFA

File Under: Aloha Petroleum, Ltd.

Latitude: 19.730064 Longitude: -155.048981

Island: Hawaii
Supplemental Loc. Text: Hilo Harbor
Case Number: 20111101-1100
HID Number: Not reported
Facility Registry Id: 110000888335
Lead and Program: HEER EP&R
ER: None

Units: Aloha Petroleum Hilo Bulk Plant NRC 994251

Substances: Diesel Fuel Not reported Less Or Greater Than: 14000 **Numerical Quantity:** Units: Gallons Activity Type: Response Activity Lead: Liz Galvez Assignment End Date: Not reported Result: Not reported

File Under: Aloha Petroleum, Ltd.

Latitude: 19.730064 Longitude: -155.048981

Island: Hawaii
Supplemental Loc. Text: Hilo Harbor

Distance

Elevation Site Database(s) EPA ID Number

ALOHA PETROLEUM HILO BULK PLANT (Continued)

S105263923

EDR ID Number

Case Number: 20141020-1210
HID Number: Not reported
Facility Registry Id: 110000888335
Lead and Program: HEER EP&R
ER: None

Units: Drill Aloha Petroleum

Substances: Diesel Fuel Less Or Greater Than: Not reported

Numerical Quantity: (

Units: Not reported

Activity Type: Drill

Activity Lead: Adam Teekell
Assignment End Date: 2014-10-20 00:00:00

Result: Drill

File Under: Aloha Petroleum, Ltd.

Latitude: 19.730064 Longitude: -155.048981

AIRS:

Facility ID: 0307-02-C Island: Hawaii

Mailing Address: 91-139 Hanua Street

Locale: Not reported Business Phone: 808-690-0406

Mailing City, St, Zip: Kapolei, Hawaii 96707-1728

Contact Name: Patrick Iona

Contact Title: Manager Projects/HSE

Description: Hilo East TerminalTwo (2) 10,000 bbl Internal Floating Roof Storage

Tanks, Three (3) External Floating Roof Storage Tanks with Geodesic Domes and One (1) Tank Truck Load RackATTACHMENT IIA: SPECIAL CONDITIONSPETROLEUM STORAGE TANKSa.Tank No. 901 - 10,000 barrel

internal floating roof tank;b.Tank No. 902 - 10,000 barrel internal floating roof tank;c.Tank No. 5869 - 5,143 barrel external floating roof tank with geodesic dome;d.Tank No. 5870 - 5,143 barrel external floating roof tank with geodesic dome; ande.Tank No. 5871 - 5,143 barrel external floating roof tank with geodesic dome.ATTACHMENT IIB: SPECIAL CONDITIONSTANK TRUCK LOAD RACKAttachment IIB of this permit

encompasses one (1) bottom-loading petroleum tank truck load rack with four (4) product arms and associated appurtenances.ATTACHMENT

IIC: SPECIAL CONDITIONS EQUIPMENT IN GASOLINE SERVICE 1. Attachment

IIC of this permit encompasses each piece of equipment used in a system that transfers gasoline or gasoline vapors. Equipment under Attachment IIC is each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, flange or other connector in the gasoline liquid transfer, and vapor collection systems. Equipment under Attachment IIC also includes the entire vapor processing system except for exhaust port(s) or stack(s).

Direction Distance

1/2-1

Distance Elevation Site EDR ID Number

EDR ID Number

EPA ID Number

28 KHI INC. DBA BAYSIDE CHEVRON SHWS U001237007 WSW 774 KAMEHAMEHA AVE LUST N/A

774 KAMEHAMEHA AVE LUST HILO, HI 96720 UST

0.903 mi. INST CONTROL

4766 ft. SPILLS

Relative: Financial Assurance

Lower SHWS:

Organization: Not reported

Actual: Supplemental Location: Kamehameha and Pauahi Street, SE corner

4 ft. Island: Hawaii

Environmental Interest: Bayside Chevron Service

HID Number: Not reported Facility Registry Identifier: 110013783646

Lead Agency: HEER
Program: State

Project Manager: Anna Fernandez

Hazard Priority: NFA

Potential Hazards And Controls: Hazard Managed With Controls

Island: Hawaii

SDAR Environmental Interest Name: Bayside Chevron Service

HID Number: Not reported Facility Registry Identifier: 110013783646

Lead Agency: HEER

Potential Hazard And Controls: Hazard Managed With Controls

Priority: NF/

Assessment: Response Necessary
Response: Response Complete

Nature of Contamination: Found: TPH-O of 0.736 mg/l in groundwater in MW-3

Nature of Residual Contamination: Subsurface soil with TPH-G, UH-d, UH-o and total xylene concentrations

exceeding HDOH EALs remains on site 3 feet below the station building.

Use Restrictions: Controls Required to Manage Contamination

Engineering Control: Not reported

Description of Restrictions: A soil management plan is required.

Institutional Control: Government - Hawaii Dept. of Health Letter Issued

Within Designated Areawide Contamination: Not reported

Site Closure Type: No Further Action Letter - Restricted Use

Document Date: 04/27/2007 Document Number: 2007-269-AF

Document Subject: No Further Action with Institutional Controls Determination

Project Manager: Anna Fernandez

Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

LUST:

Facility ID: 9-601133

Facility Status: Site Cleanup Completed (NFA)

Facility Status Date: 02/01/1999
Release ID: 970106
Project Officer: Richard Takaba

Facility ID: 9-601133

Facility Status: Site Cleanup Completed (NFA)

Facility Status Date: 04/20/2004
Release ID: 040017
Project Officer: Richard Takaba

UST:

Facility ID: 9-601133

Direction Distance

Elevation Site Database(s) EPA ID Number

KHI INC. DBA BAYSIDE CHEVRON (Continued)

U001237007

EDR ID Number

Owner: KHI dba Bayside Chevron
Owner Address: 774 Kamehameha Ave
Owner City,St,Zip: Hilo, 96720 96720
Latitude: 19.721900
Longitude: -155.078450
Horizontal Reference Datum Name: NAD83

GPS

Tank ID:

Horizontal Collection Method Name:

Date Installed: 08/21/1983

Tank Status: Currently In Use

Date Closed: Not reported

Tank Capacity: 10000

Substance: Gasoline

Tank ID: 2

Date Installed: 08/21/1983

Tank Status: Currently In Use
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasohol

Tank ID:

Date Installed: 08/21/1983

Tank Status: Currently In Use
Date Closed: Not reported
Tank Capacity: 10000
Substance: Gasohol

 Tank ID:
 R-005

 Date Installed:
 08/20/1969

Tank Status: Permanently Out of Use

Date Closed: 09/01/1983
Tank Capacity: 1000
Substance: Used Oil

Tank ID: R-4

Date Installed: 08/21/1983

Tank Status: Permanently Out of Use

Date Closed: 04/03/1997
Tank Capacity: 1000
Substance: Used Oil

INST CONTROL:

Potential hazards and controls: Hazard Managed With Controls

Supplemental Location: Kamehameha and Pauahi Street, SE corner

Zip Suffix: Not reported Island: Hawaii

Institutional Control: Government - Hawaii Dept. of Health Letter Issued

HI SPILLS:

Island: Hawaii

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

KHI INC. DBA BAYSIDE CHEVRON (Continued)

U001237007

Supplemental Loc. Text: Kamehameha and Pauahi Street, SE corner

20040629-1542 Case Number: HID Number: Not reported Facility Registry Id: 110013783646 Lead and Program: HEER EP&R ER: Not reported

Units: Bayside Chevron Contaminated Soil

Substances: Not reported Less Or Greater Than: Not reported **Numerical Quantity:** Not reported Not reported Units: Activity Type: Response Activity Lead: Mike Cripps

Assignment End Date: 2005-08-30 00:00:00 Result: Refer to ISST

Chevron Products Company File Under:

Latitude: 19.722126 -155.079456 Longitude:

HI Financial Assurance:

Alt Facility ID: 9-601133 Tank Id:

Tank Status: Currently In Use

FRTYPE: Other **Expiration Date:** Not reported

Alt Facility ID: 9-601133

Tank Id:

Tank Status: Currently In Use FRTYPE: Guarantee **Expiration Date:** Not reported

9-601133 Alt Facility ID: Tank Id: R-4

Tank Status: Permanently Out of Use

FRTYPE: Self Insured **Expiration Date:** Not reported

Alt Facility ID: 9-601133 Tank Id: R-4

Tank Status: Permanently Out of Use

FRTYPE: Other **Expiration Date:** Not reported

Alt Facility ID: 9-601133 Tank Id: R-4

Permanently Out of Use Tank Status:

FRTYPE: Guarantee **Expiration Date:** Not reported

Alt Facility ID: 9-601133 Tank Id: R-005

Permanently Out of Use Tank Status:

FRTYPE: Self Insured **Expiration Date:** Not reported

Alt Facility ID: 9-601133

MAP FINDINGS Map ID

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

KHI INC. DBA BAYSIDE CHEVRON (Continued)

Tank Id: R-005

Tank Status: Permanently Out of Use

FRTYPE: Other **Expiration Date:** Not reported

Alt Facility ID: 9-601133 R-005 Tank Id:

Tank Status: Permanently Out of Use

FRTYPE: Guarantee **Expiration Date:** Not reported

9-601133 Alt Facility ID: Tank Id:

Tank Status:

Currently In Use FRTYPE: Self Insured Expiration Date: Not reported

Alt Facility ID: 9-601133

Tank Id:

Currently In Use Tank Status: FRTYPE: Guarantee **Expiration Date:** Not reported

Alt Facility ID: 9-601133

Tank Id:

Tank Status: Currently In Use Self Insured FRTYPE: **Expiration Date:** Not reported

Alt Facility ID: 9-601133 Tank Id:

Tank Status: Currently In Use

FRTYPE: Other **Expiration Date:** Not reported

Alt Facility ID: 9-601133 Tank Id: 2

Tank Status: Currently In Use FRTYPE: Guarantee **Expiration Date:** Not reported

Alt Facility ID: 9-601133

Tank Id:

Tank Status: Currently In Use FRTYPE: Self Insured **Expiration Date:** Not reported

Alt Facility ID: 9-601133

Tank Id:

Tank Status: Currently In Use

FRTYPE: Other **Expiration Date:** Not reported

Alt Facility ID: 9-601133

Tank Id:

Tank Status: Currently In Use FRTYPE: Insurance

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U001237007

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

KHI INC. DBA BAYSIDE CHEVRON (Continued)

U001237007

SHWS S106817545

N/A

Expiration Date: 05/09/2016

Alt Facility ID: 9-601133 Tank Id: R-005

Tank Status: Permanently Out of Use

FRTYPE: Insurance **Expiration Date:** 05/09/2016

Alt Facility ID: 9-601133 Tank Id:

Tank Status: Currently In Use FRTYPE: Insurance 05/09/2016 **Expiration Date:**

Alt Facility ID: 9-601133 Tank Id: R-4

Tank Status: Permanently Out of Use

FRTYPE: Insurance **Expiration Date:** 05/09/2016

Alt Facility ID: 9-601133

Tank Id: 1

Tank Status: Currently In Use FRTYPE: Insurance **Expiration Date:** 05/09/2016

HELCO PIPELINE RELEASE HUALANI HILO 29 South **KANOELEHUA AVE & HUALANI ST**

Nature of Contamination:

1/2-1 HILO, HI 96720

0.927 mi. 4894 ft.

SHWS: Relative:

Organization: Not reported Higher Supplemental Location: Not reported

Actual: Island: Hawaii

30 ft. Environmental Interest: HELCO Pipeline Release Hualani Hilo

HID Number: Not reported Facility Registry Identifier: Not reported Lead Agency: **HEER** Program: State Project Manager: Not reported Hazard Priority: NFA Potential Hazards And Controls: No Hazard Island: Hawaii

SDAR Environmental Interest Name: HELCO Pipeline Release Hualani Hilo

Not reported HID Number: Facility Registry Identifier: Not reported HEER Lead Agency: Potential Hazard And Controls: No Hazard

Priority: NFA Assessment: Response Necessary Response Complete Response: Found: Oil pipeline break

Nature of Residual Contamination: Not reported

No Hazard Present For Unrestricted Residential Use Use Restrictions:

Engineering Control: Not reported Description of Restrictions: Not reported

Map ID MAP FINDINGS Direction

Distance

Elevation Site Database(s) EPA ID Number

HELCO PIPELINE RELEASE HUALANI HILO (Continued)

S106817545

EDR ID Number

Institutional Control: Not reported Within Designated Areawide Contamination: Not reported

Site Closure Type: No Further Action Letter - Unrestricted Residential Use

 Document Date:
 02/16/2010

 Document Number:
 2010-123-RP

Document Subject: NFA -Hualani Pipeline Release, Removal Action Report, Hawaiian

Electric Light Company, Hilo Hawaii

Project Manager: Not reported

Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Count: 7 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HILO	S118422859	UMAUMA STREAM BRIDGE	HAWAII BELT RD	9672) SHWS
HILO		PACIFIC AQUACULTURE AND COASTAL RE	KALANIANAOLE ST		SHWS, BROWNFIELDS
HILO	S118943674	HAWAII COUNTY KAMEHAMEHA AVENUE IM	KAMEHAMEHA AVE	9672	SHWS
HILO	S110061564	HILO SAFEWAY/TARGET	MAKAALA ST X RAILROAD AVE	9672	SHWS, ENG CONTROLS, INST CONT
HILO	S115554812	ARSENIC MILILANI STREET IN HILO	MILILANI ST		SHWS, SPILLS
HILO	1003879704	HILO BAY FRONT SOCCER FIELD	OFF KAMEHAMEHA AVE. BET PAUAHI	9672	SEMS-ARCHIVE
HILO	S118943731	WAILOA RIVER STATE RECREATION AREA	PIILANI ST, KAMEHAMEHA AVE, BI	9672) SHWS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 08/05/2016 Source: EPA Date Data Arrived at EDR: 10/05/2016 Telephone: N/A

Last EDR Contact: 01/05/2017 Date Made Active in Reports: 01/06/2017

Number of Days to Update: 93 Next Scheduled EDR Contact: 04/17/2017 Data Release Frequency: Quarterly

NPL Site Boundaries

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 **EPA Region 8**

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 08/05/2016 Source: EPA Date Data Arrived at EDR: 10/05/2016 Telephone: N/A Date Made Active in Reports: 01/06/2017

Last EDR Contact: 01/05/2017

Number of Days to Update: 93 Next Scheduled EDR Contact: 04/17/2017 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Source: EPA

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 08/05/2016 Date Data Arrived at EDR: 10/05/2016 Date Made Active in Reports: 01/06/2017

Number of Days to Update: 93

Source: EPA Telephone: N/A

Last EDR Contact: 01/05/2017

Next Scheduled EDR Contact: 04/17/2017 Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 09/14/2016 Date Data Arrived at EDR: 10/04/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 01/05/2017

Next Scheduled EDR Contact: 04/17/2017 Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/10/2016 Date Data Arrived at EDR: 10/20/2016 Date Made Active in Reports: 01/06/2017

Number of Days to Update: 78

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 01/06/2017

Next Scheduled EDR Contact: 05/01/2017 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/10/2016 Date Data Arrived at EDR: 10/20/2016 Date Made Active in Reports: 01/06/2017

Number of Days to Update: 78

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 01/06/2017

Next Scheduled EDR Contact: 05/01/2017 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 01/06/2017

Number of Days to Update: 100

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 12/28/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/12/2016 Date Data Arrived at EDR: 09/28/2016 Date Made Active in Reports: 01/06/2017

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/28/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/12/2016
Date Data Arrived at EDR: 09/28/2016
Date Made Active in Reports: 01/06/2017

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/28/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/12/2016 Date Data Arrived at EDR: 09/28/2016 Date Made Active in Reports: 01/06/2017

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/28/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/12/2016 Date Data Arrived at EDR: 09/28/2016 Date Made Active in Reports: 01/06/2017

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/28/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015 Date Data Arrived at EDR: 05/29/2015 Date Made Active in Reports: 06/11/2015

Number of Days to Update: 13

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 11/18/2016

Next Scheduled EDR Contact: 02/27/2017 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016 Date Data Arrived at EDR: 06/01/2016 Date Made Active in Reports: 09/02/2016

Number of Days to Update: 93

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/29/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016 Date Data Arrived at EDR: 06/01/2016 Date Made Active in Reports: 09/02/2016

Number of Days to Update: 93

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 11/29/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 09/26/2016 Date Data Arrived at EDR: 09/29/2016 Date Made Active in Reports: 11/11/2016

Number of Days to Update: 43

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 12/28/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: Sites List

Facilities, sites or areas in which the Office of Hazard Evaluation and Emergency Response has an interest, has

investigated or may investigate under HRS 128D (includes CERCLIS sites).

Date of Government Version: 09/23/2016 Date Data Arrived at EDR: 11/22/2016 Date Made Active in Reports: 12/21/2016

Number of Days to Update: 29

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 11/22/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Permitted Landfills in the State of Hawaii

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 09/17/2012 Date Data Arrived at EDR: 04/03/2013 Date Made Active in Reports: 05/10/2013

Number of Days to Update: 37

Source: Department of Health Telephone: 808-586-4245 Last EDR Contact: 12/30/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Varies

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 12/02/2016 Date Made Active in Reports: 12/21/2016

Number of Days to Update: 19

Source: Department of Health Telephone: 808-586-4228 Last EDR Contact: 12/02/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Semi-Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015 Date Data Arrived at EDR: 10/23/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 118

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015 Date Data Arrived at EDR: 02/12/2016 Date Made Active in Reports: 06/03/2016

Number of Days to Update: 112

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015 Date Data Arrived at EDR: 02/19/2016 Date Made Active in Reports: 06/03/2016 Number of Days to Update: 105

Telephone: 214-665-6597 Last EDR Contact: 10/28/2016

Source: EPA Region 6

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015 Date Data Arrived at EDR: 10/29/2015 Date Made Active in Reports: 01/04/2016 Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/28/2016

Number of Days to Update: 67

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016 Date Data Arrived at EDR: 04/29/2016 Date Made Active in Reports: 06/03/2016 Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 10/28/2016

Number of Days to Update: 35

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Semi-Annually

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016 Date Data Arrived at EDR: 01/08/2016 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 41

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016 Date Data Arrived at EDR: 04/27/2016 Date Made Active in Reports: 06/03/2016

Number of Days to Update: 37

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016 Date Data Arrived at EDR: 04/27/2016 Date Made Active in Reports: 06/03/2016

Number of Days to Update: 37

Source: Environmental Protection Agency Telephone: 415-972-3372

Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Quarterly

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010 Date Data Arrived at EDR: 02/16/2010 Date Made Active in Reports: 04/12/2010

Number of Days to Update: 55

Source: FEMA

Telephone: 202-646-5797 Last EDR Contact: 10/11/2016

Next Scheduled EDR Contact: 01/23/2017 Data Release Frequency: Varies

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 09/12/2016 Date Data Arrived at EDR: 09/15/2016 Date Made Active in Reports: 10/12/2016

Number of Days to Update: 27

Source: Department of Health Telephone: 808-586-4228 Last EDR Contact: 12/02/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015 Date Data Arrived at EDR: 10/29/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 67

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015 Date Data Arrived at EDR: 02/04/2016 Date Made Active in Reports: 06/03/2016

Number of Days to Update: 120

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014 Date Data Arrived at EDR: 11/25/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 65

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016 Date Data Arrived at EDR: 02/05/2016 Date Made Active in Reports: 06/03/2016

Number of Days to Update: 119

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016 Date Data Arrived at EDR: 04/29/2016 Date Made Active in Reports: 06/03/2016

Number of Days to Update: 35

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015 Date Data Arrived at EDR: 11/13/2015 Date Made Active in Reports: 01/04/2016

Number of Days to Update: 52

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016 Date Data Arrived at EDR: 01/08/2016 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 41

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016 Date Data Arrived at EDR: 04/27/2016 Date Made Active in Reports: 06/03/2016

Number of Days to Update: 37

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENG CONTROLS: Engineering Control Sites

A listing of sites with engineering controls in place.

Date of Government Version: 09/23/2016 Date Data Arrived at EDR: 11/22/2016 Date Made Active in Reports: 12/21/2016

Number of Days to Update: 29

Source: Department of Health Telephone: 404-586-4249 Last EDR Contact: 11/22/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Varies

INST CONTROL: Sites with Institutional Controls

Voluntary Remediation Program and Brownfields sites with institutional controls in place.

Date of Government Version: 09/23/2016 Date Data Arrived at EDR: 11/22/2016 Date Made Active in Reports: 12/21/2016

Number of Days to Update: 29

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 11/22/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Varies

State and tribal voluntary cleanup sites

VCP: Voluntary Response Program Sites

Sites participating in the Voluntary Response Program. The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties.

Date of Government Version: 09/23/2016 Date Data Arrived at EDR: 11/22/2016 Date Made Active in Reports: 12/21/2016

Number of Days to Update: 29

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 11/22/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 12/27/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009

Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites

With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 09/23/2016 Date Data Arrived at EDR: 11/22/2016 Date Made Active in Reports: 12/21/2016

Number of Days to Update: 29

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 11/22/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/20/2016 Date Data Arrived at EDR: 09/21/2016 Date Made Active in Reports: 11/11/2016

Number of Days to Update: 51

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 12/20/2016

Next Scheduled EDR Contact: 04/03/2017 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245 Last EDR Contact: 10/31/2016

Next Scheduled EDR Contact: 02/13/2017 Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258

Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside

County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 10/24/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014 Date Data Arrived at EDR: 08/06/2014 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service

Telephone: 301-443-1452 Last EDR Contact: 11/04/2016

Next Scheduled EDR Contact: 02/13/2017 Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory

Register.

Date of Government Version: 08/31/2016 Date Data Arrived at EDR: 09/06/2016 Date Made Active in Reports: 09/23/2016

Number of Days to Update: 17

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/31/2016

Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab site locations.

Date of Government Version: 08/04/2010 Date Data Arrived at EDR: 09/10/2010 Date Made Active in Reports: 10/22/2010

Number of Days to Update: 42

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 11/28/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/30/2016 Date Data Arrived at EDR: 09/06/2016 Date Made Active in Reports: 09/23/2016

Number of Days to Update: 17

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 11/29/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014 Date Data Arrived at EDR: 03/18/2014 Date Made Active in Reports: 04/24/2014

Number of Days to Update: 37

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/27/2016 Date Data Arrived at EDR: 06/28/2016 Date Made Active in Reports: 09/23/2016

Number of Days to Update: 87

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 12/28/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Annually

SPILLS: Release Notifications

Releases of hazardous substances to the environment reported to the Office of Hazard Evaluation and Emergency Response since 1988.

Date of Government Version: 01/14/2016 Date Data Arrived at EDR: 02/24/2016 Date Made Active in Reports: 04/06/2016

Number of Days to Update: 42

Source: Department of Health Telephone: 808-586-4249 Last EDR Contact: 11/23/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Varies

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 03/10/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/11/2013

Number of Days to Update: 39

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/12/2016 Date Data Arrived at EDR: 09/28/2016 Date Made Active in Reports: 01/06/2017

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: (415) 495-8895 Last EDR Contact: 12/28/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 12/08/2016

Next Scheduled EDR Contact: 03/20/2017 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS

Telephone: 888-275-8747 Last EDR Contact: 01/13/2017

Next Scheduled EDR Contact: 04/24/2017 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 01/13/2017

Next Scheduled EDR Contact: 04/24/2017

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011 Date Data Arrived at EDR: 03/09/2011 Date Made Active in Reports: 05/02/2011

Number of Days to Update: 54

Source: Environmental Protection Agency

Telephone: 615-532-8599 Last EDR Contact: 11/17/2016

Next Scheduled EDR Contact: 11/28/2016

Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 07/12/2016 Date Data Arrived at EDR: 08/17/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 65

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 11/16/2016

Next Scheduled EDR Contact: 02/27/2017 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 11/08/2016

Next Scheduled EDR Contact: 02/20/2017 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013 Date Data Arrived at EDR: 03/03/2015 Date Made Active in Reports: 03/09/2015

Number of Days to Update: 6

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 11/11/2016

Next Scheduled EDR Contact: 02/20/2017 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012 Date Data Arrived at EDR: 01/15/2015 Date Made Active in Reports: 01/29/2015

Number of Days to Update: 14

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 12/23/2016

Next Scheduled EDR Contact: 04/03/2017 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016

Number of Days to Update: 133

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 11/22/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 10/24/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical

and health information to aid in the cleanup.

Date of Government Version: 11/25/2013 Date Data Arrived at EDR: 12/12/2013 Date Made Active in Reports: 02/24/2014

Number of Days to Update: 74

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 12/06/2016

Next Scheduled EDR Contact: 03/20/2017 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2016 Date Data Arrived at EDR: 08/22/2016 Date Made Active in Reports: 11/11/2016

Number of Days to Update: 81

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 11/18/2016

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008

Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 11/07/2016

Next Scheduled EDR Contact: 02/20/2017 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016 Date Data Arrived at EDR: 04/28/2016 Date Made Active in Reports: 09/02/2016

Number of Days to Update: 127

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 01/13/2017

Next Scheduled EDR Contact: 04/24/2017 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/27/2016 Date Data Arrived at EDR: 08/05/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 77

Source: Environmental Protection Agency

Telephone: 202-564-5088 Last EDR Contact: 01/09/2017

Next Scheduled EDR Contact: 04/24/2017 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 11/17/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA

Telephone: 202-566-1667 Last EDR Contact: 11/17/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016 Date Data Arrived at EDR: 09/08/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 43

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 11/07/2016

Next Scheduled EDR Contact: 02/20/2017 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 12/06/2016

Next Scheduled EDR Contact: 03/20/2017 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 12/06/2016

Next Scheduled EDR Contact: 03/20/2017 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011 Date Data Arrived at EDR: 10/19/2011 Date Made Active in Reports: 01/10/2012

Number of Days to Update: 83

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 10/28/2016

Next Scheduled EDR Contact: 02/06/2017 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S.

Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/03/2016 Date Data Arrived at EDR: 10/05/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 16

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 01/06/2017

Next Scheduled EDR Contact: 04/17/2017 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 11/02/2016

Next Scheduled EDR Contact: 02/13/2017 Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2016 Date Data Arrived at EDR: 08/01/2016 Date Made Active in Reports: 09/23/2016

Number of Days to Update: 53

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 01/09/2017

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013 Date Data Arrived at EDR: 02/24/2015 Date Made Active in Reports: 09/30/2015

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 11/23/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater

than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 01/13/2017

Next Scheduled EDR Contact: 04/24/2017 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016 Date Data Arrived at EDR: 07/26/2016 Date Made Active in Reports: 09/23/2016

Number of Days to Update: 59

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 11/08/2016

Next Scheduled EDR Contact: 02/20/2017 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010 Date Data Arrived at EDR: 10/07/2011 Date Made Active in Reports: 03/01/2012

Number of Days to Update: 146

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 09/09/2016

Next Scheduled EDR Contact: 12/05/2016 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016 Date Data Arrived at EDR: 04/07/2016 Date Made Active in Reports: 09/02/2016

Number of Days to Update: 148

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 01/05/2017

Next Scheduled EDR Contact: 04/17/2017 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010

Number of Days to Update: 36

Source: American Journal of Public Health

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 06/30/2016 Date Data Arrived at EDR: 07/25/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 88

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 12/22/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 06/30/2016 Date Data Arrived at EDR: 07/25/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 88

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 12/22/2016

Next Scheduled EDR Contact: 04/10/2017 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/05/2016 Date Data Arrived at EDR: 09/01/2016 Date Made Active in Reports: 09/23/2016

Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 12/01/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 12/12/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 12/02/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/15/2016 Date Data Arrived at EDR: 09/07/2016 Date Made Active in Reports: 11/11/2016

Number of Days to Update: 65

Source: EPA

Telephone: (415) 947-8000 Last EDR Contact: 12/06/2016

Next Scheduled EDR Contact: 03/20/2017 Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015 Date Data Arrived at EDR: 01/29/2016 Date Made Active in Reports: 04/05/2016

Number of Days to Update: 67

Source: Department of Defense Telephone: 571-373-0407 Last EDR Contact: 12/05/2016

Next Scheduled EDR Contact: 01/30/2017 Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016 Date Data Arrived at EDR: 06/03/2016 Date Made Active in Reports: 09/02/2016

Number of Days to Update: 91

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 11/28/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Varies

AIRS: List of Permitted Facilities

A listing of permitted facilities in the state.

Date of Government Version: 04/14/2016 Date Data Arrived at EDR: 04/19/2016 Date Made Active in Reports: 05/17/2016

Number of Days to Update: 28

Source: Department of Health Telephone: 808-586-4200 Last EDR Contact: 01/03/2017

Next Scheduled EDR Contact: 04/17/2017 Data Release Frequency: Varies

DRYCLEANERS: Permitted Drycleaner Facility Listing

A listing of permitted drycleaner facilities in the state.

Date of Government Version: 01/20/2016 Date Data Arrived at EDR: 04/19/2016 Date Made Active in Reports: 05/17/2016

Number of Days to Update: 28

Source: Department of Health Telephone: 808-586-4200 Last EDR Contact: 01/03/2017

Next Scheduled EDR Contact: 04/17/2017 Data Release Frequency: Varies

Financial Assurance: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 06/21/2016 Date Data Arrived at EDR: 06/24/2016 Date Made Active in Reports: 08/02/2016

Number of Days to Update: 39

Source: Department of Health Telephone: 808-586-4226 Last EDR Contact: 10/11/2016

Next Scheduled EDR Contact: 12/26/2016 Data Release Frequency: Varies

UIC: Underground Injection Wells Listing

A listing of underground injection well locations.

Date of Government Version: 02/07/2013 Date Data Arrived at EDR: 02/12/2013 Date Made Active in Reports: 04/09/2013

Number of Days to Update: 56

Source: Department of Health Telephone: 808-586-4258 Last EDR Contact: 11/28/2016

Next Scheduled EDR Contact: 03/13/2017 Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/09/2016 Date Data Arrived at EDR: 06/13/2016 Date Made Active in Reports: 09/02/2016

Number of Days to Update: 81

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 12/09/2016

Next Scheduled EDR Contact: 03/27/2017 Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/18/2016 Date Data Arrived at EDR: 09/20/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 31

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 12/20/2016

Next Scheduled EDR Contact: 04/03/2017 Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2016 Date Data Arrived at EDR: 08/23/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 59

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 11/22/2016

Next Scheduled EDR Contact: 03/06/2017 Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc.
Date Data Arrived at EDR: N/A Telephone: N/A
Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A Source: Department of Health Date Data Arrived at EDR: 07/01/2013 Telephone: N/A Date Made Active in Reports: 01/08/2014 Last EDR Contact: 06/01/2012

Number of Days to Update: 191

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Telephone: N/A

Source: Department of Health

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/17/2014

Date Made Active in Reports: 01/17/2014 Last EDR Contact: 06/01/2012

Number of Days to Update: 200 Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Telephone: N/A

Source: Department of Health

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014

Date Made Active in Reports: 01/03/2014

Number of Days to Update: 186

Last EDR Contact: 06/01/2012

Next Scheduled EDR Contact: N/A

Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory Source: Office of Planning Telephone: 808-587-2895

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

HILO HOTELS BANYAN DR HILO, HI 96720

TARGET PROPERTY COORDINATES

Latitude (North): 19.728776 - 19° 43' 43.59" Longitude (West): 155.065961 - 155° 3' 57.46"

Universal Tranverse Mercator: Zone 5 UTM X (Meters): 283482.2 UTM Y (Meters): 2182656.2

Elevation: 12 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5949390 HILO, HI

Version Date: 2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

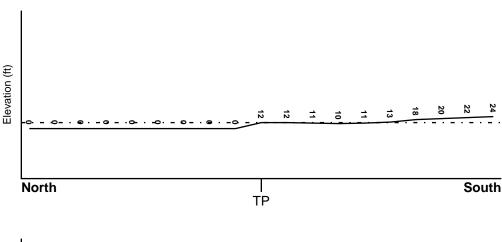
TOPOGRAPHIC INFORMATION

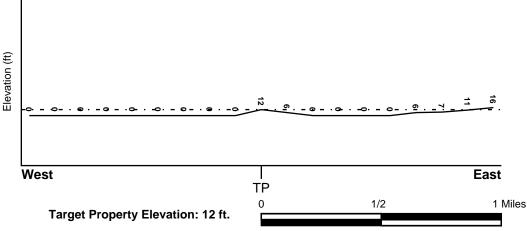
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General North

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property FEMA Source Type

1551660880C FEMA Q3 Flood data

Additional Panels in search area: FEMA Source Type

1551660885C FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property Data Coverage

HILO YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

 MAP ID
 FROM TP
 GROUNDWATER FLOW

 Not Reported
 GROUNDWATER FLOW

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

Era: - Category: -

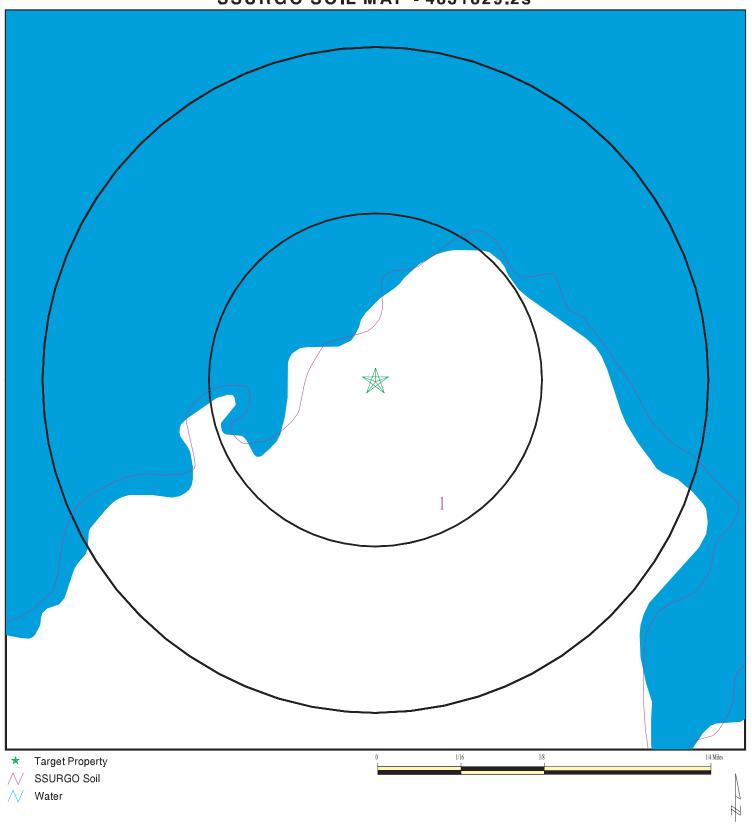
System: -

Series:

Code: N/A (decoded above as Era, System & Series)

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4831829.2s



SITE NAME: Hilo Hotels ADDRESS: Banyan Dr

Hilo HI 96720 LAT/LONG: 19.728776 / 155.065961 CLIENT: Element Environmental , LLC CONTACT: Susan Oram INQUIRY#: 4831829.2s

DATE: January 19, 2017 1:06 pm

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Keaukaha

Soil Surface Texture: muck

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high

water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information								
	Boundary			Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)	
1	0 inches	7 inches	muck	A-8	Highly organic soils, Peat.	Max: 141 Min: 42.34	Max: Min:	
2	7 inches	18 inches	bedrock	Not reported	Not reported	Max: 0.42 Min: 0.02	Max: Min:	

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 0.001 miles

State Database 1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP	
	USGS40000268587	1/4 - 1/2 Mile SSW	
A2	USGS40000268589	1/4 - 1/2 Mile SSW	
A3	USGS40000268591	1/4 - 1/2 Mile SSW	
A4	USGS40000268590	1/4 - 1/2 Mile SSW	
A5	USGS40000268588	1/4 - 1/2 Mile SSW	
10	USGS40000268586	1/4 - 1/2 Mile SSE	
11	USGS40000268582	1/2 - 1 Mile SSE	

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID FROM TP

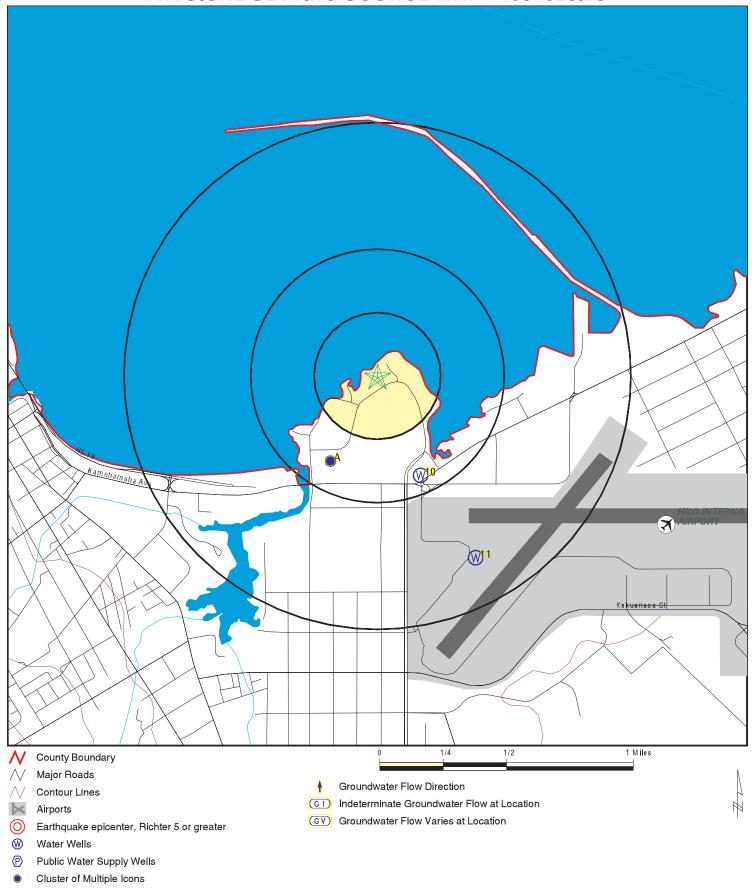
No PWS System Found

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A6	HI90000000004318	1/4 - 1/2 Mile SSW
A7	HI900000004319	1/4 - 1/2 Mile SSW
A8	HI900000004316	1/4 - 1/2 Mile SSW
A9	HI900000004317	1/4 - 1/2 Mile SSW

PHYSICAL SETTING SOURCE MAP - 4831829.2s



SITE NAME: Hilo Hotels ADDRESS: Banyan Dr

Hilo HI 96720 LAT/LONG: 19.728776 / 155.065961 CLIENT: Element Envi CONTACT: Susan Oram Element Environmental, LLC

INQUIRY#: 4831829.2s

January 19, 2017 1:06 pm DATE:

Map ID Direction Distance

Elevation Database EDR ID Number

A1 SSW

FED USGS USGS40000268587

1/4 - 1/2 Mile Lower

Org. Identifier: USGS-HI

Formal name: USGS Hawaii Water Science Center

Monloc Identifier: USGS-194337155041601 Monloc name: 8-4304-03 WAIAKEA

Monloc type: Well

Monloc desc: Not Reported

20010000 Drainagearea value: Not Reported Huc code: Contrib drainagearea: Not Reported Drainagearea Units: Not Reported 19.7239052 Contrib drainagearea units: Not Reported Latitude: Longitude: -155.0683422 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 10.20 Vert measure units: feet Vertacc measure val: .1

Vert accmeasure units: feet

Vertcollection method: Level or other surveying method

Vert coord refsys: HILOCAL Countrycode: US

Aquifername: Not Reported Formation type: Not Reported Aquifer type: Not Reported

Construction date: 19570101 Welldepth: 25.5 Welldepth units: ft Wellholedepth: 25.5

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

A2 SSW FED USGS USGS40000268589

1/4 - 1/2 Mile Lower

Org. Identifier: USGS-HI

Formal name: USGS Hawaii Water Science Center

Monloc Identifier: USGS-194337155041701
Monloc name: 8-4304-02 WAIAKEA DUG WELL

Monloc type: Well

Monloc desc: Not Reported

Huc code: 20010000 Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported 19.7239052 Latitude: -155.06862 24000 Longitude: Sourcemap scale: Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 10.20 Vert measure units: feet Vertacc measure val: 1

Vert accmeasure units: feet

Vertcollection method: Level or other surveying method

Vert coord refsys: HILOCAL Countrycode: US

Aquifername: Hawaii volcanic-rock aquifers

Formation type: Not Reported

Aquifer type: Not Reported

Construction date: 19530101 Welldepth: 20 Welldepth units: ft Wellholedepth: 20

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

A3 SSW FED USGS USGS40000268591

1/4 - 1/2 Mile Lower

Org. Identifier: USGS-HI

Formal name: USGS Hawaii Water Science Center

Monloc Identifier: USGS-194337155041802

Monloc name: 8-4304.01A

Monloc type: Well

Monloc desc: Not Reported

20010000 Huc code: Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported 19.7239051 Latitude: Longitude: -155.0688978 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 8.00 Vert measure units: Vertacc measure val: 1

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: HILOCAL Countrycode:

Aquifername: Not Reported Formation type: Not Reported Aquifer type: Not Reported

Construction date: 19700101 Welldepth: Not Reported Welldepth units: Not Reported Wellholedepth: Not Reported

Wellholedepth units: Not Reported

Ground-water levels, Number of Measurements: 0

A4 SSW FED USGS USGS40000268590

1/4 - 1/2 Mile Lower

Org. Identifier: USGS-HI

Formal name: USGS Hawaii Water Science Center

Monloc Identifier: USGS-194337155041801
Monloc name: 8-4304-01 WAIAKEA DUG WELL

Monloc type: Well

Monloc desc: Not Reported Huc code: 20010000

Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported Latitude: 19.7239051 Longitude: -155.0688978 Sourcemap scale: 24000 Horiz Acc measure: 5 Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 12.00 Vert measure units: feet Vertacc measure val: 2

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: HILOCAL Countrycode: US

Aquifername: Not Reported Formation type: Not Reported

US

Aquifer type: Not Reported

Construction date: 19440101 Welldepth: 20 Welldepth units: ft Wellholedepth: 20

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 1

Feet below Feet to Date Surface Sealevel

1972-04-05 12.47

FED USGS USGS40000268588

1/4 - 1/2 Mile Lower

> Org. Identifier: **USGS-HI**

USGS Hawaii Water Science Center Formal name:

Monloc Identifier: USGS-194337155041602

Monloc name: 8-4304.01B -04

Well Monloc type:

Monloc desc: Not Reported

Huc code: 20010000 Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported Latitude: 19.7239051 Longitude: -155.0688978 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Interpolated from map Horiz Collection method:

Horiz coord refsys: NAD83 Vert measure val: 8.00 Vert measure units: feet Vertacc measure val: 3

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

US HILOCAL Countrycode: Vert coord refsys:

Not Reported Aquifername: Formation type: Not Reported Aquifer type: Not Reported

Welldepth: Construction date: 19710101 16 Welldepth units: ft Wellholedepth: 16

Wellholedepth units: ft

Ground-water levels, Number of Measurements: 0

A6 SSW **HI WELLS** HI900000004318

1/4 - 1/2 Mile Lower

> Wid: 8-4304-003 Island: Hawaii Well name: Shipman 3 Old name: Not Reported

Yr drilled: 1971 **Bechtel** Driller: Quad map: 67 Long83dd:

-155.068889 Lat83dd: 19.723889

Gps: Utm: -1

Owner user: Hawaii Electric Light Co., Inc., HELCO

Land owner: Not Reported

Pump insta: Not Reported

Old number:Not ReportedWell type:DUGCasing dia:Not ReportedGround el:10

Well depth: 20

Solid case: Not Reported Perf case: Not Reported

Use: IND - Geothermal, Thermoelectric Cooling, Power De

Use year: Not Reported

Init head: Not Reported Init head2: Not Reported

Init head3: Not Reported

Init cl: 10000

Test date: Not Reported Test gpm: Not Reported Test ddown: Not Reported Test chlor: Not Reported Test temp: Not Reported Test unit: Not Reported Pump gpm: 6600

Draft mgy: Not Reported Head feet: Not Reported Max chlor: Not Reported Min chlor: Not Reported

Geology: QKL Pump yr: 0

Draft yr: Not Reported Bot hole: -10

Bot solid: Not Reported Bot perf: Not Reported

Spec capac: Not Reported

Pump mgd: 9.504

Draft mgd: Not Reported Pump elev: Not Reported Pump depth: Not Reported Tmk: (3) 2-1-001:024

Aqui code: 80401

Latest hd: Not Reported Wcr: 01-JAN-71

Pir: Not Reported

Surveyor: Not Reported

T: Not Reported Site id: HI900000004318

A7
SSW
HI WELLS
HI9000000004319
1/4 - 1/2 Mile

Wid:8-4304-004Island:HawaiiWell name:Shipman 4A 4BOld name:Not Reported

Yr drilled: 1970
Driller: Not Reported
Quad map: 67

Lower

Lat83dd: -155.068889 Lat83dd: 19.723889

Gps: 0 Utm: -1

Owner user: Hawaii Electric Light Co., Inc., HELCO

Land owner: Not Reported Pump insta: Not Reported

Old number: Not Reported Well type: DUG Casing dia: Not Reported Ground el: 10

Well depth: 20

Solid case: Not Reported Perf case: Not Reported

Use: IND - Geothermal, Thermoelectric Cooling, Power De

Use year: Not Reported

Init head: Not Reported Init head2: Not Reported

Init head3: Not Reported Init cl: 19000

Test date: Not Reported Test gpm: Not Reported

Test ddown: Not Reported Test chlor: Not Reported Test temp: Not Reported Test unit: Not Reported

Pump gpm: 8800

Draft mgy: Not Reported Head feet: Not Reported Max chlor: Not Reported Min chlor: Not Reported

Geology: Not Reported

Pump yr:

Draft yr: Not Reported Bot hole: -10

Bot solid: Not Reported Bot perf: Not Reported

Spec capac: Not Reported

Pump mgd: 12.672

Draft mgd: Not Reported Pump elev: Not Reported Pump depth: Not Reported Tmk: (3) 2-1-001:024 Aqui code: 80401

Latest hd: Not Reported Wcr: 01-JAN-70

Pir: Not Reported Surveyor: Not Reported

T: Not Reported Site id: HI9000000004319

A8 SSW HI WELLS HI900000004316 1/4 - 1/2 Mile Lower

Wid: 8-4304-001 Island: Hawaii
Well name: Shipman 1A 1B Old name: Not Reported

Yr drilled: 1943
Driller: Bechtel
Quad map: 67

Long83dd: -155.068889 Lat83dd: 19.723889

Gps: 0 Utm: -1

Owner user: Hawaii Electric Light Co., Inc., HELCO

Land owner: Not Reported Pump insta: Not Reported

Old number: Not Reported Well type: Not Reported

Casing dia: 54 Ground el: 12

Well depth: 20

Solid case: Not Reported Perf case: Not Reported

Use: IND - Geothermal, Thermoelectric Cooling, Power De

Use year: Not Reported

Init head: Not Reported Init head2: Not Reported

Init head3: Not Reported

Init cl: 0

Test date: Not Reported Test gpm: Not Reported Test ddown: Not Reported Test chlor: Not Reported Test temp: Not Reported Test unit: Not Reported

Test temp: Not Repo

Pump gpm:5400Draft mgy:Not ReportedHead feet:Not ReportedMax chlor:Not ReportedMin chlor:Not Reported

Max chlor: Not Reported Geology: Not Reported

Pump yr: 0

Draft yr: Not Reported Bot hole: -8

Bot solid: Not Reported Bot perf: Not Reported

Spec capac: Not Reported

Pump mgd: 7.776

Draft mgd: Not Reported Pump elev: Not Reported Pump depth: Not Reported Tmk: (3) 2-1-001:024

Aqui code: 80401

Latest hd: Not Reported Wcr: 01-JAN-43

Pir: Not Reported Surveyor: Not Reported

T: Not Reported Site id: HI9000000004316

A9 SSW HI WELLS HI900000004317

1/4 - 1/2 Mile Lower

Wid:8-4304-002Island:HawaiiWell name:Shipman 2Old name:Not Reported

Yr drilled: 1957
Driller: Bechtel
Quad map: 67

Long83dd: -155.068889 Lat83dd: 19.723889

Gps: 0 Utm: -1

Owner user: Hawaii Electric Light Co., Inc., HELCO

Land owner: Not Reported

Pump insta: Not Reported

Old number: Not Reported Well type: DUG Casing dia: 84 Ground el: 10

Well depth: 26

Solid case: Not Reported Perf case: Not Reported

Use: UNU - Unused Use year: Not Reported

Init head: Not Reported Init head2: Not Reported

Init head3: Not Reported

Init cl: 0

Test date:Not ReportedTest gpm:Not ReportedTest ddown:Not ReportedTest chlor:Not ReportedTest temp:Not ReportedTest unit:Not Reported

Pump gpm: 6600

Draft mgy: Not Reported Head feet: Not Reported Max chlor: Not Reported Min chlor: Not Reported

Geology: QKL Pump yr: 0

Draft yr: Not Reported Bot hole: -16

Bot solid: Not Reported Bot perf: Not Reported

Spec capac: Not Reported

Pump mgd: 9.504

Draft mgd: Not Reported Pump elev: Not Reported Pump depth: Not Reported Tmk: Not Reported (3) 2-1-001:024

Aqui code: 80401

Latest hd: Not Reported Wcr: 01-JAN-57

Pir: Not Reported

Surveyor: Not Reported

T: Not Reported Site id: HI9000000004317

Map ID Direction Distance

Elevation Database EDR ID Number

SSE 1/4 - 1/2 Mile FED USGS USGS40000268586

1/4 - 1/2 Mil Lower

10

Org. Identifier: USGS-HI

Formal name: USGS Hawaii Water Science Center

Monloc Identifier: USGS-194334155035801

Monloc name: 8-4303.02 Monloc type: Well

Monloc desc: Not Reported

20010000 Drainagearea value: Not Reported Huc code: Contrib drainagearea: Not Reported Drainagearea Units: Not Reported Contrib drainagearea units: Not Reported Latitude: 19.7230719 Longitude: -155.0633422 Sourcemap scale: 24000 Horiz Acc measure: Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 10.00 Vert measure units: feet Vertacc measure val: 1

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: HILOCAL Countrycode: US

Aquifername: Not Reported Formation type: Not Reported Aquifer type: Not Reported

Construction date: Not Reported Welldepth: Not Reported Welldepth units: Not Reported Wellholedepth: Not Reported

Wellholedepth units: Not Reported

Ground-water levels, Number of Measurements: 0

11 SSE FED USGS USGS40000268582

1/2 - 1 Mile Higher

Org. Identifier: USGS-HI

Formal name: USGS Hawaii Water Science Center

Monloc Identifier: USGS-194317155034601

Monloc name: 8-4303.01

Monloc type: Well

Monloc desc: Not Reported

Huc code: 20010000

Drainagearea value: Not Reported Drainagearea Units: Not Reported Contrib drainagearea: Not Reported Contrib drainagearea units: Not Reported 19.71835 Latitude: Longitude: -155.0600088 24000 Sourcemap scale: Horiz Acc measure: 5 Horiz Acc measure units: seconds

Horiz Collection method: Interpolated from map

Horiz coord refsys: NAD83 Vert measure val: 20.00 Vert measure units: feet Vertacc measure val: 5

Vert accmeasure units: feet

Vertcollection method: Interpolated from topographic map

Vert coord refsys: HILOCAL Countrycode: US

Aquifername: Not Reported Formation type: Not Reported

Aquifer type: Not Reported Construction date: Not Reported Welldepth units: Not Reported

Wellholedepth units:

Not Reported

Ground-water levels, Number of Measurements: 0

Welldepth: Not Reported Wellholedepth: Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for HAWAII County: 3

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 96720

Number of sites tested: 43

Area Average Activity % <4 pCi/L % 4-20 pCi/L % >20 pCi/L Living Area - 1st Floor -0.112 pCi/L 100% 0% 0% Not Reported Living Area - 2nd Floor Not Reported Not Reported Not Reported Basement -0.106 pCi/L 100% 0% 0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory

Source: Office of Planning Telephone: 808-587-2895

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Well Index Database

Source: Commission on Water Resource Management

Telephone: 808-587-0214

CWRM maintains a Well Index Database to track specific information pertaining to the construction and installation of production wells in Hawaii

OTHER STATE DATABASE INFORMATION

RADON

Area Radon Information Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Hilo Hotels Banyan Dr Hilo, HI 96720

Inquiry Number: 4831829.12

January 19, 2017

The EDR Aerial Photo Decade Package



EDR Aerial Photo Decade Package

01/19/17

Site Name: Client Name:

Hilo Hotels Element Environmental, LLC

 Banyan Dr
 98-030 Hekaha Street

 Hilo, HI 96720
 Aiea, HI 96701-0000

 EDR Inquiry # 4831829.12
 Contact: Susan Oram



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	Source
2000	1"=500'	Acquisition Date: June 16, 2000	USGS/DOQQ
1992	1"=500'	Flight Date: September 30, 1992	USGS
1988	1"=500'	Flight Date: October 01, 1988	USGS
1977	1"=500'	Flight Date: January 03, 1977	USGS
1954	1"=500'	Flight Date: April 10, 1954	USGS

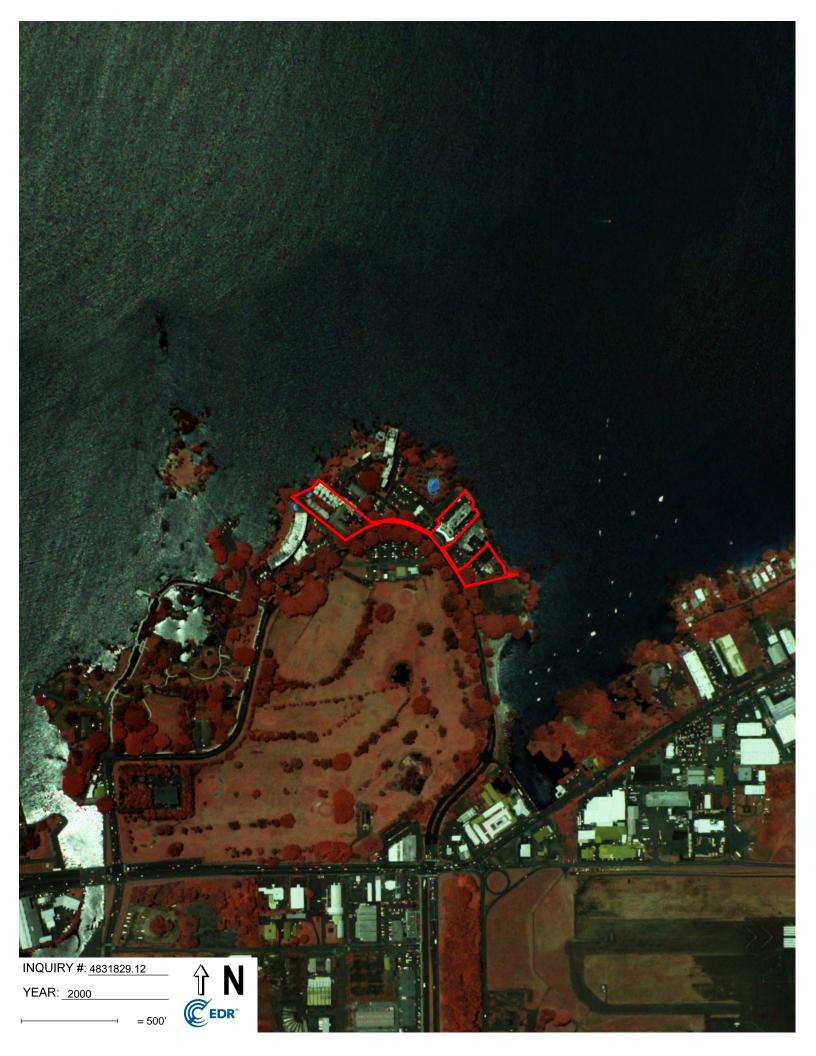
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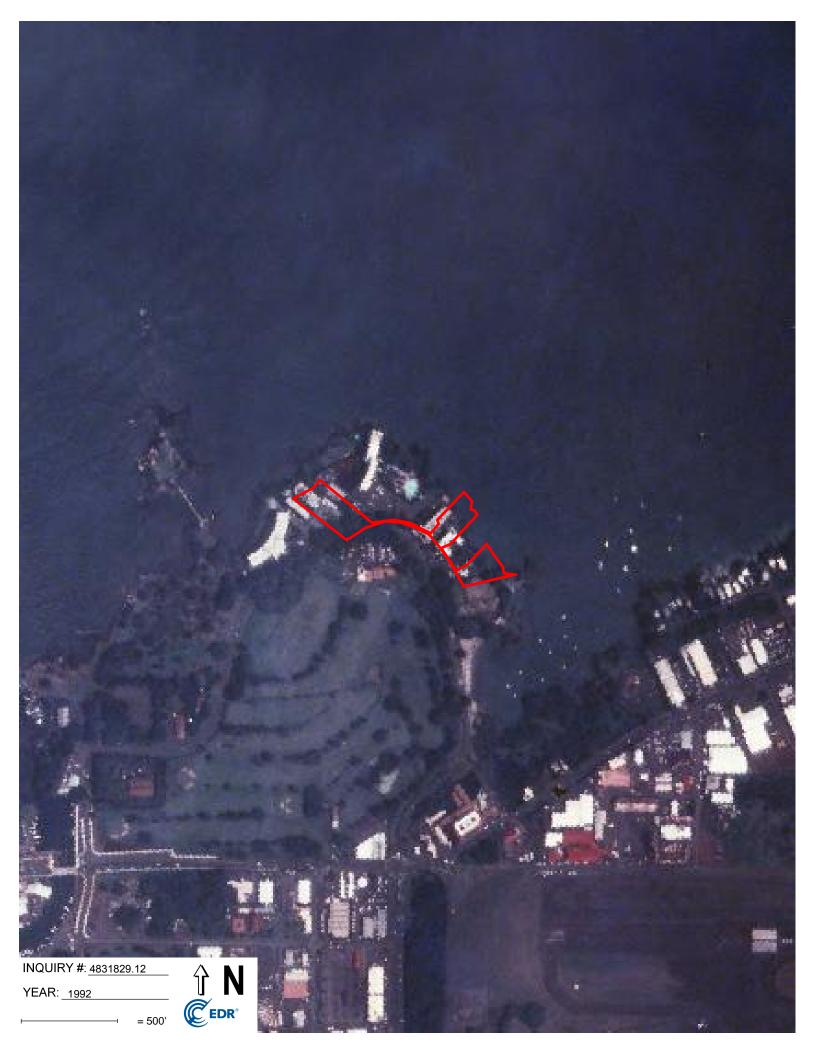
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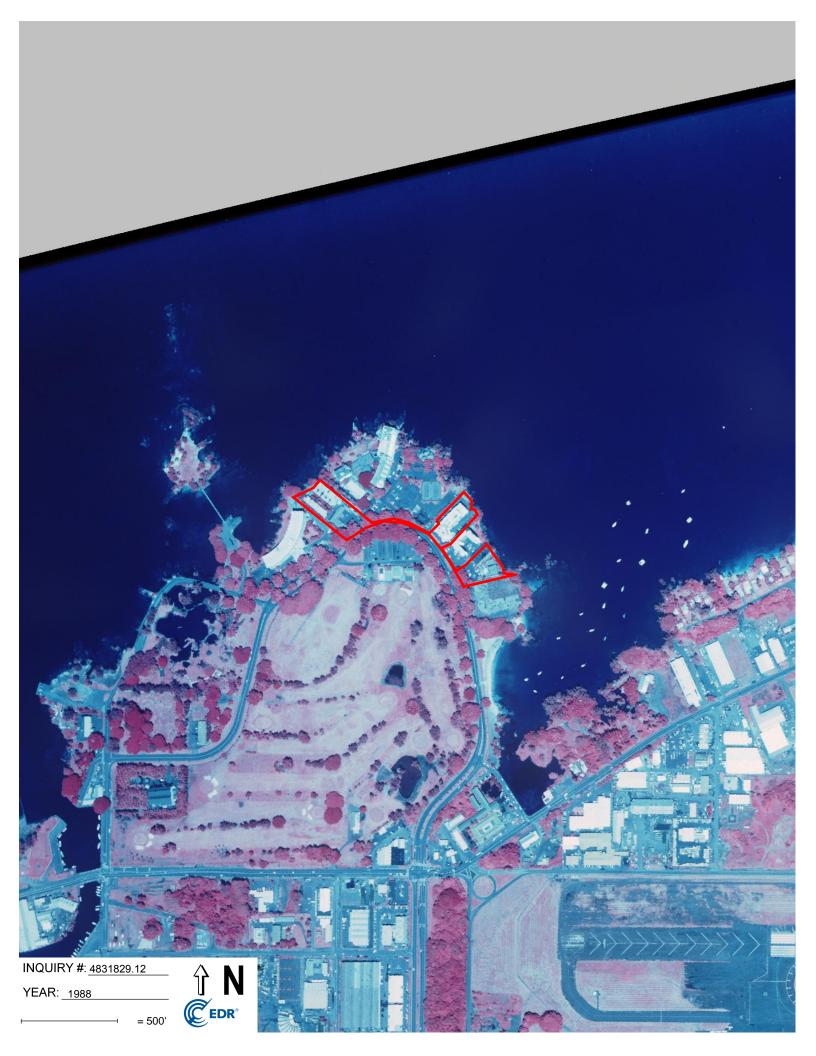
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Hilo Hotels Banyan Dr Hilo, HI 96720

Inquiry Number: 4831829.3

January 19, 2017

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

Certified Sanborn® Map Report

01/19/17

Site Name: Client Name:

Hilo Hotels Element Environmental, LLC

98-030 Hekaha Street Banyan Dr Hilo, HI 96720 Aiea, HI 96701-0000 EDR Inquiry # 4831829.3 Contact: Susan Oram

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Element Environmental, LLC were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 2EC6-49D2-9F23

PO# NA

170004 Hilo Hotels **Project**

Maps Provided:

1991

1987

1978 1974

1957

1921



Sanborn® Library search results

Certification #: 2EC6-49D2-9F23

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress

✓ University Publications of America

▼ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1991 Source Sheets



Volume 1, Sheet 26 1991

1987 Source Sheets



Volume 1, Sheet 26 1987

1978 Source Sheets



Volume 1, Sheet 26 1978

1974 Source Sheets



Volume 1, Sheet 26 1974

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1957 Source Sheets



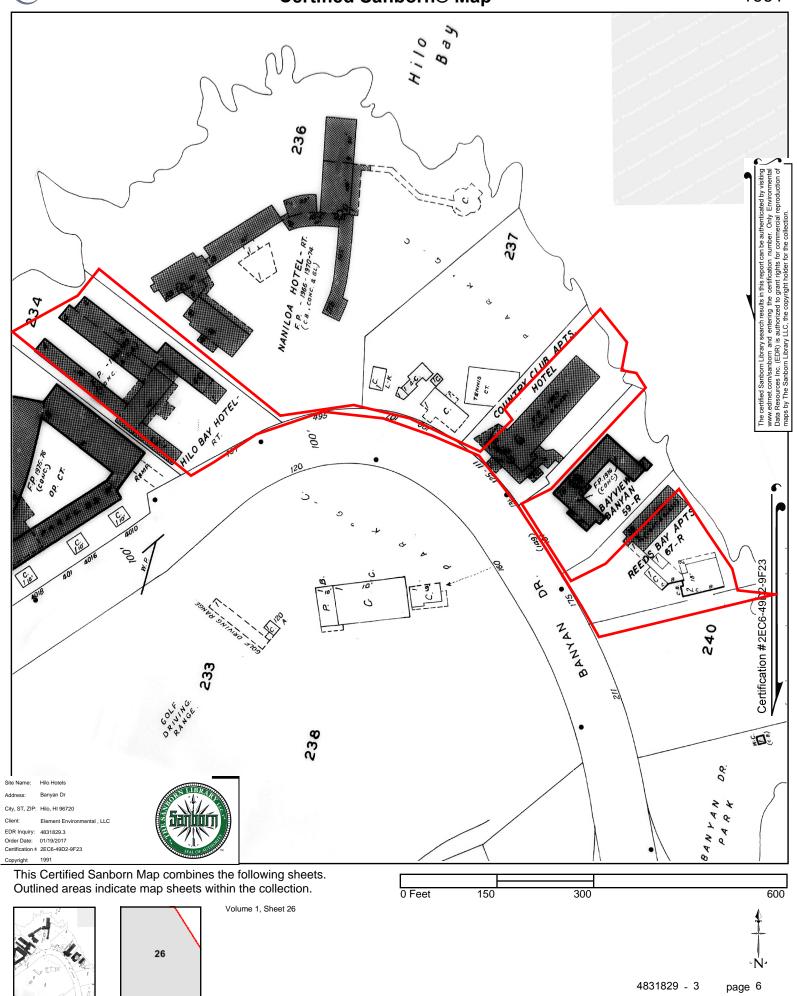
Volume 1, Sheet 26 1957

1921 Source Sheets

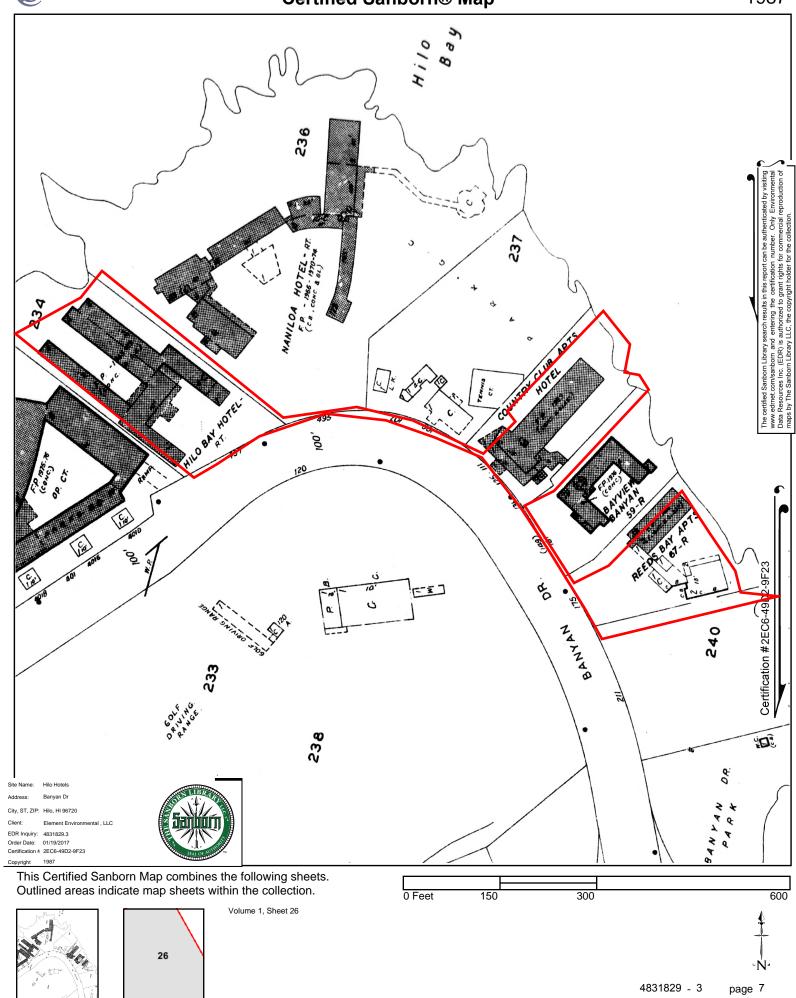


Volume 1, Sheet 26 1921





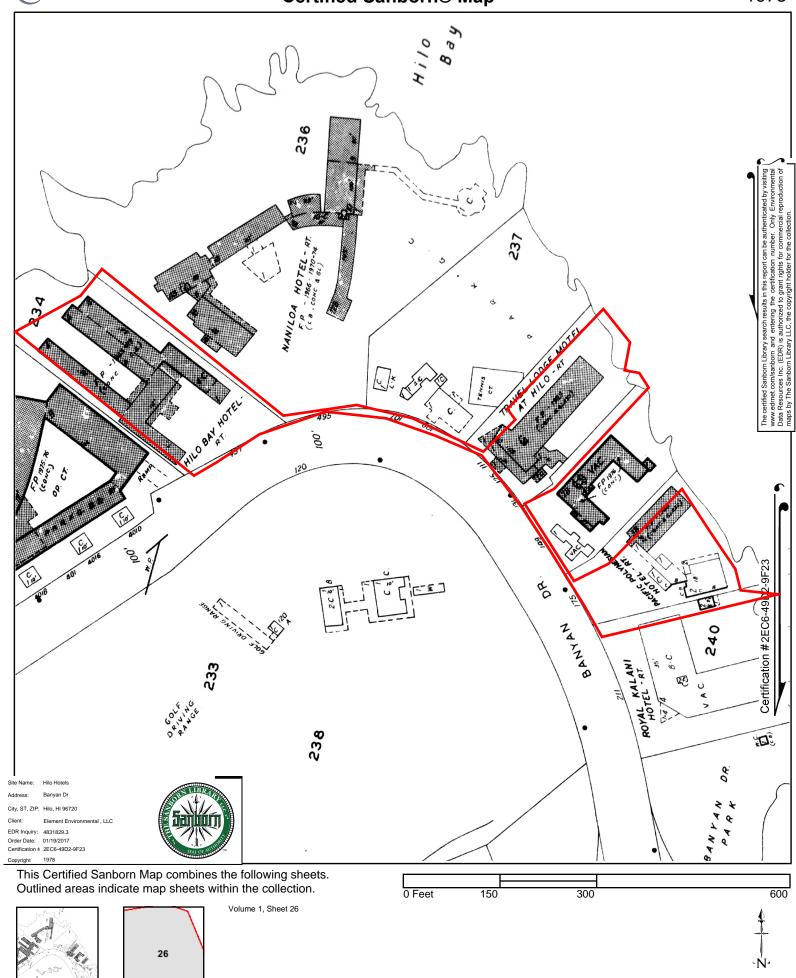




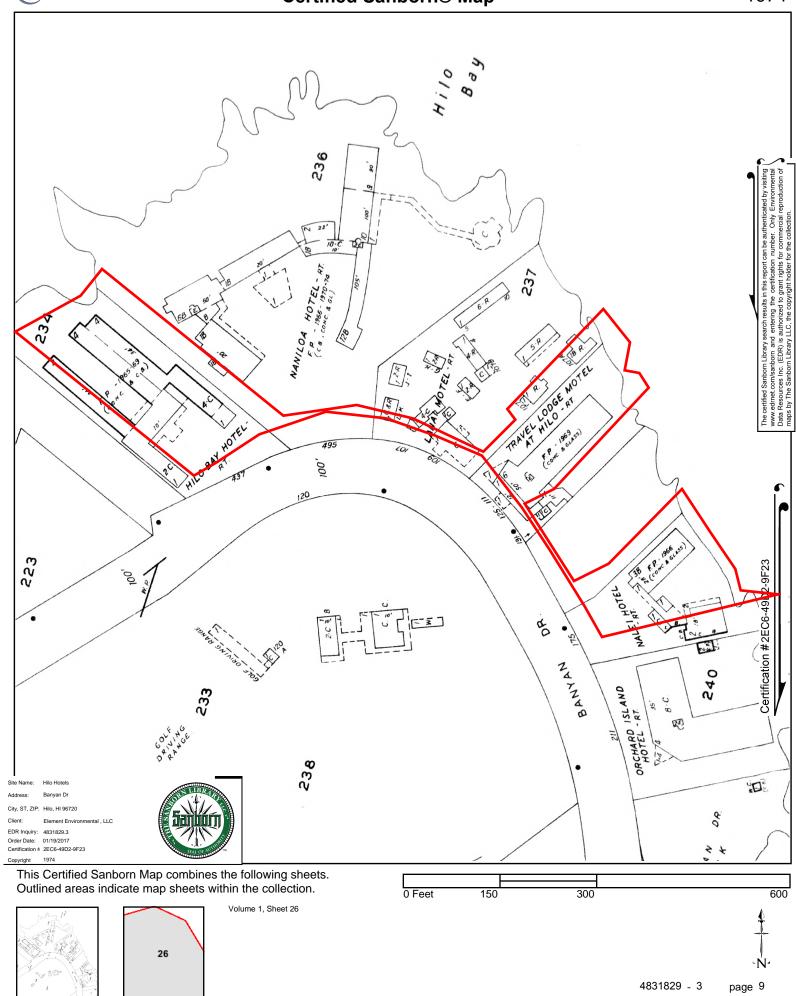
4831829 - 3

page 8

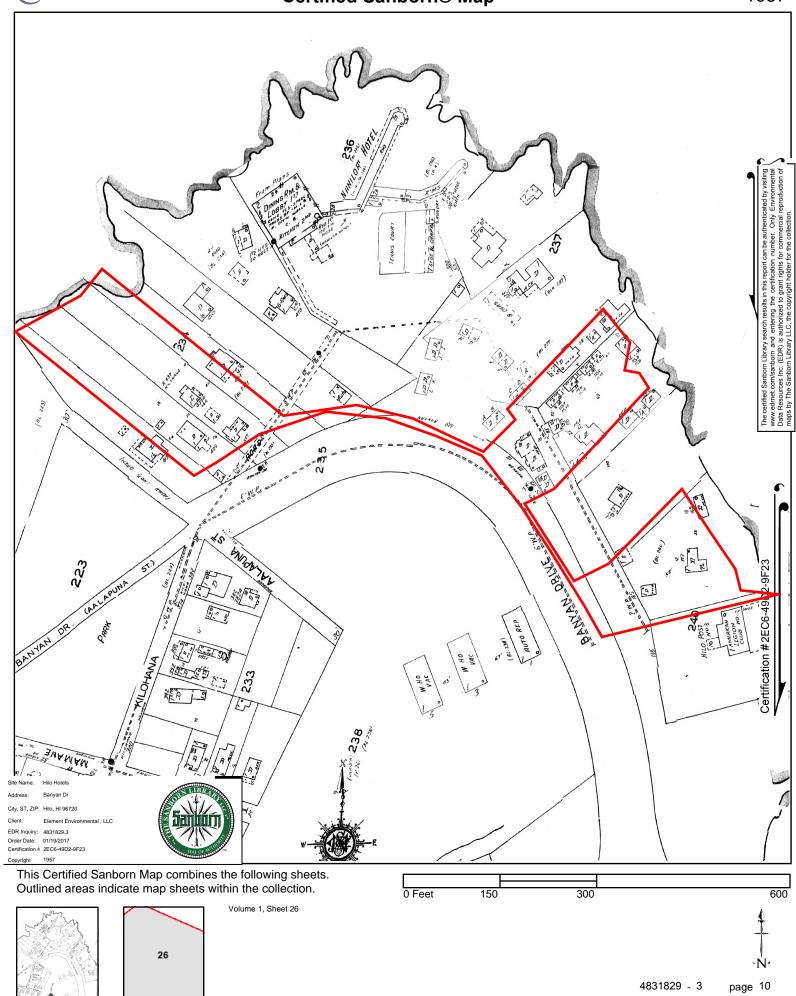




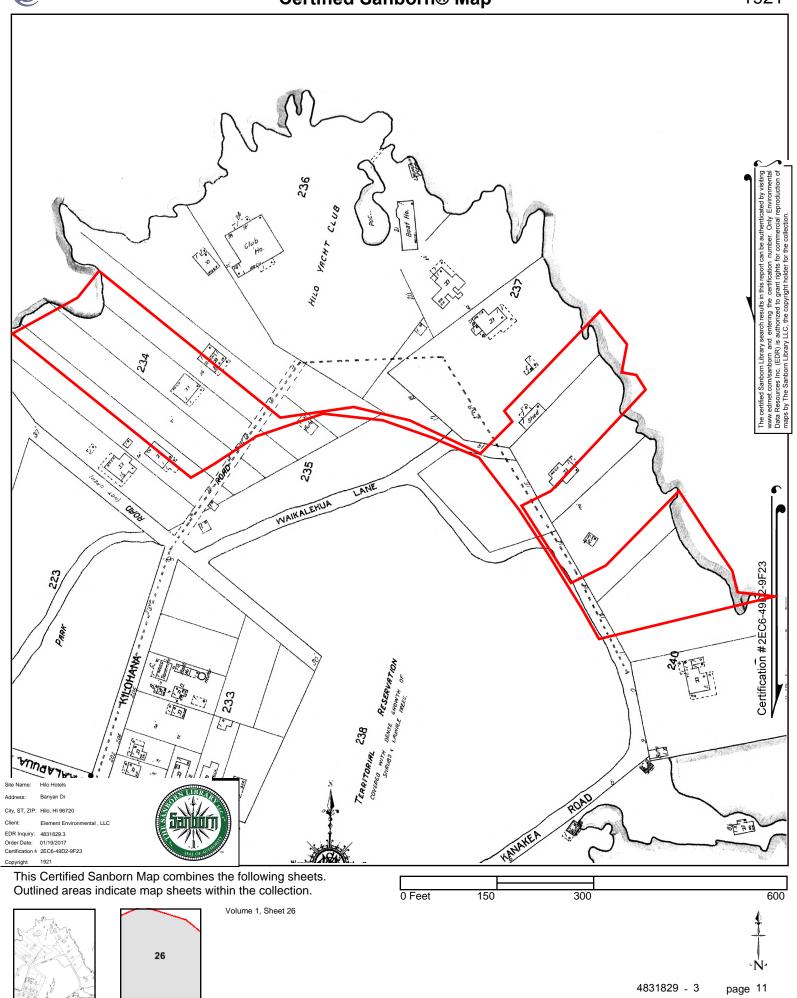


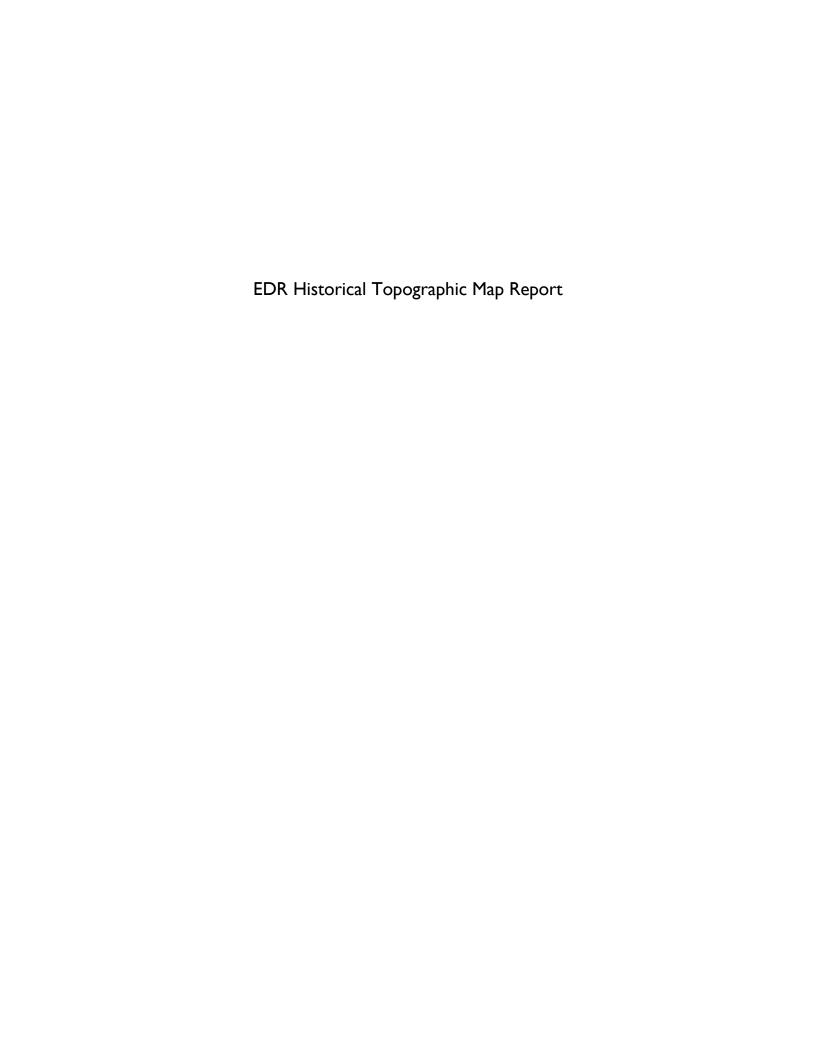












Hilo Hotels Banyan Dr Hilo, HI 96720

Inquiry Number: 4831829.4

January 19, 2017

EDR Historical Topo Map Report

with QuadMatch™



EDR Historical Topo Map Report

01/19/17

Site Name: Client Name:

Hilo Hotels Element Environmental, LLC

 Banyan Dr
 98-030 Hekaha Street

 Hilo, HI 96720
 Aiea, HI 96701-0000

 EDR Inquiry # 4831829.4
 Contact: Susan Oram



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Element Environmental, LLC were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:	Coordinates:
Jour on Modulio.	oooi amates.

P.O.# NA Latitude: 19.728776 19° 43' 44" North

Project: 170004 Hilo Hotels **Longitude:** -155.065961 -155° 3' 57" West

 UTM Zone:
 Zone 5 North

 UTM X Meters:
 283485.48

 UTM Y Meters:
 2182786.22

Elevation: 12.76' above sea level

Maps Provided:

2013

1995

1981

1963, 1966

1932

1915, 1917

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2013 Source Sheets



Papaikou 2013 7.5-minute, 24000



Hilo 2013 7.5-minute, 24000

1995 Source Sheets



Hilo 1995 7.5-minute, 24000 Aerial Photo Revised 1995

1981 Source Sheets



Hilo 1981 7.5-minute, 24000 Aerial Photo Revised 1977

1963, 1966 Source Sheets



Hilo 1963 7.5-minute, 24000 Aerial Photo Revised 1961



Papaikou 1966 7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1932 Source Sheets



Hilo 1932 15-minute, 62500

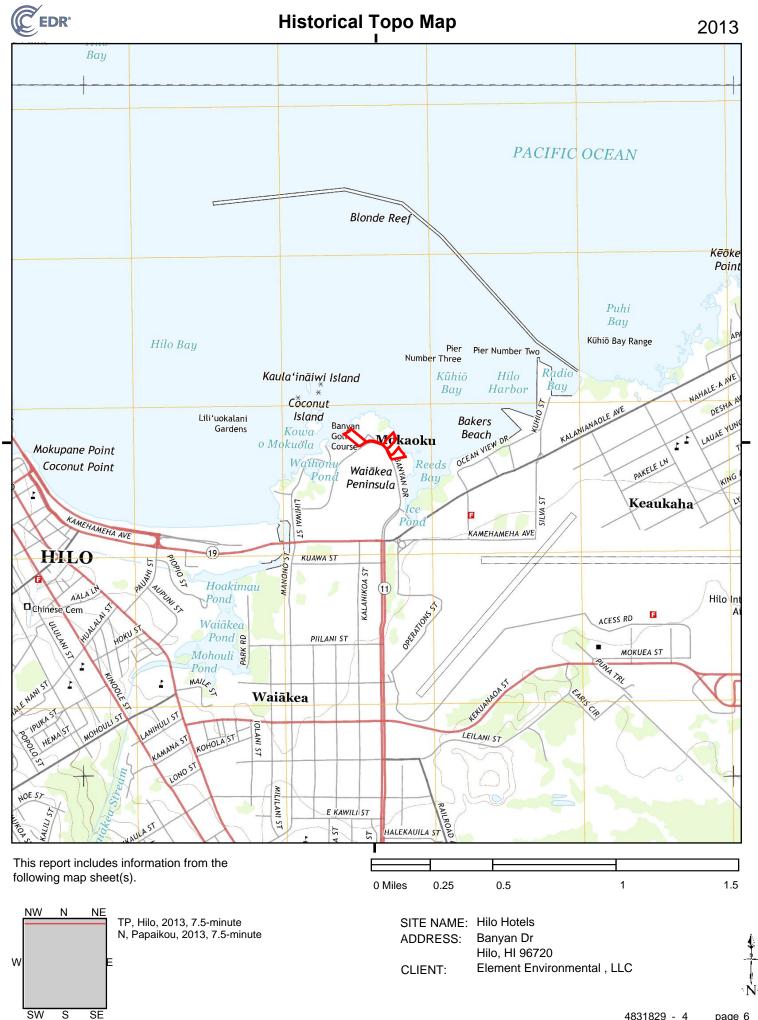
1915, 1917 Source Sheets



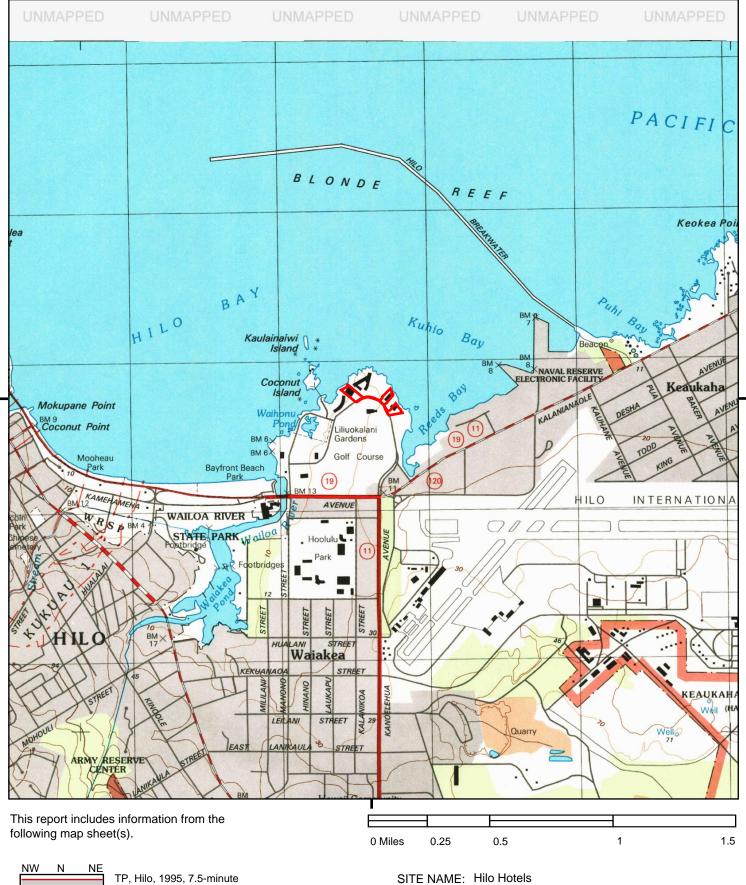
Honomu 1915 15-minute, 62500



Hilo 1917 15-minute, 62500







TP, Hilo, 1995, 7.5-minute

SW

S

SE

SITE NAME: Hilo Hotels
ADDRESS: Banyan Dr

DRESS: Banyan Dr Hilo, HI 96720

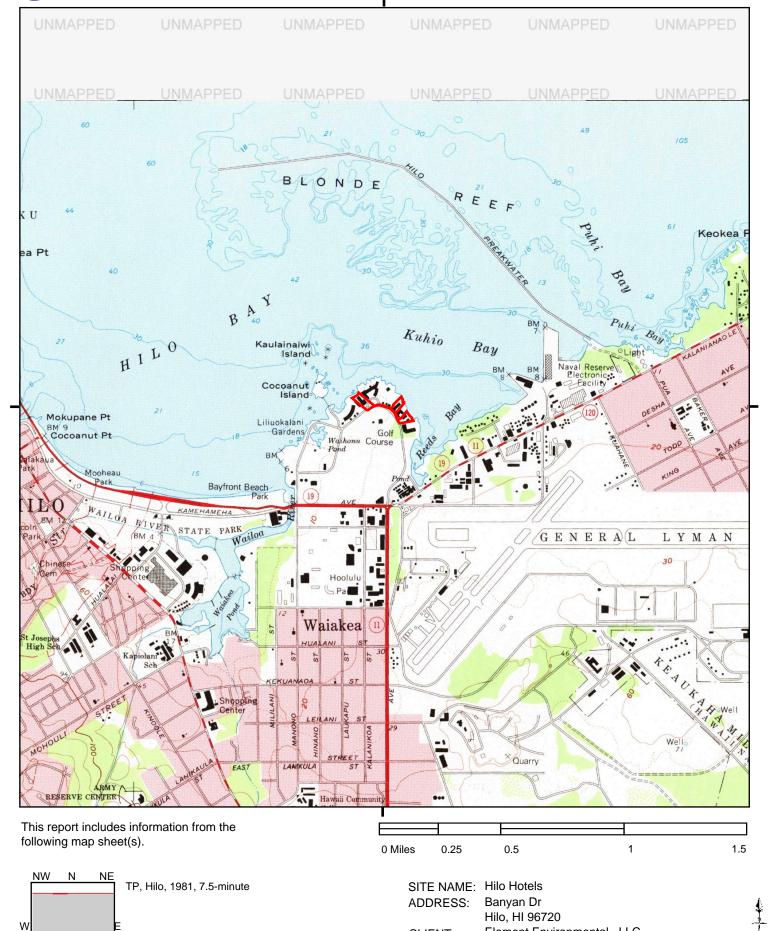
CLIENT: Element Environmental , LLC



SW

S

SE



Element Environmental, LLC

CLIENT:

This report includes information from the following map sheet(s).

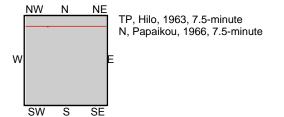
HILO

60

Mokupane Pt

BM 9 Cocoanut Pt

ea Pt



0 Miles 0.25 0.5 1 1.5

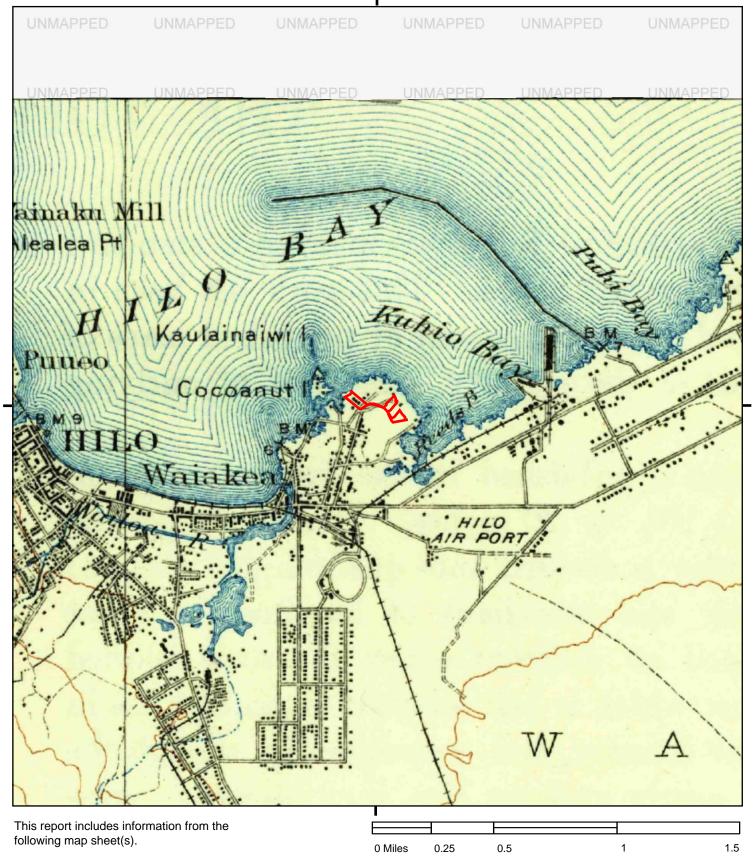
SITE NAME: Hilo Hotels ADDRESS: Banyan Dr

Hilo, HI 96720

CLIENT: Element Environmental, LLC







NW N NE TP, Hilo, 1932, 15-minute

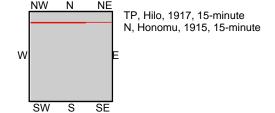
SITE NAME: Hilo Hotels
ADDRESS: Banyan Dr

Banyan Dr Hilo, HI 96720

CLIENT: Element Environmental, LLC



This report includes information from the following map sheet(s).



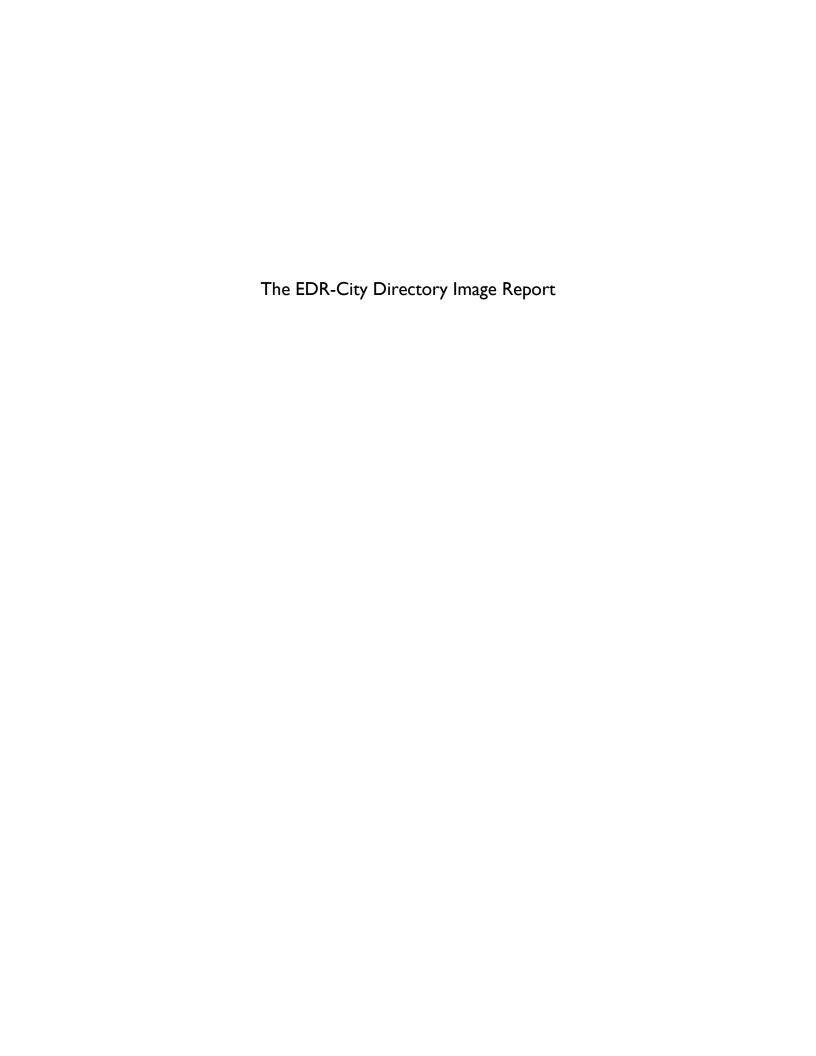
0 Miles 0.25 0.5 1 1.5

SITE NAME: Hilo Hotels ADDRESS: Banyan Dr

Hilo, HI 96720

CLIENT: Element Environmental, LLC





Hilo Hotels

Banyan Dr Hilo, HI 96720

Inquiry Number: 4831829.5

January 19, 2017

The EDR-City Directory Image Report



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SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.Please contact EDR at 1-800-352-0050 with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	Target Street	Cross Street	<u>Source</u>
2013	$\overline{\checkmark}$	$\overline{\checkmark}$	Cole Information Services
2008		$\overline{\mathbf{V}}$	Cole Information Services
2003		$\overline{\mathbf{V}}$	Cole Information Services
1999		\square	Cole Information Services
1995		$\overline{\checkmark}$	Cole Information Services
1992		$\overline{\checkmark}$	Cole Information Services

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FINDINGS

TARGET PROPERTY STREET

Banyan Dr Hilo, HI 96720

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
BANYAN DR		
2013	pg A2	Cole Information Services
2008	pg A5	Cole Information Services
2003	pg A8	Cole Information Services
1999	pg A11	Cole Information Services
1995	pg A14	Cole Information Services
1992	pg A17	Cole Information Services

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FINDINGS

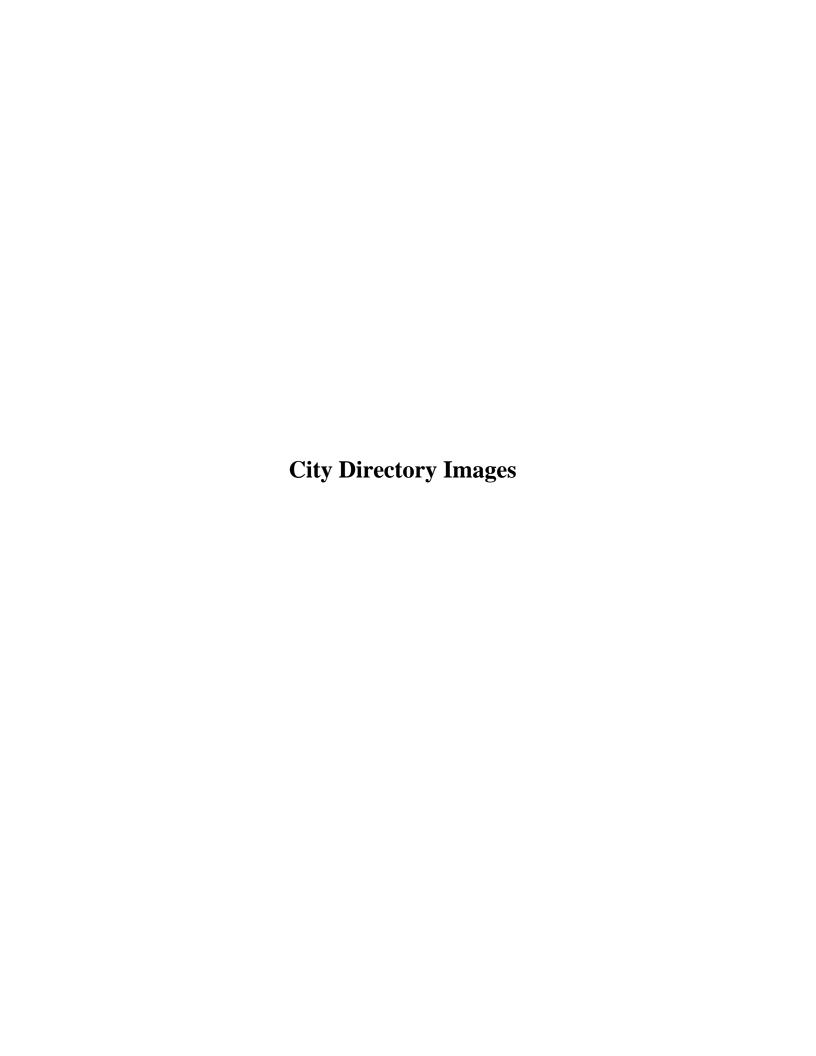
CROSS STREETS

CD Image	<u>Source</u>
	<u>CD Image</u>

KAMEHAMEHA AVE

2013	pg. A4	Cole Information Services
2008	pg. A7	Cole Information Services
2003	pg. A10	Cole Information Services
1999	pg. A13	Cole Information Services
1995	pg. A16	Cole Information Services
1992	pg. A18	Cole Information Services

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BANYAN DR 2013

21	ALII ICE COMPANY LTD
	KAILUA AIR CONDITIONING & REFRIGERAT
74	WWE HAWAII HEADQUARTERS
71	BANYAN GIFT SHOP BANYAN MASSAGE HALE
	BLUE KALO
	HILO HAWAIIAN HOTEL
	JAMA ENTERPRISES
	JAYMIELEES STYLING SALON
	N JOY TRAVEL AGENCY
87	HILO BAY HOTEL UNCLE BILLYS
O1	PLANTATION KITCHEN LLC THE
	UNCLE BILLYS
93	DAWNS BARBER SHOP
	GEORGE KOSMIDES
101	CHRIS TIMM
120	NANILOA VOLCANOES GOLF CLUB
121	321 CONNECT INC
	COUNTRY CLUB CONDO HOTEL
	COUNTRY CLUB HAWAII CONDO HOTEL
	HALAU HULA O KAHIKILAULANI
	HARRY NAMAUU
136	OCCUPANT UNKNOWN
161	ANDREW THOMPSON
	ANTONIA CHONG
	CHARLENE HOOHULI
	CHEY FISCHER
	CHRISANTA AGUILAR CLYDE NOTLEY
	COURTNEY PACHECANO-MONTE
	DALE PATAO
	DRAGOLJUB PETROVIC
	DWAYNE LUCAS
	FELY DIZON
	FLORA COLLINS
	HARDIMON SARA
	HERBERT ARATA
	JACOB FUKUZONO
	JANELLE HICKOK
	JOSEPH POIRIER
	JUANA ROY
	KEITH HUGHES
	L NIREI
	LARRY GERING
	LEILANI KAAI
	LORY PUU
	LUCINDA GOLDSTEIN
	MONA OBA
	NORMA GODFREY
	PATSY HALALILO

BANYAN DR 2013 (Cont'd)

161 RALPH RENGULBAI

RICHARD SAYA SEISHO OSHIRO

STEPHEN MARTINO

TERRY WESTLUND

TRUDI DELFIN

WAYNE YOSHIZUMI

WILL CLARK

175 ANTHONY VERIATO

ARNOLD MIYASAKI

C THORSEN

CLIFTON LEONARD

CONNIE PECK

DAVID GUEST

DAVID HEDGECOCK

DONALD INOUYE

DONNA JARRA

JAMES MAKAIO

JARED MARTIN

JOHN SILVA

JOHNNY KAMAHELE

LEILANI KUMUNALU

MARILYN WILLIAMS

MISTY WHEELER

PENNY KAMAKA

REEDS BAY RESORT HOTEL

SB SPENCER

T GOODALL

YVETTE BUTTERFIELD

KAMEHAMEHA AVE 2013

329	HILO DOWNTOWN IMPROVEMENT ASSOCIATIO
330	FISH HOUSE CAFE
	PLANET SHADE
	SUZIS DESIGNS
336	REUBENS MEXICAN FOOD
	STAIRWAY TO ART
382	NAUTILUS DIVE CENTER INC
394	MASAS SHELL SERVICE
434	TESORO HAWAII CORPORATION
744	BAYFRONT MOTORS
774	BAYSIDE CHEVRON SERVICE
	CHEVRON
1266	EASTER SEALS HAWAII
	GENERATOR WIZARDS
	KANESHIRO LISA A K PSYD LLC
	KOA CONSULTING LLC
	MCDONNELL FRAME & DESIGN
	PRIMERICA
	SECURITAS SECURITY SERVICES
	TURNING POINT FOR FAMILIES
1550	COQUIS HIDEAWAY SPORTS BAR
1582	STATE OF HAWAII GOVERNMENT
1672	JACKSON VOLVO SERVICE
1710	WIKIWIKI KITCHEN INC
1717	HILO SAND DOLLAR
	HULAKAI
	WATERWORKS
1730	KENS HOUSE OF PANCAKES
1765	VERNAS III DRIVE INN
1965	SUISAN COMPANY LIMITED
2055	KUWAYE TRUCKING INC

BANYAN DR 2008

	DANTANUK	2006
21	ALII ICE CO LTD	
	KAILUA AC & REFRIGERATION	
71	BANYAN MASSAGE HALE	
	HANKYU EXPRESS USA INC	
	HILO HAWAIIAN HOTEL	
	JAMA ENTERPRISES	
	JAYMIELEES STYLING SALON	
87	BERETANIA PROPERTIES INC	
	HILO BAY RESTAURANT INC	
	RESORTS HAWAII INC	
	UNCLE BILLYS	
	UNCLE BILLYS GENERAL STORE AT HILO	
93	BIG ISLAND INTERNATIONAL MARAT	
	HOOLA O LOMILOMI LAPAAU CLINIC	
	NAKANO CO LTD	
	NANILOA VOLCANOES RESORT	
	TING HAO SEAFOOD RESTAURANT	
101	CHRIS TIMM	
120	NANILOA COUNTRY CLUB	
	NANILOA GOLF COURSE	
121	321 CONNECT INC	
	COUNTRY CLUB CONDO HOTEL	
	HAWAII LOA PUBLICATIONS	
	JIM COBBS TREE FARM	
	POP ONE INC	
	ROBERTA BRYANT	
	TCE PACIFIC CORP	
126	HILO SEASIDE HOTEL	
	OCCUPANT UNKNOWN	
136	COCONUT GRILL	
161	ALBERTO SILVA	
	ALICIA WILSON	
	ANDREW DUNCAN	
	BENNETT SCHMIDT	
	BRAD IWASAKI	
	BRANDY KAMOHALII	
	CHARLENE PULGADOS	
	CHARLES CALDWELL	
	CODY WHITE	
	CRYSTAL SINGLETARY	
	DENISE STAUDINGER	
	DOUGLAS MORRISON	
	DRAGOLJUB PETROVIC	
	EUGENE OREVILLO	
	FRANCES SALES	
	FRANCIS LINDSEY	
	HARDIMON SARA	
	HERBERT ARATA	
	J MYERS	
	JOHNETTE COLTES	

BANYAN DR 2008 (Cont'd)

161 JONATHAN DAY

KATHLEEN SPENCE

L MALONE

LEILANI KAAI

LORI BRUCE

MARIAN BUNDY

MARILY GAYLORD

MARY CASHMAN

MATSUMI FUJII

MONA OBA

MOOSE INTERNATIONAL INC

P AHPUCK

PETER OKANE

RALPH RENGULBAI

RENAE NAKATA

RICHARD EALUM

RICHARD SAYA

RITA PARNALA

ROBERT ARIAL

S BRENNEMAN

S LERMA

SEISHO OSHIRO

SHANNON OKAMOTO

SHANNON POMMERENK

SHAYANNE PINHEIRO

SHELLIE NAHAKUELUA

SHERIA ZANNINI

SOLOMON DIAZ

TERRY WESTLUND

175 AVELINO LEE

BANYAN TREE BEAUTY SALON

CARL NYGREN

DAVID HEDGECOCK

DONALD INOUYE

FRANCINE OREVILLO

HARRIET IONA

JOAN BEST

JOHN SILVA

JOHNNY KAMAHELE

MICHAEL VALIERE

NORMIANA FIGUEIRA

REEDS BAY RESORT HOTEL LTD

ROGER HUTTO

RONALD NEWBERRY

SHEILA CARPENTER

T GOODALL

YVETTE BUTTERFIELD

KAMEHAMEHA AVE 2008

329	HILO DOWNTOWN IMPROVEMENT ASSOCIATIO
336	HIS HIGHEST PRAISE OF HILO
382	NAUTILUS DIVE CENTER INC
384	KIM TO
	KT FLOWERS
394	MASAS SHELL SERVICE INC
434	TESORO CORP
774	BAYSIDE CHEVRON SERVICE
	KHI INC
1266	APPLIED GRAPHICS INC
	ART WITH ATTITUDE
	BAY VIEW MARINE
	CALICAS WELDING SERVICE
	GENERATOR WIZARDS
	KA MALUHIA LEARNING CENTER
	LISA A K KANESHIRO PSYD LLC
	MALUHIA EDUCATION & TRAINING SERVICE
	SECURITAS SECURITY SERVICES USA INC
	TURNING POINT FOR FAMILIES INC
1550	FIREHOUSE RESTAURANT CORP
	PUB TIME INC
1582	ENVIRONMENTAL MANAGEMENT
	HEALTH HAWAII DEPARTMENT OF
1717	J & J HARDWARE HOME IMPROVEMENT
1730	KENS HOUSE OF PANCAKES
1765	VERNAS III DRIVE INN
1965	MATSUNO ENTERPRISES LTD
	SUISAN
	SUISAN CO LTD
2055	PSC INDUSTRIAL SERVICES GROUP

<u>Target Street</u> <u>Cross Street</u> <u>Source</u>

BANYAN DR 2003

Cole Information Services

	DAINTAINDR	
0.4	OOOLIDANIT LINIKALOMAL	
21	OCCUPANT UNKNOWN	
71	BIG ISLAND COFFEE CO HANKYU EXPRESS USA INC	
	LANE PUA	
	— · · · — · · · · ·	
	LANE PUA	
	N JOY TRAVEL AGENCY TRANQUIL WATERS HILO HWN HOTEL	
07	WATERS TRANQUIL	
87	HILO BAY HOTEL RESORTS HAWAII INC	
	UNCLE BILLYS GENERAL STORE	
	UNCLE BILLYS HILO BAY HOTEL	
93	BEN & CO	
93	BIG ISLAND INTERNATIONAL MRTHN	
	HAWAII NANILOA RESORT	
	HOOLA O LMLM LAPAAU CLNC	
	HOOLA O LOMILOMI LAPAAU CLINIC	
	MERRIE MONARCH FESTIVAL	
	NAKANO CO	
	PACIFIC SURGICAL ASSOCS	
	TING HAO SEAFOOD RESTAURANT	
	TRAVIS HANAKAHI	
	WATERS OF LIFE PBLC CHRTR SCHL	
101	CHRIS TIMM	
111	BANYAN BICYCLE ADVNTR MULTI	
	BANYAN HIBACHI	
	OCCUPANT UNKNOWN	
120	HALAU HULA OKAHIKILAULANI	
	NANILOA GOLF CRS DRVNG RANGE	
121	ANGELA JODOIN	
	ASHLEY KASHIMA	
	CHARLES DICKERSON	
	DOROTHY WHITE	
	EDVELIN KAILIANU	
	ELI MAKASOBE	
	FRED KESKE	
	IMAINO PAUL TAX SRVC & CNSLTNT	
	JING LI	
	KINNEY LEMMON	
	LEO ROUX	
	LUMAN GESFORD	
	MAYA IMAMURA	
	NAILS & GLAMOUR ON CO	
	RAYA ALEXANDER	
	RONALD HENSHAW	
	RUSSELL CUNNINGHAM	
	SHOOTERS BAR & GRILL	
161	A RANDALL	
	ANANALATO	

AMY LATO

BENNETTA SCHMIDT

Target Street Cross Street Source

✓ - Cole Information Services

BANYAN DR 2003 (Cont'd)

161 CARLENE PULGADOS

COUNTRY CLUB CONDO HOTEL

EVA DRISKELL EVA MARTIN

GREGORY POMMERENK

JASON ARIKI

JOAN CONVERSE

JOSEPH SUMMERS

KEITH GODFREY

KENNETH RAUPP

LARRY BALBARINO

LEONE STEMBER

LORI RIVERA

LOYAL ORDER OF MOOSE HILO LODG

NARCISA YAGIN

NATHAN OSHIRO

NYLENE SCHOELLHORN-PUHA

P AHPUCK

PETER OKANE

ROSEMARY FROELICH

S BRENNEMAN

S LERMA

THOMAS DECLUE

175 AMINTA ELL

ANDY STARK

BANYAN TREE BEAUTY SALON

DAVID HEDGECOCK

DONALD INOUYE

JOHNNY KAMAHELE

JUDITH GEORGE

MICAH MILLER

MICHAEL JONES

PAULA AYOTTE

REEDS BAY RESORT HOTEL

RICHARD SAKODA

RONALD NEWBERRY

THERESA GOODALL

THOMAS RAVEY

4831829.5 Page: A9

KAMEHAMEHA AVE 2003

220	OCCUPANT UNKNOWN
330	
336	OCCUPANT UNKNOWN
000	REUBENS MEXICAN FOOD
382	NAUTILUS DIVE CTR INC
384	KT FLOWERS
394	MASAS SHELL SERVICE
434	OCCUPANT UNKNOWN
744	BAY FRONT SHELL FOOD MART
774	BAYSIDE CHEVRON
	BAYSIDE CHEVRON SERVICE
1266	APPLIED GRAPHICS INC
	BAY VIEW MARINE
	BURNS INTERNATIONAL SCRTY SRVC
	CALICAS WELDING SERVICE
	MCDONNELL FRAME & DESIGN
	RHINO LININGS
	YAMANAKA ENTERPRISES
	YAMANAKA HIROMU REALTY INC
1582	DEPT OF HEALTH
	HAWAII STATE GOVERNMENT HEALTH
	OCCUPANT UNKNOWN
1710	KAUPENA ONO HAWAIIAN FOODS
1717	J & J HARDWARE
	J & J HRDWR HOME IMPRVMNT CTR
	OCCUPANT UNKNOWN
1730	KENS HOUSE OF PANCAKES
1765	VERNA MILLER
	VERNAS III DRIVE INN
1801	OCCUPANT UNKNOWN
	TOSCO CORP
1965	REX MATSUNO
	SUISAN CO
2055	KUWAYE TRUCKING INC
	OCCUPANT UNKNOWN
	PSC INDUSTRIAL SERVICES GROUP

BANYAN DR 1999

21	HAWAII ICE & COLD STORAGE COMPANY
71	BANYAN BODYWORKS CLINIC
<i>,</i> ,	BANYAN GENERAL STORE
	BIG ISLAND COFFEE COMPANY LIMITED
	HILO HAWAIIAN HOTEL
	N JOY TRAVEL AGENCY
	STYLES INSIGHT
	VITA USA COMPANY
87	HILO BAY HOTEL UNCLE BILLYS
	NEIGHBOR ISLE HOTEL & RESTAURANT SUPPLY
	POLYNESIAN MARKET PLACE UNCLE BILLYS
	UNCLE BILLYS RESTAURANT AT HILO BAY HTL UNCLE BILLYS
91	RUTH MORGAN
93	BANYAN NANILOA GIFT SHOP
	BEN AND COMPANY
	HAWAII NANILOA RESORT
	MERRIE MONARCH FESTIVAL CALL
	NAKANO COMPANY LIMITED
	TING HAO SEAFOOD RESTAURANT
111	MICHAEL BRANDON
120	NANILOA GOLF COURSE DRIVING RANGE
121	COUNTRY CLUB APARTMENTS
	COUNTRY CLUB CONDOMINIUM HOTEL
	DONALD JAMES ASSOCIATES
	HAWAII LAND REALTY CORPORATION
	IMAINO PAUL TAX SERVICE & CONSULTANT
	LEUCHT EUGENE E ARCHITECTS LIMITED
	NAILS & GLAMOUR ON THE GO
126	SHOOTERS BAR & GRILL OCCUPANT UNKNOWN
161	A RANDALL
101	B OH
	BLANE HASHIMOTO
	DAROL KAOLOWI
	DAVIN DAWANA
	ERIC BAUCH
	EVA MARTIN
	GORDON FERREIRA
	J RICHARDSON
	JILLIAN OREVILLO
	KENNETH RAUPP
	LARRY BALBARINO
	LOYAL ORDER OF MOOSE HILO LODGE 2379
	M AIU
	MARK NAKASHIMA
	PETER OKANE
	R FROELICH
	S MARTINO
	SUE JONES
	VINCENT SAYA

BANYAN DR 1999 (Cont'd)

175 BANYAN TREE BEAUTY SALON

BIG ISLAND MASSAGE CAROLYN GILMAN

CLIFTON UME

DAVID HEDGECOCK

DONALD INOUYE

H PALACIO

JACK SILVA

JAMES HOPKINS

JOAN BEST

JOHNNY KAMAHELE

JUDITH GEORGE

LEO ROUX

M GOSS

MARY FRABLE

MICAH MILLER

NEWBERRY RONALD

REEDS BAY RESORT HOTEL LIMITED

RONALD NEWBERRY

SANDRA DELSANTOS

T GOODALL WILLIAM BOND

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KAMEHAMEHA AVE 1999

330	UNIVERSAL JEWELERS
336	REUBENS MEXICAN FOOD
382	NAUTILUS DIVE CENTER INCORPORATED
394	MASAS SHELL SERVICE
434	BHP HAWAII INCORPORATED BHP GAS EXPRESS
744	TEXACO R & M INCORPORATED
774	BAYSIDE CHEVRON SERVICE
1266	BAY VIEW MARINE
	BURNS INTERNATIONAL SECURITY SERVICES
	CALICAS WELDING SERVICE
	DAYTON JACKSON MACHINE WORKS
	FORCE MARINE INCORPORATED
	HILO BAY PRINTING COMPANY
	ORANGE-PEEL PRESS
	RAINBOW GRAPHICS & PACKAGINGS
	YAMANAKA HIROMU REALTY INCORPORATED
1550	K K TEI
1582	HAWAII STAT GOVERNMENT HEALTH & HMN SERVICES DEPTENT OF
1672	BHP HAWAII INCORPORATED BHP GAS EXPRESS
1690	HARPER CAR & TRUCK RENTALS OF HAWAII
1710	WIKI-WIKI MART DV OF SURE SAVE SPR MKTS HILO
1717	J & J HARDWARE HOME IMPROVEMENT CENTER
1730	KENS HOUSE OF PANCAKES
1765	VERNAS III DRIVE INN
1801	OTAS SERVICE INCORPORATED
1965	PINT SIZE CORPORATION THE
	SUISAN COMPANY LIMITED SALES & FROZEN FOODS DEPARTMENT
2055	KUWAYE TRUCKING INCORPORATED
	KUWAYE TRUCKING INCORPORATED RESIDENCE TELEPHONES

BANYAN DR 1995

04	LIAMAN ICE & COLD STODACE CO	
21	HAWAII ICE & COLD STORAGE CO	
71	BANYAN GENERAL STORE	
	FREITAS, JERRY K	
	HANKYU EXPRESS USA INC	
	HILO HAWAIIAN HOTEL	
	HUKI LIKE LTD	
	KWHH TV CHANNEL 14 HILO	
	N JOY TRAVEL AGENCY	
	TAPA REALTY INC	
87	KONA BAY HOTEL UNCLE BILLYS	
	POLYNESIAN MARKET PLACE	
	UNCLE BILLYS HILO BAY HOTEL	
	UNCLE BILLYS RESTAURANT	
93	CO, BEN	
	HAWAII NANILOA HOTEL	
	M TS SALON	
120	NANILOA COUNTRY CLUB	
	V & V DRIVING RANGE & PRO	
121	BARBA BEAVEN MD	
	COUNTRY CLUB CONDO HOTEL	
	EUGENE E LEUCHT ARCHITECTS LTD	
	NAGAI, D S	
	NAILS & GLAMOUR ON THE GO	
	PAUL IMAINO TAX SVC & CONSLNT	
	STRATTONS	
	T & C REALTY	
161	AHIA, ABRAHAM JR	
	ARQUERO, LIBORIO E SR	
	CONNER, T	
	CRAFT, SARA A	
	CRISCOE, SABRINA	
	DAWES, J	
	GAYLORD, M	
	GREEN, FRANCES W	
	HSI CORP	
	JOHNSON, MARK	
	KAOLOWI, DAROL	
	KAPLAN, ROBERT S	
	KAUPU, JOHANNA	
	KEAHEY, DANIEL III	
	LEORIN, KRISTIE	
	LINDSEY, BOB	
	MARTIN, EVA	
	MARTINO, STEVE	
	NEWELL, DEAN M	
	NICHOLS, FAYE P	
	OKANE, PETER	
	RAUPP, KENNETH A	
	RENNERT, S	
	RICHARDSON, J	

BANYAN DR 1995 (Cont'd)

161 SAYA, RONALD

SPAIN, CHARLES L STEWART, MALCOLM TORNGREN, KEVIN

WARD, JOHN

WARNER, WALTER M WEBBER, MARV N WILLIAMS, P M WONG, WAI C

175 ALDERSON, SCOTT C

BAKER, ELAINE L

BANYAN TREE BEAUTY SALON

BECKYS

BIG ISLAND MASSAGE

BOYER, W L

CALIFORNIA NAILS DOWNER, TRACEY B FLORES, EDWIN GOODALL, T R

GOSS, M T

HEDGECOCK, DAVID

KAY, SHARON LEUNG, LINCOLN

MC DONALDS TAX SVC

MILLS, LORI NAKASATO, K NEWBERRY, R

NEWBERRY, RONALD

PAJIMOLA, TANYA

REEDS BAY RESORT HOTEL LTD

ROBERTSON, SCOTT H

SOLIS, MIGUEL

THOMSON, REX

VEGAS, B F

WAEGER, PETER

WAIPA, F

WINFREY, TANYA L

4831829.5 Page: A15

KAMEHAMEHA AVE 1995

330	I AM BIBLE & BOOK
336	REUBENS
	VILLANUEVA, JUAN
382	
394	MASAS SHELL
744	TEXACO R & M INC
774	BAYSIDE CHEVRON
1266	BAYVIEW MARINE
	BURNS INTERNATIONAL SEC SVC
	CALICAS WELDING SVC
	FIGUEIRAS AUTO BODY
	FORCE KAYAKS
	FORCE MARINE INC
	MANA WOODWORKS
	PHARMACARE INC
	YAMANAKA ENTERPRISES
	K K TEI
1582	ENVIRONMENTAL HEALTH SVC
	ENVIRONMENTAL MANAGEMENT
1690	
	HILO REALTY
1710	WIKI WIKI KITCHEN
	WIKI WIKI MART
1717	
1730	KENS HOUSE OF PANCAKES
1765	DAIRY QUEEN
1801	OTAS UNION SVC
1965	
2055	HAWAIIAN REINFORCING STEEL CO
	KUWAYE TRUCKING INC

Target Street Cross Street Source

✓ - Cole Information Services

BANYAN DR 1992

161 AHIA, ABRAHAM JR

BACA, E

CRAFT, SARA A

EHR, DONALD G

ELI, DENNIS

GREEN, FRANCES W

IRWIN, VERN

KIMURA, E

LAPENTER, JAKE S

MOORE, JERRY

NELSON, RICHARD SR

OKANE, PETER

PIGGOTT, MICHAEL

PLUMBER, CS

REDAK, STEVEN

SPAIN, CJ

SPAIN, MERCY

WAIALAE, JERRY

WAIPA, M

WARZECHA, STEVE

175 BROWN, T

CASTILLO, A B

DOWNER, TRACEY B

FELTON, MARK

GOODALL, TR

HEDGECOCK, DAVID

MARTEN, BRUCE

MARTIN, HENRY

NELSON, JAN M

NEWBERRY, R

NEWBERRY, RONALD

OSHIRO, MICKI

PERKINS, LEIGH

ROBINSON, L

SOLIS, MIGUEL

TREVITT, CHRIS

VANDUREN, MARK

WAEGER, PETER

4831829.5 Page: A17

Target Street Cross Street Source
- Cole Information Services

KAMEHAMEHA AVE 1992

1006 CARSON, J N SWARTWOUT, GLEN 1181 GARNERO, SYLVIE 2306 BROWNING, DENISE



Hilo Hotels

Banyan Dr Hilo, HI 96720

Inquiry Number: 4831829.6

January 19, 2017

The EDR Property Tax Map Report



EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

NO COVERAGE

Thank you for your business.

Please contact EDR at 1-800-352-0050 with any questions or comments.

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HILO HOTELS BANYAN DR HILO, HI

Inquiry Number: 4831829.7S FEBRUARY 1, 2017

EDR Environmental Lien and AUL Search



The EDR Environmental Lien Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050 with any questions or comments.

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TARGET PROPERTY INFORMATION

ADDRESS

HILO HOTELS 175 BANYAN DRIVE HILO, HI 96720

RESEARCH SOURCE

Source 1: HAWAII COUNTY RECORDER OF DEEDS

Source 2: HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PROPERTY INFORMATION

Deed '	
--------	--

Type of Deed: ASSIGNMENT OF LEASE

Title is vested in: REEDS BAY RESORT HOTEL, LTD

Title received from: MICHAEL DENNIS HEINBAUGH, MICHAEL JOSEPH KASPAR, KATHLEEN KASPAR AND

HOWARD WAYNE MONTGOMERY

Date Executed: 1/6/1990 Date Recorded: 7/28/1994 Book: NA Page: NA Volume: NA Instrument#: 94-125865

Docket: NA Land Record Comments: NA

Miscellaneous Comments: OWNED BY THE STATE OF HAWAII AND LEASED TO REEDS BAY RESORT HOTEL, LTD

AS RECORDED IN THE DOCUMENT BELOW Legal Description:

Current Owner: STATE OF HAWAII - OWNER / REEDS BAY RESORT HOTEL, LTD - LESSEE

Property Identifiers: 3-2-1-005-022-0000

Comments: NA

ENVIRONMENTAL LIEN			
Environmental Lien:	Found	Not Found	X
If Found:			
1st Party:			
2 nd Party:			
Dated:			
Recorded:			
Book:			
Page:			

Docket:			
Volume:			
Instrument #:			
Comments:			
Miscellaneous:			
OTHER ACTIVITY	AND USE	E LIM	ITATIONS (AULS)
Other AUL's:	Found	X	Not Found
If Found:			
1st Party:			MICHAEL DENNIS HEINBAUGH, MICHAEL JOSEPH KASPAR, KATHLEEN KASPAR AND HOWARD WAYNE MONTGOMERY
2 nd Party:			REEDS BAY RESORT HOTEL, LTD
Dated:			1/6/1990
Recorded:			7/28/1994
Book:			NA
Page:			NA
Docket:			NA
Volume:			NA
Instrument #:			94-125865
Comments:			MATTERS DISCLOSED BY ASSIGNMENT OF LEASE
Miscellaneous:			

DEED EXHIBIT

· •

R-805

STATE OF HAWAIL BUREAU OF CONVEYANCES RECORDED

JUL 28, 1994 12:18 PM

Doc No(s) 94-125865

/s/ S. FURUKAWA REGISTRAR OF CONVEYANCES

AFTER RECORDATION, RETURN BY MAIL TO

Scott Alderson 175 Banyan Drive Hilo, HI 96720

TITLE OF DOCUMENT:

PARTIES TO DOCUMENT:

PROPERTY DESCRIPTION:

LIBER/PAGE:

DOCUMENT NO.: TRANSFER CERTIFICATE OF TITLE NO(S).: STATE OF HAWAII
CIRCUIT COURT OF THE
THIRD CIRCUIT

ORDER APPROVING FINAL ACCOUNTS, DISTRIBUTING ESTATE AND DISCHARGING PERSONAL REPRESENTATIVE

CASE NUMBER

93-0049

THE ESTATE OF

MICHAEL DENNIS HEINBAUGH,

DECEASED

Petition for Allowance of Final Accounts, Determination of Trust Distribution of Estate having been filed by the Chief Clerk of this court and said matter having come before the court, the court finds:

- 1. Notice of the time and place of hearing the petition was given to all interested persons as provided by law.
- 2. An inventory of all the property and assets of the estate has been filed herein.
- 3. Notice to creditors was given in the manner provided by law and the time for presenting claims has expired.
- 4. The Personal Representative has collected all sums and amounts of money due to the estate which could be collected; has paid all just debts of the estate, and all expenses of administration, and all taxes which have attached to or accrued against the estate; and has faithfully performed and discharged all the duties required by law or by order of this court.
- 5. The estate is in a condition to be closed.
- 6. A certificate from the Director of Taxation showing satisfaction of any inheritance or estate and transfer tax due on the assets of the estate has been filed herein.

The court further finds:

That MICHAEL DENNIS HEINBAUGH died intestate on September 20, 1992 in Honolulu, Hawaii. He was a resident of Hilo, Hawaii.

That said decedent was survived by a cousin, AGNES TAIT CASTLE.

That said AGNES TAIT CASTLE has assigned all of her interest in the estate to SCOTT ALDERSON. That said Assignment was filed herein on June 18, 1993.

I hereby certify that this is a full, true and correct copy of the original on file i_1,\dots,i_r fice.

mu K. Ikawa

THING LINGUIT CONSTITUTE OF HAWAII FILLD

ORDER APPROVING PINAL ACCOUNTS. DISTRIBUTING ESTATE AND DISCHARGING PERSONAL REPRESENTATIVE

PAGE 1 OF 2 PAGES

ORDER APPROVING FINAL ACCOUNTS, DISTRIBUTING ESTATE AND DISCHARGING PERSONAL REPRESENTATIVE (Continued)

CASE NUMBER

SE 93-00049 -1

As of the date of decedent's death, the decedent owned or claimed to own all of the property which is more fully described in the inventory.

All of the allegations set forth in the petition are true, and the accounts of the Personal Representative which are attached to and made parts of the petition are in all respects full, true and correct and should be approved.

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED:

- 1. The final accounts of the Personal Representative are approved and allowed.
- 2. The personal representative is hereby authorized and directed to distribute said estate remaining in his hands as follows:

TO: SCOTT ALDERSON, cash in the amount of \$1,083.17; 1984 Mazda 626, ID No. JMIGC3113E1622785.

Title to the property vests as follows:

TO: SCOTT ALDERSON, all of decedent's leasehold interest in that unrecorded Sub-Sub-Sublease attached hereto as Exhibit A and by reference made a part hereof.

Upon the filing of due and proper vouchers showing distribution in accordance with this order, the Personal Representative is discharged from all further and future liability and responsibility.

DATE
JUL 5 1994

ORDER APPROVINGFINA

PAGE 2 OF 2 PAGES

ORDER APPROVING FINAL ACCOUNTS. DISTRIBUTING ESTATE AND DISCHARGING PERSONAL REPRESENTATIVE

FOR

14 4

SUB-SUB-SUBLEASE

RECITALS

- 1. Sublessee by sub-sublease dated August 6, 1985, leased to MICHAEL JOSEPH KASPAR and KATHLEEN ANN KASPAR, husband and wife, premises located and described as Suite 114, 175 Banyan Drive, Hilo, Hawaii 96720, consisting of 324 square feet, more or less.
- 2. Sub-Sublessee and Sub-Sub-Sublessee desire that the Sublessor and Sublessee consent to a sub-sub-sublease of the whole of the above-described premises.

IN CONSIDERATION of the mutual covenants contained herein, the parties agree as follows:

- 1. Sublessor and Sublessee agree to the sub-sub-sublease request provided that Sub-Sub-Sublessee shall be bound by each and every covenant and condition contained in the sublease.
- 2. Sub-Sub-Sublessee shall perform all of the covenants and conditions contained in the sublease to be performed by Sublessee except the payment of rent to be made by the Sublessee to Sublessor.
- 3. Term of sub-sub-sublease shall commence on the 17m day of $19 q_3$, and shall end on the 14th day of March, 2015.

5. In the event of default under any of the terms of this Sub-Sub-Sublease, the non-defaulting party shall be entitled to recover attorney's fees and costs.

The law of the state of the sta

IN WITNESS WHEREOF, the parties have executed this agreement on the date first written above.

SUB-SUB-SUBLESSEE	Michael Dennis Hembough
SUB-SUBLESSEE	MICHAEL OSEPH KASPAR
	KATHLOON ANN KASPAR
SUBLESSEE	Howard Mayne Montgomery HOWARD WAYNE MONTGOMERY
SUBLESSOR .	By Les 1 D.
	ву

STATE OF HAWAII SS. COUNTY OF HELDAN On this _____day of ______, 19 P<, before me personally appeared MICHAEL DENNIS HEINBAUGH, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed. Sware of Hawaii Notary Publ My commissibil ATE OF STATE OF CALIFORNIA 95. COUNTY OF LOS ANGELES on this latt day of TANLIARY, 1990, before me personally appeared MICHAEL JOSEPH KASPAR and KATHLEEN ANN KASPAR, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed. Fro.ad to me on the basis of satisfactory evidence to be the person Notary Public, State of California OFFICIAL SEAL JOHN A WELBORN NOTARY PUBLIC - CAUFORNIA My commission expires: NOV 18,1992 LOS ANGELES COUNTY My comm. expires NOV 18, 1992 STATE OF CALIFORNIA on this <u>oli</u> day of <u>TANUAR</u>, 19<u>0</u>, before me personally appeared HOWARD WAYNE MONTGOMERY, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed. COUNTY OF LOS ANGELES Proved to me on the basis of satisfactory evidence to be the person Notary Public, State of California My commission expires: NOV 18,1992 OFFICIAL SEAL JOHN A WELBORN NOTARY PUBLIC - CALIFORNIA LOS ANGELES COUNTY My comm. expires NOV 18, 1992

COUNTY OF HAWAII

On this day of , 19 , before me and to me known, who, being duly sworn, did say that they are the of REEDS BAY RESORT HOTEL, LTD., a Hawaii corporation, and that the seal affixed to the foregoing instrument is the corporate seal of said corporation, that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and the said officers acknowledged said instrument to be the free act and deed of said corporation.

Notary Public, State of Hawaii

My commission expires:

COUNTY OF HAWAI Recent Sales in Area Previous Parcel Next Parcel Return to Main Search Page Hawaii Home Real Property Home

Recent Sales in Area	<u>Previous Parcel</u>	Next Parcel	Return to Main Search Page	<u>Hawaii Home</u>	Real Property Home						
	Owner and Parcel Information										
Owner Name	STATE OF HAWAII Fee Own REEDS BAY RESORT HOTEL		Today's Date	February 1, 20	17						
Mailing Address	LOBBY OFFICE 175 BANYAN DR HILO, HI 96720-4650		Parcel Number	21005022000	0						
Location Address	175 BANYAN DRIVE		Project Name								
Property Class	HOTEL & RESORT		Parcel Map	Show Parcel N	Plat (TMK) Maps						
Neighborhood Code	2192-7		Land Area (acres)	1.19							
Legal Information			Land Area (approximate sq ft)	51,836							

Assessment Information Show Historical Assessments										
Year	Property Class	Market Land Value	Dedicated Use Value	Land Exemption	Net Taxable Land Value	Market Building Value	Assessed Building Value	Building Exemption	Net Taxable Building Value	Total Taxable Value
2016	HOTEL & RESORT	\$ 777,500	\$ 0	\$ 0	\$ 777,500	\$ 1,330,100	\$ 1,330,100	\$ 0	\$ 1,330,100	\$ 2,107,600

Appeal Information						
	No appeal information	n on parcel.				
Land Information						
Property Class	Property Class Square Footage Acreage Agricultural Usage					
HOTEL & RESORT	51,836	1.19				

				Comme	rcial Impr	ovement Info	rmation				
Property Class	Building Card	Building Number	Improvement Name	Identical Units	Units	Structure Type	Year Built	Effective Year Built	Gross Building Value	Gross Building Description	Sketch
	1	0001	REEDS BAY APARTMENTS	0	0	APARTMENTS - M-3	1978	1978	0		NA
Commercia	l Building S	ections									
Card	Section	Level From	Level To	Area	Perimeter	Usage	Wall Height	Exterior Wall	Frame Type		
1	001	01	01	6,360	346	APARTMENT	8	MASONRY	MASONRY		
1	001	02	03	6,360	346	APARTMENT	8	MASONRY	MASONRY		
1	001	B1	B1	2,544	202	APARTMENT	8	MASONRY	MASONRY		

Other Building and Yard Improvements						
Description	Description Quantity Year Built Area Gross Building Value					
No information associated with this parcel.						

Permit Information					
Date Permit Number Reason Permit Amount					
No permit information associated with this parcel.					

Dept of Public Works Bldg Division Permit and Inspections Information								
Permit Date	Permit Type	Permit Number	Permit Reason	Permit Description	Estimated Cost	Inspection Date	Inspection Status	
11/07/1997	Electrical	E971366*	Repair		\$1,000	11/14/1997	COMPLETED	
08/27/1990	Building	901817*	Alteration		\$220			
03/18/1988	Electrical	E880361*	Addition		\$2,900	04/11/1988	COMPLETED	
10/23/1984	Building	841904*	Alteration		\$500	08/29/1985	COMPLETED	
03/16/1982	Electrical	EH59922*	Alteration		\$600	04/06/1982	COMPLETED	
03/08/1982	Building	820432*	Alteration		\$3,000			
02/24/1982	Building	820349*	Alteration		\$2,000			
02/24/1982	Electrical	EH59836*	Alteration		\$400	04/06/1982	COMPLETED	
10/03/1980	Building	802456*	Alteration		\$600			

HILO HOTELS BANYAN DR HILO, HI

Inquiry Number: 4831829.7S FEBRUARY 1, 2017

EDR Environmental Lien and AUL Search



The EDR Environmental Lien Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050 with any questions or comments.

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TARGET PROPERTY INFORMATION

ADDRESS

Recorded: Book: Page:

HILO HOTELS 121 BANYAN DRIVE HILO, HI 96720

RESEARCH SOURCE

Source 1: HAWAII COUNTY RECORDER OF DEEDS

Source 2: HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

<u>PR</u>

Source 3: UNITED STATES	ENVIRONMENTAL	PROTECTION AGENCY	
PROPERTY INFORMATION			
Deed 1			
Type of Deed:		ASSIGNMENT OF LEASE	
Title is vested in:		THE ASSOCIATION OF APARTMENT OWNERS OF COUNTRY CLUB HAWAII, INC.	
Title received from:		YUKIKO NARITA, ADMINISTRATOR	
Date Executed:		12/28/2012	
Date Recorded:		12/31/2012	
Book:		NA	
Page:		NA	
Volume:		NA	
Instrument#:		A-47481506	
Docket:		NA	
Land Record Comments:		NA	
Miscellaneous Comments	s:	OWNED BY THE STATE OF HAWAII AND LEASED TO THE ASSOCIATION OF APARTMENT	
		OWNERS OF COUNTRY CLUB HAWAII, INC.	
Legal Description:	AS RECORDED II	N THE DOCUMENT BELOW	
Current Owner:	STATE OF HAWA HAWAII, INC LES	NII – OWNER / THE ASSOCIATION OF APARTMENT OWNERS OF COUNTRY CLUB SSEE	
Property Identifiers:	3-2-1-005-020-000	00	
Comments:	NA		
ENVIRONMENTAL LIEN			
Environmental Lien:	Found	Not Found X	
If Found:			
1st Party:			
2 nd Party:			
Dated:			

Docket:	
Volume:	
Instrument #:	
Comments:	
Miscellaneous:	
OTHER ACTIVITY AND USE LI	MITATIONS (AULS)
Other AUL's: Found X	Not Found
If Found:	
	V4.444.0 V4.0 E. 4.0 V4.40.0 E. 4.0
1st Party:	YUKIKO NARITA, ADMINISTRATOR
2 nd Party:	THE ASSOCIATION OF APARTMENT OWNERS OF COUNTRY CLUB HAWAII, INC.
Dated:	12/28/2012
Recorded:	12/31/2012
Book:	NA
Page:	NA
Docket:	NA
Volume:	NA
Instrument #:	A-47481506
Comments:	MATTERS DISCLOSED BY ASSIGNMENT OF LEASE
Miscellaneous:	

DEED EXHIBIT





STATE OF HAWAII BUREAU OF CONVEYANCES RECORDED

December 31, 2012 10:45 AM

Doc No(s) A-47481506



1 1 / 1 B-32189080 OFC

/s/ NICKI ANN THOMPSON REGISTRAR

Conveyance Tax: \$3.00

LAND COURT SYSTEM

REGULAR SYSTEM

Return by: MAIL (X) PICKUP() TO:

THE ASSOCIATION OF APARTMENT OWNERS OF COUNTRY CLUB HAWAII, INC. 93 KOHOLA ST

HILO, HAWAII 96720

THIS DOCUMENT CONTAINS 14 PAGES

TITLE OF DOCUMENT:

ASSIGNMENT OF CONDOMINIUM CONVEYANCE DOCUMENT

PARTIES TO DOCUMENT:

-}s -{

ASSIGNOR: YUKIKO NARITA, Estate Administrator of the Estate of

Susumu Fukunishi, Deceased, whose mailing address is Chiyoda Bldg., Bekkan 9th Floor, 6-1-2 Nishitenma, Kita-ku, Osaka 530-

0047 Japan

ASSIGNEE: THE ASSOCIATION OF APARTMENT OWNERS OF

COUNTRY CLUB HAWAII, INC., a Hawaii non-profit

corporation, with its mailing address c/o Property Professionals

Hawaii, LLC, 93 Kohola Street, Hilo, Hawaii 96720

TAX MAP KEY (3) 2-1-005:020, C.P.R. 0042, Apt 310

PKK/ASSIGNMENT/11-12-12

ASSIGNMENT OF CONDOMINIUM CONVEYANCE DOCUMENT

THIS ASSIGNMENT dated December 28, 2012, is made by and between YUKIKO NARITA, Estate Administrator of the Estate of Susumu Fukunishi, Deceased, appointed by Acknowledgment of Authority dated September 12, 2012 and filed in the Circuit Court of the Third Circuit, State of Hawaii, P. No. 12-1-0198, whose mailing address is Chiyoda Bldg., Bekkan 9th Floor, 6-1-2 Nishitenma, Kita-ku, Osaka 530-0047 Japan, hereinafter called the "Assignor", and THE ASSOCIATION OF APARTMENT OWNERS OF COUNTRY CLUB HAWAII, INC., a Hawaii non-profit corporation, with its mailing address c/o Property Professionals Hawaii, LLC, 93 Kohola Street, Hilo, Hawaii 96720, hereinafter called the "Assignee".

The Assignor, in consideration of the sum of Ten Dollars (\$10.00) and other valuable consideration paid to the Assignor by the Assignee, the receipt of which is acknowledged, and of the covenants and agreements contained herein on the part of the Assignee to be observed and performed, conveys and assigns unto the Assignee, and the Assignee's successors and assigns, the property described in attached Exhibit "A", including, without limitation, all of the estate, right, title and interest conveyed and demised by the Condominium Conveyance Document described in Exhibit "A", hereinafter called the "property".

TO HAVE AND TO HOLD the property, including the improvements and all rights, easements, privileges and appurtenances belonging or appertaining to or held and enjoyed with the property, and all of the right, title and interest of the Assignor in and to the property unto the Assignee in fee simple as to the condominium apartment described in Exhibit "A" and for and during the unexpired lease term as to the undivided interest in the land described in Exhibit "A" according to the tenancy set forth herein; subject, however, to the payment of the rents reserved by the Condominium Conveyance Document and to the observance and performance of all of the covenants and conditions contained in the Condominium Conveyance Document which are to be observed and performed by the grantee named in the Condominium Conveyance Document and to the encumbrances, exceptions and reservations set forth in Exhibit "A".

This instrument is executed by YUKIKO NARITA not personally but as Estate Administrator aforesaid in the exercise of the power and authority conferred upon and vested in her as such Estate Administrator, and it is expressly understood and agreed that nothing herein contained shall be construed as creating any liability on YUKIKO NARITA, individually.

This instrument and the respective covenants of the Assignor and the Assignee shall be binding upon and inure to the benefit of the Assignor and the Assignee, respectively. The terms "Assigner", "Assignee" and "Grantor" as and when used herein, or any pronouns used in place thereof, shall mean and include the singular or plural number, individuals, partnerships, trustees and corporations, and each of their respective heirs, personal representatives, successors and assigns. All covenants and obligations undertaken by two or more persons shall be deemed to be joint and

several unless a contrary intention is clearly expressed herein. The term "rents" includes all rents, taxes, assessments and other sums payable by the grantee under the Condominium Conveyance Document.

The parties agree that this instrument may be executed in counterparts, each of which shall be deemed an original, and the counterparts shall together constitute one and the same instrument, binding all parties notwithstanding that all of the parties are not signatory to the same counterparts. For all purposes, including, without limitation, recordation, filing and delivery of this instrument, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document.

IN WITNESS WHEREOF, the parties have executed this instrument as of the date first above written.

YUKIKO NARITA, Estate Administrator of the Estate of Susumu Fukunishi, Deceased

Assignor

THE ASSOCIATION OF APARTMENT OWNERS OF COUNTRY CLUB HAWAII, INC., a Hawaii non-profit corporation

By Julian

Its Vice President

Assignee

On this _____ day of ______, 2012, before me personally appeared YUKIKO NARITA, Estate Administrator of the Estate of Susumu Fukunishi, Deceased, to me known (or proved to me on the basis of satisfactory evidence) to be the person described in and who executed the foregoing instrument, and acknowledged to me that she executed the same as her free act and deed as said Estate Administrator.

| Name: ______ Notary Public | My commission expires: _______

Apostille (Convention de La Haye du 5 Octobre 1961)

1.	Country	
	This public document	
2.	has been signed by	
3.	acting in the capacity of	
4.	bears the seal/stamp of	
		Certified
5.	at	6. the
7.	by	
8.	No	
9.	Seal/stamp	10. Signature

IAPAN

PROCECTION OF OSAKA

CITY OF OSAKA

CONSULATE GENERAL OF THE

UNITED STATES OF AMERICA

SS: SS

Vi L. Jacobs-Nhan

I, Vice Consul , Consul of the United States of America at

Osaka-Kobe, Japan , duly commissioned and qualified, do hereby certify that
on this 5th day of December , 2012, before me personally appeared
Yukiko Narita , to me personally known, and known to be the individual
described in, whose name is subscribed to, and who executed the annexed instrument, and heirig
informed by me of the contents of said instrument, said person duly acknowledged to me that said
person executed the same freely and voluntarily for the uses and purposes therein mentioned.

In witness whereof I have hereunto set my hand and official sealther day and year last above written.

Vi Vacobs-Nhan

Consul of the United States of America

STATE OF HAWAII)
) ss
COUNTY OF HAWAII)

On this Wh day of Deune her, 2012, before me personally appeared SADAO H. AOKI, to me known, who, being by me duly sworn, did say that he is the Vice President of THE ASSOCIATION OF APARTMENT OWNERS OF COUNTRY CLUB HAWAII, INC., a Hawaii non-profit corporation, and that said instrument was signed in behalf of said corporation by authority of its Board of Directors, and said person acknowledges said instrument to be the free act and deed of said corporation.

> CARW A MEDELAY Name:

Notary Public, State of Hawaii

My commission expires: 4/17/13

NOTARY CERTIFICATION

Document Date: 12/28/ No. of Pages: 14 Document Name or Description: ASSIGNMENT OF CONDOMINIUM

CONVEYANCE DUCUMBLY

Date of Notarization: 12/24

Name: CAUN A. MEDELING

Notary Public, State of Hawaii

Third Judicial Circuit

My commission expires: 4/17/13

TMK: (3) 2-1-005-020

EXHIBIT "A"

CONDOMINIUM CONVEYANCE DOCUMENT

LESSOR/

GRANTOR : COUNTRY CLUB-HAWAII, INC., a Hawaii corporation, as

Trustee under the provisions of a certain Trust Agreement, dated September 19, 1987, and pursuant to the Land Trust Act, Chapter 558 of the Hawaii

Revised Statutes

LESSEE/

GRANTEE : ANTHONY DE MELLO and IRENE DE MELLO, husband and

wife, as Tenants by the Entirety

DATED : March 6, 1989

RECORDED : Liber 22981 Page 321

TERM : Commencing from the effective date hereof and

terminating at midnight, March 14, 2015

THE LESSEE'S INTEREST BY MESNE ASSIGNMENTS ASSIGNED AND APARTMENT

CONVEYED

ASSIGNOR/

GRANTOR : IRENE F. PERREIRA, unmarried

ASSIGNEE/

GRANTEE : SUSUMU FUKUNISHI, single, as Tenant in Severalty

DATED : August 30, 1994

RECORDED : Document No. 94-150565

The Leasehold estate and interest and all those certain estates, rights and/or interests conveyed by said Condominium Conveyance Document in and to the following:

(A) Apartment No. 310 of that certain Condominium Project known as "COUNTRY CLUB HAWAII", as established by Declaration of Horizontal Property Regime dated May 19, 1987, recorded in the Bureau of Conveyances of the State of Hawaii in Liber 20954 at Page 93, as amended, and as shown on Condominium Map No. 1076 and any amendments thereto.

The use of the apartment shall be confined to residential purposes only, unless the apartment is No. 101, 201, 204, 206, 227 or 228, in which event the apartment may be used for commercial purposes.

Together with the following appurtenant easements:

Nonexclusive easements for ingress and egress and support of said apartment through the common elements of the Project and for repair of said apartments through all other apartments and through the common elements of the Project.

(B) An undivided 0.62570% interest, as tenant in common with all other apartment owners in and to the common elements of the Project (exclusive of land) as described in the aforesaid Declaration, subject as to the said common elements to nonexclusive easements appurtenant to all apartments for ingress, egress, support and repair.

II.

An undivided leasehold interest in the land, equal to the undivided common interest in the common elements appurtenant to the Apartment as set forth in the Declaration, as amended from time to time, or as set forth in any replacement declaration covering the demised land, or if the demised land is removed from the Horizontal Property Regime, then as set forth in the declaration immediately preceding such removal, as tenant in common with all other Lessees in and to the land described herein.

The lands upon which said Condominium Project "COUNTRY CLUB HAWAII" is located are described as follows:

-PARCEL FIRST:-

All of that certain parcel of land situate, lying and being at Waiakea, District of South Hilo, Island and County of Hawaii, State of Hawaii, being LOT 10 of the "OCEAN VIEW LOTS", same being a portion of the Government (Crown) Land of Waiakea, and containing an area of 0.92 acre, more or less.

-PARCEL SECOND:-

All of that certain parcel of land (being a portion of the land described in and covered by Land Patent Grant Number 10,119 to Harriet Blanche Rose) situate, lying and being at Waiakea, District of South Hilo, Island and County of Hawaii, State of Hawaii, being a PORTION OF LOT 9 of the "OCEAN VIEW LOTS", and containing an area of 10,890 square feet, more or less.

Said parcels of land being more particularly described in Declaration of Horizontal Property Regime dated May 19, 1987, recorded in said Bureau of Conveyances in Liber 20954 at Page 93, as amended.

SUBJECT HOWEVER, to the following:

- Mineral and water rights of any nature in favor of the State of Hawaii.
- 2. -AS TO PARCEL FIRST:-
 - (A) Location of the seaward boundary in accordance with the laws of the State of Hawaii and shoreline setback line in accordance with County regulation and/or ordinance and the effect, if any, upon the area of the land described herein.

(B) UNRECORDED GENERAL LEASE NO. 3269 dated June 15, 1948, entered into by and between the TERRITORY OF HAWAII (now the STATE OF HAWAII), as Lessor, and A. M. M. OSORIO, as Lessee; leasing and demising said Parcel for a term of 21 years commencing June 1, 1949.

Said Lease was amended by unrecorded instrument dated November 16, 1962; re: term extended to March 14, 2015.

Said Lease was further amended by unrecorded instrument dated July 2, 1968.

Said Lease, as amended, by mesne assignments was assigned to COUNTRY CLUB-HAWAII, INC., as Trustee under the provisions of a certain Trust Agreement, dated September 19, 1987, and pursuant to the Land Trust Act, Chapter 558 of the Hawaii Revised Statutes, by instrument dated September 19, 1987, recorded in Liber 21727 at Page 228; consent thereto given by the State of Hawaii, by its Board of Land and Natural Resources.

3. -AS TO PARCEL SECOND:-

- (A) GRANT OF EASEMENT dated January 20, 1966, made by TRADEWIND RESORT INCORPORATED to HAWAII ELECTRIC LIGHT COMPANY, INC., as mentioned in instrument recorded in Liber 9167 at Page 2.
- (B) The terms and provisions contained in the following:

INSTRUMENT : DEED

DATED : July 2, 1968

RECORDED : Liber 6116 Page 65

The foregoing includes, but is not limited to, matters relating to the following:

"Reserving, however, unto the Grantor, its successors and assigns, an estate of years up to and including March 14, 2015, the intent of the Grantor being to continue to maintain complete control over the use and possession of the premises until March 14, 2015."

Said reservation was assigned to Country Club-Hawaii, Inc., as Trustee under the provisions of a certain Trust Agreement, dated September 19, 1987, and pursuant to the Land Trust Act, Chapter 558 of the Hawaii Revised Statutes, by instrument dated September 19, 1987, recorded in Liber 21727 at Page 240; consent thereto given by the State of Hawaii, by its Board of Land and Natural Resources.

4. The terms and provisions contained in the following:

INSTRUMENT: DECLARATION OF HORIZONTAL PROPERTY REGIME FOR THE

"COUNTRY CLUB HAWAII" CONDOMINIUM PROJECT

DATED : May 19, 1987 .

RECORDED : Liber 20954 Page 93

MAPS : 1076 and any amendments thereto

Consent thereto given by instrument dated February 24, 1988, recorded in Liber $\underline{21727}$ at Page $\underline{225}$. Said Declaration was amended by instrument dated December 14, 1987, recorded in Liber 21727 at Page 216.

5. The terms and provisions contained in the following:

INSTRUMENT: RESTATED BY-LAWS OF THE ASSOCIATION OF APARTMENT

OWNERS COUNTRY CLUB HAWAII

DATED : March 8, 2002

RECORDED : Document No. 2002-043614

The foregoing Restated By-Laws restates the original By-Laws dated May 19, 1987, recorded in Liber $\underline{20954}$ at Page $\underline{119}$, and any amendments thereto.

6. The terms and provisions contained in Condominium Conveyance Document referred to in Exhibit A.

7. NOTICE OF LIEN

IN FAVOR OF: THE ASSOCIATION OF APARTMENT OWNERS OF COUNTRY CLUB

HAWAII, INC., a Hawaii non-profit corporation

DATED : December 20, 2011 RECORDED : Document No. A-43920980

AMOUNT : \$2,019.27

COUNTY OF HAWAI'I Real Property Tax Office

Recent Sales in Area	<u>a</u>	<u>Previous Parcel</u>	Next Parcel		Return to Main Search Page	<u>Hawai</u>	ii Home	Real Property Home
	Owner and Parcel Information							
Owner Name	wner Name STATE OF HAWAII Fee Owner AOAO COUNTRY CLUB HAWAII INC Lessee		Today's Date February 1, 2017		017			
Mailing Address	75-169 HUALALAI RD KAILUA KONA, HI 96740-1744		Parcel Number		210050200000			
Location Address	Location Address 121 BANYAN DRIVE		Project Name					
Property Class HOTEL & RESORT		Parcel Map	Sh	iow Parcel	Map Plat (TMK) Maps			
Neighborhood Code CC224		Land Area (acres)	1.1	166				
Legal Information 1.166 AC		Land Area (approximate sq ft)	50,	,791				
Condo Information This is a Condo Master Non-Taxable Parcel. Individual Assessments are found on units below.								

·	

HILO HOTELS BANYAN DR HILO, HI

Inquiry Number: 4831829.7S FEBRUARY 1, 2017

EDR Environmental Lien and AUL Search



The EDR Environmental Lien Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050 with any questions or comments.

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TARGET PROPERTY INFORMATION

ADDRESS

HILO HOTELS 87 BANYAN DRIVE HILO, HI 96720

RESEARCH SOURCE

Source 1: HAWAII COUNTY RECORDER OF DEEDS

Source 2: HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

Source 3: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PROPERTY INFORMATION

Deed 1	
Type of Deed:	ASSIGNMENT OF LEASE

Title is vested in: SAVIO HBH DEVELOPMENT COMPANY LLC

Title received from: HILO BAY HOTEL, INC.

 Date Executed:
 3/11/2016

 Date Recorded:
 3/2/2016

 Book:
 NA

 Page:
 NA

 Volume:
 NA

Instrument#: A-59050595

Docket: NA
Land Record Comments: NA

Miscellaneous Comments: OWNED BY THE STATE OF HAWAII AND LEASED TO SAVIO HBH DEVELOPMENT COMPANY

LLC

Legal Description: AS RECORDED IN THE DOCUMENT BELOW

Current Owner: STATE OF HAWAII – OWNER / SAVIO HBH DEVELOPMENT COMPANY LLC - LESSEE

Property Identifiers: 3-2-1-005-034-0000

Comments: NA

ENVIRONMENTAL LIEN

ENVIRONMENTAL LIEN			
Environmental Lien:	Found	Not Found	X
If Found:			
1st Party:			
2 nd Party:			
Dated:			
Recorded:			
Book:			
Page:			

MATTERS DISCLOSED BY ASSIGNMENT OF LEASE

Docket:	
Volume:	
Instrument #:	
Comments:	
Miscellaneous:	
OTHER ACTIVITY AND USE LIMIT	TATIONS (AULS)
Other AUL's: Found X	Not Found
If Found:	
1st Party:	HILO BAY HOTEL, INC.
2 nd Party:	SAVIO HBH DEVELOPMENT COMPANY LLC
Dated:	2/11/2016
Recorded:	3/2/2016
Book:	NA
Page:	NA
Docket:	NA
Volume:	NA
Instrument #:	A-59050595

Comments:

Miscellaneous:

DEED EXHIBIT



STATE OF HAWAII BUREAU OF CONVEYANCES RECORDED

March 02, 2016 3:29 PM Doc No(s) A - 59050595

Total Number of Pages: ||



1 1/1 TAW B - 32771225 /s/ NICKI ANN THOMPSON REGISTRAR

Conveyance Tax: \$1.50

m

Return by Mail () Pickup (X)

Chun Kerr LLP (DSW)
745 Fort Street, Fort Street Tower, 9th Floor

Honolulu, HI 96813

Tel: No. (808) 528-8200

Tax Map Key Nos. 3-2-1-005-033: 034, 035 and 045

ASSIGNMENT AND ASSUMPTION OF LEASES

WITNESSETH:

That, for a valuable consideration paid by the Assignee, the receipt of which is hereby acknowledged, and in consideration of the covenants and agreements of the Assignee hereinafter set forth, the Assignee does hereby sell, assign, transfer, set over and deliver unto the Assignee, its successors and permitted assigns, all of the estate, right, title and interest of the Assignor in and to:

Those certain leases (collectively hereinafter referred to as the "Lease") more particularly described in Exhibit "A" attached hereto and made a part hereof, subject to the encumbrances, exceptions, reservations, easements, and other matters, if any, noted therein,

And all of the estate, right, title and interest of the Assignor in and to the land thereby demised, and all buildings, improvements, rights, easements, privileges and

appurtenances situated on or built on or used, occupied and enjoyed in connection with said Lease and the land thereby demised,

TO HAVE AND TO HOLD the same, together with all buildings, improvements, rights, easements, privileges, appurtenances, exceptions and reservations thereunto belonging or appertaining, unto the Assignee, as Tenant in Severalty, as hereinbefore provided for the rest, residue and remainder of the term of said Lese upon and subject to the consent of the Lessor named in said Lease, the payment of rent and the observance and performance by the Assignee of all the terms, covenants, conditions and provisions therein contained and on the part of the lessee named in said Lease to be observed and performed.

AND, in consideration of the premises, the Assignor does hereby covenant with the Assignee that the Assignor is the lawful owner of the herein described leaseholds, that said Lease is in full force and effect and are not in default, that said leaseholds and properties demised thereby are free and clear of and from all liens and encumbrances, except for the lien of real property taxes not yet by law required to be paid, except as may herein specifically be set forth, and except as for such liens, encumbrances, and other matters noted on **Exhibit "A"** attached hereto, that the Assignor has good right to sell and assign the same, as aforesaid, and, that the Assignor will WARRANT AND DEFEND said leaseholds unto the Assignee against the lawful claims and demands of all persons, except as aforesaid. Assignor agrees to indemnify, protect, and defend Assignee against and hold Assignee harmless from and against any and all claims, causes of action, demands, obligations, losses, damages, liabilities, judgments, costs and expenses (including, without limitation, attorneys' fees, charges and disbursements actually incurred) arising out of or resulting from, any failure by Assignor to perform its covenants, agreements, or obligations pursuant to the Lease prior to the Effective Date.

AND, in consideration of the foregoing, the Assignee does hereby expressly assume all undertakings and obligations of the lessee under the Lease, and promises, covenants and agrees to and with the Assignor and to and with the lessor under the Lease, that the Assignee will pay the rents and any other sums under the Lease assigned hereby as and when the same become due and payable pursuant to the provisions of said Lease arising from and after the Effective Date, and will also faithfully and timely observe and perform all of the terms, covenants and conditions contained in said Lease which are or ought to be observed and performed by the lessee under said Lease arising after the Effective Date, and will at all times indemnify, defend, and save harmless the Assignor and said lessor under said Lease from and against the non-payment of said rents or other sums and the non-observance or non-performance of said terms, covenants or conditions and each of them arising from and after the Effective Date.

AND IT IS HEREBY MUTUALLY AGREED that the terms "Assignor", "Assignee" and "Lessor" as used herein, or any pronouns used in place thereof, shall mean and include the masculine or feminine, the singular or plural number, and individuals, firms or corporations, and their and each of their respective heirs, personal representatives, successors, and assigns, according to the context hereof, and that the covenant of any two or more persons herein shall be joint and several.

This Assignment may be executed and acknowledged in any number of counterparts, each of which shall be deemed to be an original, and all of which taken together shall constitute one and the same Assignment, which shall be binding upon all parties to this Assignment, even if all of the parties do not sign the same counterparts. The parties' signatures may be separated on different pages. All of such counterpart signature pages shall be read as though one, and they shall have the same force and effect as though all of the signers had signed a single signature page. For all purposes, including, without limitation, recordation, filing and delivery of this Assignment, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document.

[SIGNATURES APPEAR ON THE FOLLOWING PAGE.]

IN WITNESS WHEREOF, the undersigned have executed this Assignment as of the day and year first above written.

HILO BAY HOTEL, INC.,
a Hawaii corporation

By Name: Sanora Vakonizo
Its: President

Name: Its:

Assignor

SAVIO HBH DEVELOPMENT
COMPANY LLC,
a Hawaii limited liability company

By: Savio Manager Inc.,
a Hawaii corporation
Its: Manager

By:
Peter Savio
Its President

Assignee

IN WITNESS WHEREOF, the undersigned have executed this Assignment as of the day and year first above written.

HILO BAY HOTEL, INC., a Hawaii corporation

By	6	
	Name:	
	Its:	
Ву		
0.70	Name:	
	Its:	
		Assignor

SAVIO HBH DEVELOPMENT COMPANY LLC, a Hawaii limited liability company

By: Savio Manager Inc.,

a Hawaii corporation

Its: Manager

Peter Savio Its President

Assignee

STATE OF HAWAII)) SS. CITY & COUNTY OF HONOLULU-)
On this Abday of February, 2016 before me personally appeared Sandia Yokomizv and, to me satisfactorily proven, who, being by me duly sworn or affirmed, did say that such persons executed the foregoing instrument as the free act and deed of such persons, and if applicable in the capacities shown, having been duly authorized to execute such instrument in such capacities.
Print Name: Wanda A. Quiocho Notary Public for the above-noted State & County My commission expires: 6-2-18
Document Date: 2-11-16 Number of Pages (excluding the exhibit pages): 10 Notary Name: Wanda A. Quiocho 3rd Judicial Circuit Document Description: ASSIGNMENT AND ASSUMPTION OF LEASES
Warda A. Quich Date

NOTARY CERTIFICATION



ma

STATE OF HAWAII)
CITY & COUNTY OF HONOLULU) SS.
On this Oday of February, 2016 before me personally appeared Peter Savio, to me satisfactorily proven, who, being by me duly sworn or affirmed, did say that such person executed the foregoing instrument as the free act and deed of such person, and if applicable in the capacity shown, having been duly authorized to execute such instrument in such capacity. Notary Public for the above-noted State & County My commission expires: 12 14 2018
Document Date: Whated. Number of Pages (excluding the exhibit pages): Le Notary Name: Oreen Kawewein First Judicial Circuit Document Description: ASSIGNMENT AND ASSUMPTION OF LEASES
Notary Signature Date
NOTARY CERTIFICATION



EXHIBIT "A"

1. Unrecorded General Lease No. 3265 dated June 15, 1948, by and between the Territory of Hawaii, by its COMMISSIONER OF PUBLIC LANDS, as Lessor, and Bernard K. Chock, as Lessee, as amended, and by mesne assignments, said lease was assigned to Hilo Bay Hotel Inc., a Hawaii corporation.

-PARCEL FIRST:- (TMK (3) 2-1-005-033)

Lot 2, Ocean View Lots, Waiakea, Hilo City, South Hilo, Hawaii. Being a portion of the Government (Crown) Land of Waiakea.

Beginning at the south corner of this lot, and the east corner of Lot 1, Ocean View Lots, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MOKUOLA 2" being 757.74 feet south and 995.41 feet east, as shown on Government Survey Registered Map 4016 and running by azimuths measured clockwise from true south:

1.	128°	28'	410.45	feet along Lot 1, Ocean View Lots to a spike in concrete;
2.	244°	18'	72.25	feet along Government Land to a spike in concrete;
3.	308°	28'	374.56	feet along Lot 3, Ocean View Lots;
4.	34°	35'	65.18	feet along the northwest side of road to the point of beginning. Area 0.586 acres.

Subject, however, to an easement in favor of the Territory of Hawaii for the sewer right-of-way (3 feet wide) across this lot as shown on plan hereto attached and made a part hereof, together with the right of ingress and egress to and from said sewer right-of-way for construction, maintenance and repair.

- a. Any and all other liens, encumbrances, easements, restrictions and reservations of record, if any.
- Unrecorded General Lease No. 3266 dated June 15, 1948, by and between the Territory
 of Hawaii, by its COMMISSIONER OF PUBLIC LANDS, as Lessor, and Bernard K.
 Chock, as Lessee, as amended, and by mesne assignments, said lease was assigned to
 Hilo Bay Hotel Inc., a Hawaii corporation.

-PARCEL SECOND:- (TMK (3) 2-1-005-034)

Lot 3, Ocean View Lots, Waiakea, Hilo City, South Hilo, Hawaii. Being a portion of the Government (Crown) Land of Waiakea.

Beginning at the east corner of this lot, and the south corner of Lot 4, Ocean View Lots, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MOKUOLA 2" being 650.90 feet south and 1,069.08 feet east, as shown on Government Survey Registered Map 4016 and running by azimuths measured clockwise from true south:

1.	34°	35'	64.60	feet along the northwest side of road;
2.	128°	28'	374.56	feet along Lot 2, Ocean View Lots to a spike in concrete;
3.	241°	29'	70.02	feet along Government Land to a spike in concrete;
4.	308°	28'	342.81	feet along Lot 4, Ocean View Lots to the point of beginning. Area 0.531 acres.

Subject, however, to an easement in favor of the Territory of Hawaii for the sewer right-of-way (3 feet wide) across this lot as shown on plan hereto attached and made a part hereof, together with the right of ingress and egress to and from said sewer right-of-way for construction, maintenance and repair.

- Any and all other liens, encumbrances, easements, restrictions and reservations of record, if any.
- 3. Unrecorded General Lease No. 3267 dated June 15, 1948, by and between the Territory of Hawaii, by its COMMISSIONER OF PUBLIC LANDS, as Lessor, and Frank M. Carr & Alice Carr, collectively as Lessee, as amended, and by mesne assignments, said lease was assigned to Hilo Bay Hotel Inc., a Hawaii corporation.

-PARCEL THIRD:- (TMK (3) 2-1-005-035)

Lot 4, Ocean View Lots, Waiakea, Hilo City, South Hilo, Hawaii. Being a portion of the Government (Crown) Land of Waiakea.

Beginning at the south corner of this lot, and the east corner of Lot 3, Ocean View Lots, the coordinates of said point of beginning referred to Government Survey Triangulation Station "MOKUOLA 2" being 650.90 feet south and 1,069.08 feet east, as shown on Government Survey Registered Map 4016 and running by azimuths measured clockwise from true south:

1.	128°	28'		342.81	feet along Lot 3, Ocean View Lots to a spike in concrete;
2.	225°	37'	30"	64.55	feet along Government Land to a spike in concrete;
3.	308°	28'		330.42	feet along Lot 5, Ocean View Lots;
4.	34°	35'		64.20	feet along the northwest side of road to the point of beginning. Area 0.495 acres.

Subject, however, to an easement in favor of the Territory of Hawaii for the sewer right-of-way (3 feet wide) across this lot as shown on plan hereto attached and made a part hereof, together with the right of ingress and egress to and from said sewer right-of-way for construction, maintenance and repair.

- a. Any and all other liens, encumbrances, easements, restrictions and reservations of record, if any.
- 4. Unrecorded General Lease No. S-4252 dated August 14, 1969, by and between the State of Hawaii, as Lessor, and Hilo Bay Hotel Inc., a Hawaii corporation, as Lessee.
 - -PARCEL FOURTH:- (TMK (3) 2-1-005-045)

Lot B, situate on the north side of Banyan Drive, Waiakea, South Hilo, Island of Hawaii. Being a portion of the Government (Crown) Land of Waiakea.

Beginning at the east corner of this parcel of land, the southwest corner of Lot A of Government Remnant, and on the north side of Banyan Drive, the coordinates of said point of beginning referred to Government Survey Triangulation Station "HALAI" being 4,324.34 feet north and 10,813.19 feet east, as shown on Government Survey Registered Map 4145, thence running by azimuths measured clockwise from true south:

1.	Along th	Along the north side of Banyan Drive on a curve to the left with a radius of 370.00 feet, the chord azimuth and distance being:							
	60°	58'	36.5"	150.35	feet;				
2.	49°	15'	15"	55.62	feet along the north side of Banyan Drive;				
3.	128°	28'		16.14	feet along Lot C of Government Remnant to a spike in concrete;				
4.	214°	35'		193.98	feet along Lots 2, 3 and 4 of Ocean View Lots;				
5.	308°	28'		97.26	feet along Lot A of Government Remnant to the point of beginning. Area 0.215 Acres.				

Subject, however, to the following easements over, under and across the above-described parcel of land as shown on plan attached hereto and made a part hereof, together with rights of ingress and egress to and from said easements for construction, maintenance and repairs of said easements:

- a. Sanitary Sewer Line Easement (5.00 feet wide) in favor of County of Hawaii.
- b. Underground Electric Power Line Easement (5.00 feet wide) in favor of Hilo Electric Light Co., Ltd.
- c. Water Pipe Line easement (5.00 feet wide) in favor of County of Hawaii.

- d. Gas Line Easement (5.00 feet wide) in favor of Honolulu Gas. Co.
- e. Road Easement (30.00 feet wide) in favor of the State of Hawaii, its successors and assigns.
- f. Any and all other liens, encumbrances, easements, restrictions and reservations of record, if any.

COUNTY OF HAWAI Real Property Tax Office Recent Sales in Area Previous Parcel Next Parcel Return to Main Search Page Hawaii Home Real Property Home

Recent Sales in Area		<u>Previous Parcel</u>	Next Parcel		Return to Main Search Page	Hawa	aii Home	Real Property Home	
Owner and Parcel Information									
Owner Name SAVIO HBH DEVELOPMENT CO LLC Lessee					Today's Date February 1, 2017			017	
Mailing Address	1451 S KING ST STE 504 HONOLULU, HI 96814-2509				Parcel Number	2	210050340000		
Location Address	87 E	BANYAN DRIVE			Project Name				
Property Class	operty Class HOTEL & RESORT		Parcel Map	s	Show Parcel Map Plat (TMK) Maps				
Neighborhood Code	2192-7		Land Area (acres)	0	0.531				
Legal Information					Land Area (approximate sq ft)	2	23,130		

	Assessment Information Show Historical Assessments										
Year	Property Class	Market Land Value	Dedicated Use Value	Land Exemption	Net Taxable Land Value	Market Building Value	Assessed Building Value	Building Exemption	Net Taxable Building Value	Total Taxable Value	
2016	HOTEL & RESORT	\$ 329,600	\$ 0	\$ 0	\$ 329,600	\$ 0	\$ 0	\$ 0	\$ 0	\$ 329,600	

Appeal Information							
No appeal information on parcel.							
	Land Inform	ation					
Property Class	Square Footage	Acreage	Agricultural Usage				
HOTEL & RESORT	23,130	0.531					

Improvement Information

No improvement information available for this parcel.

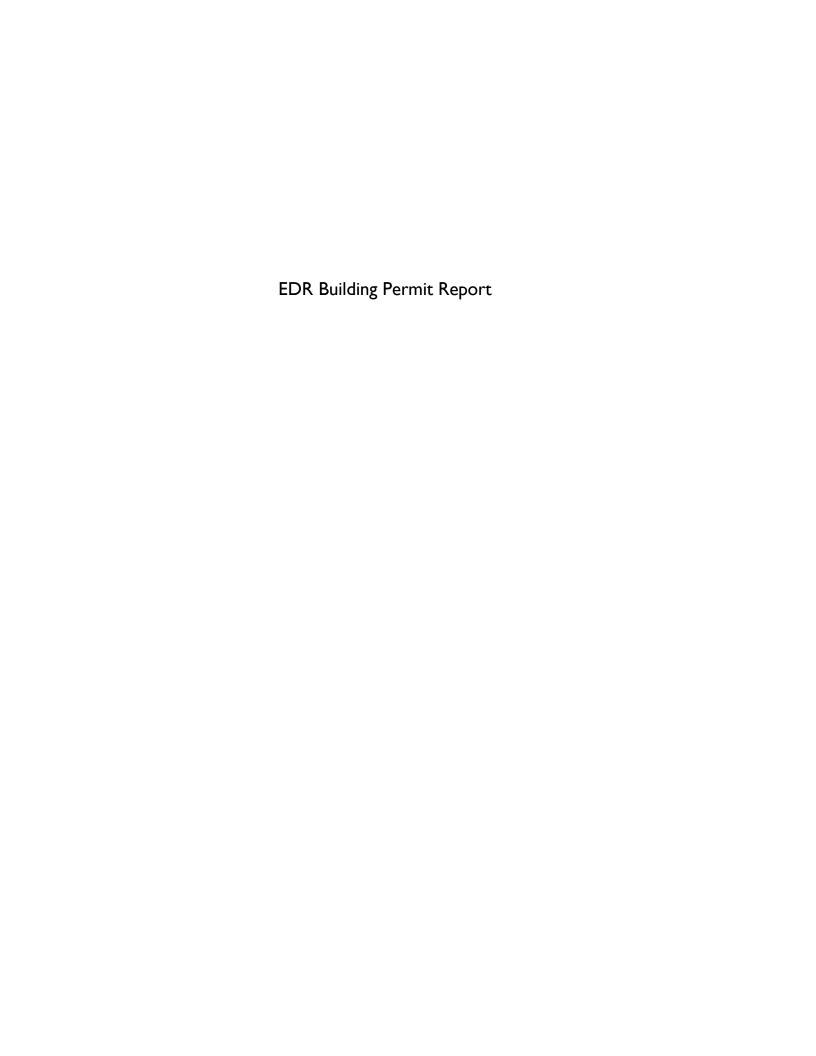
Other Building and Yard Improvements								
Description	Quantity	Year Built	Area	Gross Building Value				
No information associated with this parcel.								

Permit Information							
Date	Permit Number	Reason Permit Amount					
No permit information associated with this parcel.							

	Dept of Public Works Bldg Division Permit and Inspections Information										
Permit Date											
03/20/1997	Electrical	E970364*	Alteration		\$2,000	10/06/1997	COMPLETED				
02/25/1997	Plumbing	M970222*	Alteration		\$3,000	03/14/1997	COMPLETED				
02/24/1997	Electrical	E970221*	Alteration		\$2,000	10/06/1997	COMPLETED				
02/19/1997	Building	<u>970203*</u>	Alteration		\$15,000	03/25/1997	COMPLETED				
03/29/1982	Building	<u>820557*</u>	Repair		\$1,000						

As a courtesy to the public, we provide building permit data as supplied by the Department of Public Works. As such, no warranties, expressed or implied, are provided for the data herein, its use or its interpretation, and accuracy.

Current Tax Bill Information 2016 Tax Payments Show Historical Taxes									
Tax Period	Description	Original Due Date	Taxes Assessment	Tax Credits	Net Tax	Penalty	Interest	Other	Amount Due
2016-2	Real Property Tax	02/21/2017	\$ 0.00	\$ 0.00	\$ 1,788.08	\$ 0.00	\$ 0.00	\$ 0.00	\$ 1,788.08
									\$ 1,788.08



Hilo Hotels

Banyan Dr Hilo, HI 96720

Inquiry Number: 4831829.8

January 19, 2017

EDR Building Permit Report

Target Property and Adjoining Properties



EDR Building Permit Report: Search Documentation

1/19/17

Site Name: Client Name:

Hilo Hotels Element Environmental , LLC

Banyan Dr 98-030 Hekaha Street Hilo, HI 96720 Aiea, HI 96701-0000

EDR Inquiry # 4831829.8 Contact: Susan Oram

Search Documentation

DATA GAP

The complete collection of Building Permit data available to EDR has been searched, and as of 1/19/17, EDR does not have access to building permits in the city where your target property is located (Hilo, HI).

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This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED ORIMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THEMAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALLRISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OFERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL,INCIDENTAL CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLYLIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risklevels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providingany facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by anenvironmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to beconstrued as legal advice.

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquires (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.





APPENDIX C HELCO LETTER



April 18, 2017

Susan Oram Element Environmental L.L.C. 98-030 Hekaha Street, Unit 9 Aiea, HI 96701

Re: PCB information on Hawaii Electric Light equipment in the vicinity of various

parcels along Banyan Drive, Hilo, Hawaii 96720

Ms. Susan Oram:

In response to your request received April 12, 2017, regarding information on Hawaii Electric Light (HELCO) equipment in the vicinity of various parcels along Banyan Drive, Hilo, we provide the following information:

Transformer Information		Location	Purchase Date	PCB Status	PCB Test Date
225 KVA	Company #9499	3T72, Banyan Drive (TMK 2-1-005:035)	Nov. 1973	PCB Free	12/23/16
500 KVA	Company #35187	3T75, Banyan Drive (TMK 2-1-005:020)	2/13/2003	PCB Free	N/A
150 KVA	Company #34559	3T76, Banyan Drive (TMK 2-2-022-008)	4/8/2002	PCB Free	N/A

Our records indicate that there are three pad-mount transformers in the vicinity of the subject sites. There was one reportable release (DOH Release ID 20020104-0935) at 3T76, Banyan Drive (Reeds Bay Hotel). Removal action activities were performed in accordance with the *Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan* (SCP) and the *PCB Spill Cleanup Policy* set forth in the Code of Federal Regulations. Laboratory analytical results indicate that DOH Tier I EALs were satisfied. The SCP Oil Spill Notification Form was submitted to the Department of Health Hazardous Evaluation and Emergency Response (HEER) office on February 4, 2002. The final release response report summarizing our cleanup effort was submitted to the HEER Office on April 28, 2006.

If you have further questions, please contact me at 808-969-0266.

Sincerely,

Chris Chun-Hoon

Environmental Compliance Coordinator

lin la Hoon

APPENDIX D QUALIFICATIONS OF THE ENVIRONMENTAL PROFESSIONALS





Associate Senior Geologist

EDUCATION:

Graduate Work in Geology - Vanderbilt University, 1988 - 1989 **B.A., Geology (minor in Hydrology)** - Austin Peay State University, 1988

PROFESSIONAL REGISTRATIONS:

Licensed Geologist, Washington State, No. 1664, 2002

SPECIALIZED TRAINING:

OSHA 40-hour Initial HAZWOPER Training and Current 8-hour Refresher Hazardous Waste Site Supervisor Training

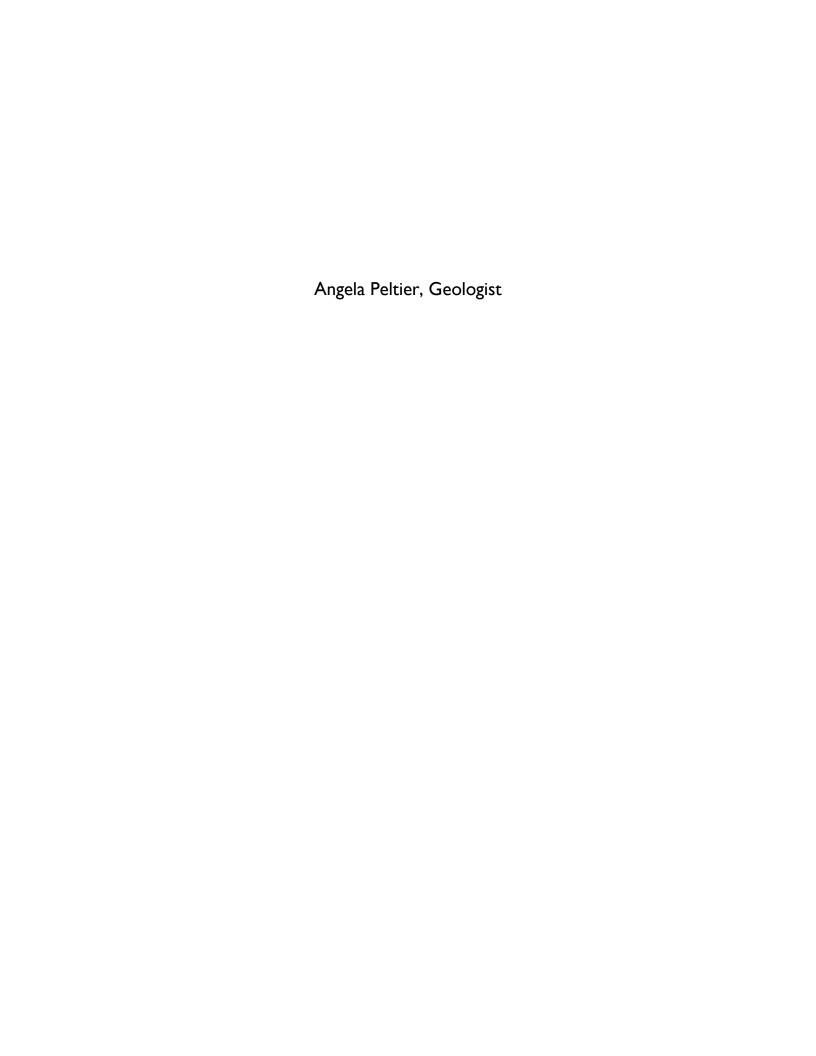
SUMMARY OF EXPERIENCE:

Ms. Campbell is an Associate and Senior Geologist at Element Environmental LLC (E2). Ms. Campbell joined E2 on July 1, 2006, when E2 merged with Mountain Edge Environmental, Inc. She has 17 years of experience in Hawaii in the environmental consulting field. Her specific expertise includes site assessment, characterization, and remediation. Ms. Campbell has assisted with several state level task forces to assess environmental risk and address petroleum contaminated soils.

Ms. Campbell has managed many environmental projects involving Phase I Environmental Site Assessments (ESAs), preliminary as sessments, emergency spill response, subsurface investigation, groundwater monitoring, assessment of fate and transport of surface and groundwater contaminants, soil and groundwater remediation, and risk assessment. She has also man aged numerous underground storage tank (UST) removal projects which included preparation of pl ans and specifications for UST removal, UST removal monitoring, release response activities such as over-excavation, installation of soil borings and groundwater monitoring wells, long term remediation design and implementation, and report preparation.

Ms. Campbell has also managed a number of complex hazardous and biological waste removal and site closure projects which involved geophysical surveys, preparation of plans and specifications, waste characterization, and removal and disposal activities. She has performed Phase I ESAs and has assisted with the pre paration and review of environ mental impact sta tements. She has also performed environmental and hydrogeological investigations and has conducted remediation activities for several illegal landfill sites. Noteworthy projects Ms. Campbell has managed included several large emergency response site investigations and remediation projects involving the release of petroleum and PCBs. One of these projects included an emergency response to a major gasoline spill on Kauai that impacted air, soil, surface water, and groundwater. For this project, Ms. Campbell coordinated with the U.S. Coast Guard, county fire and police depar tments, EPA Region 9, Hawaii DOH, responsible parties, property owners, tenants, and the community. She monit ored explosivity and con taminant migration in the subsurface, underground structures/utilities, buildings, a private sewage pumping station, an adjacent stream and the Pacific Ocean; coordinated emergency medical treatment and medical monitoring of affected spill response personnel and civilians; monitored installation of soil vapor points, soil borings, and groundwater monitoring wells; collected soil vapor, soil, groundwater, and stream water samples; prepared release response report; and provided technical support to legal team.

Ms. Campbell has been the principal investigator for several water quality re lated projects, including preparation of National Pollutant Discharge Elimination System (NPDES) permit applications for an auto recycling facility, an aquarium, a well drilling operation, a cemetery, and a museum; preparation of Storm Water Pollution Control Plans for an auto recycling facility and a solid waste transfer station; storm water and industrial discharge monitoring at various sites; and a ssisting clients in addressing NPDES compliance issues.





EDUCATION:

B.S., Geology and Geophysics – University of Hawaii, 2004

SPECIALIZED TRAINING:

OSHA 40-hour Initial HAZWOPER Training

SUMMARY OF EXPERIENCE:

Ms. Peltier is a Geologist at Element Environmental LLC (E2). Ms. Peltier joined E2 on July 1, 2006, when E2 merged with Mountain Edge Environmental, Inc. She has 9 years of experience in Hawaii in the environmental consulting field. Her specific expertise includes site assessment, characterization, and remediation.

Ms. Peltier has assisted in many environmental projects involving Phase I Environmental Site Assessments (ESAs), preliminary assessments, emergency spill response, subsurface investigation, groundwater monitoring, assessment of fate and transport of surface and groundwater contaminants, soil and groundwater remediation, risk assessment, groundwater monitoring, and explosive gas monitoring. She has also assisted in underground storage tank (UST) removal projects which included preparation of plans and specifications for UST removal, UST removal monitoring, release response activities such as over-excavation, installation of soil borings and groundwater monitoring wells, long term remediation design and implementation, and report preparation.

Ms. Peltier has also performed Phase I ESAs and has assisted with the preparation of environmental impact statements. She has also performed environmental and hydrogeological investigations and has conducted remediation activities for several illegal landfill sites.

Ms. Peltier has been involved in several water quality related projects, including preparation of National Pollutant Discharge Elimination System (NPDES) permit applications for an auto recycling facility, an aquarium, and a well drilling operation, preparation of Storm Water Pollution Control Plans for an auto recycling facility and a solid waste transfer station; storm water and industrial discharge monitoring at various sites.

HILO PAGODA

Areas of Concern, Investigation, and Remediation

Pool Pump Release (Chlorine)

<u>Investigation</u>: Verify release ongoing - hand dig - collect one sample <u>Remediation</u>: Delineate/remove contamination (no backfill included)

Sewage Lift Station Release (Gear Oil)

Investigation: Hand auger/drill - collect up to 6 samples to delineate horizontal extent

Remediation: Delineate/remove contamination (no backfill included)

Flammable Storage Locker (Mixed Substances)

Investigation: Assess area - if soil has been impacted - collect up to 4 samples

Remediation: Delineate/remove contamination (no backfill included)

- Remove 1K Diesel UST if Present
 - If no UST removal, then we will drill around suspect UST location and sample

<u>Investigation</u>: Assume 20 feet of piping - collect 6 MI soil samples from excavation walls, floor, and piping - one grab groundwater sample

Remediation: Delineate/remove contamination (backfill included, repaving not included)

Surface Soil Testing around the AST

<u>Investigation</u>: Collect up to two MI surface soil samples (unless paved) Remediation: Delineate/remove contamination (no backfill included)

MI Testing for Arsenic in Surface Soil at Waterfront

<u>Investigation</u>: Collect up to two MI surface soil samples near waterfront Remediation: Remove/dispose of top six inches of soil (no backfill included)

• MI Testing for Lead and OCI Pesticides around Buildings

Investigation: Collect up to 20 perimeter MI surface soil samples around painted structures

Remediation: Remove/dispose of top six inches of soil (no backfill included)

• Plans and Specifications for environmental activities

Estimated Investigation Costs: \$170,000 plus a 15% Contingency (\$25,500)

<u>Estimated Follow-on Investigation/Remediation Costs (Non-Hazardous Disposal)</u>: \$800,000 plus a 20%

Contingency (\$160,000)

Estimated Plans and Specifications Costs: \$30,000

COUNTRY CLUB CONDOMINIUMS

Areas of Concern

• Ground Floor Transformer Exploded - collect up to 20 Wipe samples

Investigation: Collect up to 20 wipe samples

Remediation: Remove/dispose of contaminated materials

• MI Testing for Arsenic in Surface Soil at Waterfront

<u>Investigation</u>: Collect up to two MI surface soil samples near waterfront <u>Remediation</u>: Remove/dispose of top six inches of soil (no backfill included)

MI Testing for Lead and OCI Pesticides around Buildings

<u>Investigation</u>: Collect up to 20 perimeter MI surface soil samples around painted structures

Remediation: Remove/dispose of top six inches of soil (no backfill included)

• Plans and Specifications for environmental activities

Estimated Investigation Costs: \$100,000 plus a 15% Contingency (\$15,500)

<u>Estimated Follow-on Investigation/Remediation Costs (Non-Hazardous Disposal)</u>: \$900,000 plus a 20%

Contingency (\$270,000)

Estimated Plans and Specifications Costs: \$25,000

REEDS BAY

Areas of Concern

• Pool Pump Release (Chlorine)

<u>Investigation</u>: Verify release ongoing - hand dig - collect one sample <u>Remediation</u>: Delineate/remove contamination (no backfill included)

MI Testing for Arsenic in Surface Soil at Waterfront

<u>Investigation</u>: Collect up to two MI surface soil samples near waterfront <u>Remediation</u>: Remove/dispose of top six inches of soil (no backfill included)

MI Testing for Lead and OCI Pesticides around Buildings

<u>Investigation</u>: Collect up to 20 perimeter MI surface soil samples around painted structures

Remediation: Remove/dispose of top six inches of soil (no backfill included)

• Plans and Specifications for environmental activities

<u>Estimated Investigation Costs</u>: \$70,000 plus a 15% Contingency (\$10,500) plus a 15% Contingency (\$15,000)

<u>Estimated Follow-on Investigation/Remediation Costs (Non-Hazardous Disposal)</u>: \$400,000 plus a 20% Contingency (\$80,000)

Estimated Plans and Specifications Costs: \$20,000

ESTIMATED PHASE II ESA SCHEDULE BY SITE

Hilo Pagoda Hotel Hilo, Hawaii, Hawaii

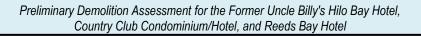
TASKS	Year				
	Month 1	Month 2	Month 3	Month 4	
Phase II ESA					
Coordination, Mobilization, and Toning					
Soil Sampling and UST Investigation/Closure					
Groundwater Sampling if Required					
Laboratory Analysis					
Phase II ESA Report					
Draft Phase II ESA Report					
Client Review and Comment					
Final Phase II ESA Report					

Country Club Condominiums Hilo, Hawaii, Hawaii

TASKS	Year				
	Month 1	Month 2	Month 3	Month 4	
Phase II ESA – Field Sampling					
Coordination and Mobilization					
Soil Sampling					
Interior PCB Sampling					
Laboratory Analysis					
Phase II ESA Report					
Draft Phase II ESA Report					
Client Review and Comment					
Final Phase II ESA Report					

Reed's Bay Hilo, Hawaii, Hawaii

TASKS	Year			
	Month 1	Month 2	Month 3	Month 4
Phase II ESA – Field Sampling				
Coordination and Mobilization				
Soil Sampling				
Laboratory Analysis				
Phase II ESA Report				
Draft Phase II ESA Report				
Client Review and Comment				
Final Phase II ESA Report				



APPENDIX D

Archaeological Literature Review and Field Inspection Cultural Surveys Hawaii

Draft

Archaeological Literature Review and Field Inspection Report for the Pagoda Hilo Bay Hotel, Country Club Condominium Hotel, Reeds Bay Resort and Related Facilities Project, Waiākea Ahupua'a, South Hilo District, Hawai'i Island TMKs: [3] 2-1-005:020, 022, 033, 034, and 035

Prepared for R.M. Towill Corporation

Prepared by Olivier M. Bautista B.A., Sarah Wilkinson, B.A., and Hallett H. Hammatt, Ph.D.

Cultural Surveys Hawai'i, Inc. Kailua, Hawai'i (Job Code: WAIAKEA 21)

February 2017

Oʻahu Office P.O. Box 1114 Kailua, Hawaiʻi 96734 Ph.: (808) 262-9972

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Management Summary

Reference	Archaeological Literature Review and Field Inspection Report for the Pagoda Hilo Bay Hotel, Country Club Condominium Hotel, Reeds Bay Resort Hotel and Related Facilities Project, Waiākea Ahupua'a, South Hilo District, Hawai'i Island, TMKs: [3] 2-1-005:020, 022, 033, 034, and 035 (Bautista et al. 2017)			
Date	February 2017			
Project Number(s)	Cultural Surveys Hawai'i, Inc. (CSH) Job Code: WAIAKEA 21			
Investigation Permit Number	CSH completed the fieldwork component of this study under archaeological fieldwork permit number 17-08, issued by the Hawai'i State Historic Preservation Division (SHPD) per Hawai'i Administrative Rules (HAR) §13-282.			
Agencies	State of Hawai'i Department of Land and Natural Resources (DLNR)/State Historic Preservation Division (SHPD); Hawai'i Department of Transportation (HDOT).			
Land Jurisdiction	State and County of Hawai'i			
Project Proponent	DLNR			
Project Location	The project area consists of the Pagoda Hilo Bay Hotel, Country Club Condominium Hotel, and Reeds Bay Resort Hotel, all of which are located on the <i>makai</i> (seaward) side of Banyan Drive on the Waiākea Peninsula adjacent to Hilo Bay on Hawai'i Island.			
Project Description	The proposed project involves the demolition of the subject hotels.			
Project Acreage	The overall project acreage is approximately 3.967 acres (1.605 hectares).			
	ID	TMK	Acreage	
	Pagoda Hilo Bay Hotel	[3] 2-1-005:033, 034, and 035	1.611	
	Country Club Condominium Hotel	[3] 2-1-005:020	1.166	
	Reeds Bay Resort Hotel	[3] 2-1-005:022	1.19	
	Total acreage		3.967	
			(1.605 hectares)	

LRFI for the Pagoda, Country Club Condominium, and Reeds Bay Hotels, Waiākea, South Hilo, Hawai'i TMKs: [3] 2-1-005:020, 022, 033, 034, 035

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Document Purpose	This investigation was designed—through detailed historical, cultural, and archaeological background research and a field inspection of the project area—to determine the likelihood that historic properties may be affected by the project and, based on findings, consider cultural resource management recommendations. This document is intended to facilitate the project's planning and support the project's historic preservation and environmental review compliance. This investigation does not fulfill the requirements of an archaeological inventory survey investigation, per HAR §13-276. Consequently, this report cannot be used to make formal recommendations for SHPD review and acceptance.
Fieldwork Effort	Fieldwork was accomplished on 20 January 2017 by Olivier Bautista, B.A., and Sarah Wilkinson, B.A., under the general supervision of Hallett H. Hammatt, Ph.D. This work required approximately 2 persondays to complete.
Results Summary	Background research indicates Waiākea was favored in pre-Contact times for its abundant resources. A <i>heiau</i> (pre-Christian place of worship) once stood on the peninsula at Maka'oku across from Moku'ula (Coconut Island), which was named for its healing springs. After Contact, Waiākea became a center of commerce and associated residence. The Hilo Railroad was constructed through the area in response to the successes of the Waiakea Mill Company. Portions of the Waiākea Peninsula, including the project area lands, were leased for private residences through the mid-1900s, and Banyan Drive was constructed in the early 1930s. After the 1946 and 1960 tsunamis development within Waiākea shifted somewhat inland. Tourism became the economic focus, and the Waiākea Peninsula was redeveloped as a resort and recreation area. The hotels on the project area parcels were constructed in the 1960s-1970s.
	The fieldwork component of the LRFI was accomplished on 20 January 2017. No archaeological sites were identified by the brief surface inspection, likely attributable to previous report development. Four historic-era banyan trees planted in the 1930s and 1960s are located adjacent to the project area.
Recommendations	Archaeological materials such as cultural layers potentially containing artifacts, human burials, and/or other features could occur subsurface in undisturbed portions of the project area. If and when specific plans are made for development involving ground disturbance, consultation with SHPD should take place to determine the appropriate scope for further archaeological investigation and mitigation.

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Section 1 Introduction

1.1 Project Background

At the request of R.M. Towill, Cultural Surveys Hawai'i, Inc. (CSH) has prepared this literature review and field inspection report (LRFI) for the Pagoda Hilo Bay Hotel (formerly Uncle Billy's Hotel), Country Club Condominium Hotel, Reeds Bay Resort Hotel and Related Facilities project, Waiākea Ahupua'a, South Hilo District, Hawai'i Island, TMKs: [3] 2-1-005:020, 022, 033, 034, and 35. These three hotels are located on the *makai* (seaward) side of Banyan Drive on the Waiākea Peninsula adjacent to Hilo Bay, in the town of Hilo on Hawai'i Island. The project area is depicted on a portion of the 1995 Hilo U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 1), a tax map plat (Figure 2), and a 2013 aerial photograph (Figure 3).

The proposed project involves the demolition of the subject hotels. The overall project acreage, comprising the three discontinuous hotel properties, is approximately 3.967 acres (1.605 hectares).

1.2 Document Purpose

This investigation was designed—through detailed historical, cultural, and archaeological background research and a field inspection of the project area—to determine the likelihood that historic properties may be affected by the project and, based on findings, consider cultural resource management recommendations. This document is intended to facilitate the project's planning and support the project's historic preservation and environmental review compliance. This investigation does not fulfill the requirements of an archaeological inventory survey investigation, per Hawai'i Administrative Rules (HAR) §13-276. Consequently, this report cannot be used to make formal recommendations for SHPD review and acceptance.

1.3 Environmental Setting

1.3.1 Natural Environment

The project area is situated approximately 2 miles west of downtown Hilo and 3 miles northwest of the Hilo International Airport Terminal, along the windward coast of the island of Hawai'i, on the northern tip of the Waiākea Peninsula. The natural shoreline along the Waiākea Peninsula consists of mostly exposed bedrock and isolated pockets of black sand. The peninsula is relatively level, with a very mild slope toward Hilo Bay. Elevation ranges from sea level to approximately 5 meters (m) (0-15 feet [ft]) above mean sea level (amsl). The climate is generally mild with temperatures averaging 73.5 degrees Fahrenheit. Diurnal winds are typically on-shore, while nocturnal winds typically shift to an off-shore pattern. The average annual rainfall in the vicinity of the project area is approximately 3,000-4,000 millimeters (mm) (118-157 inches) (Giambelluca et al. 1986).

Three small bodies of water are located on the Waiākea Peninsula, none of which are in the project area. The first is Waihonu Pond, situated on the western portion of the peninsula within Lili'uokalani Gardens. The other two are located within the Naniloa Golf Course, one near the second hole and the other near the ninth hole; both of these very small ponds are spring fed and unnamed. Vegetation on the peninsula consists predominately of maintained grassy lawns and

TMKs: : [3] 2-1-005:020, 022, 033, 034, 035

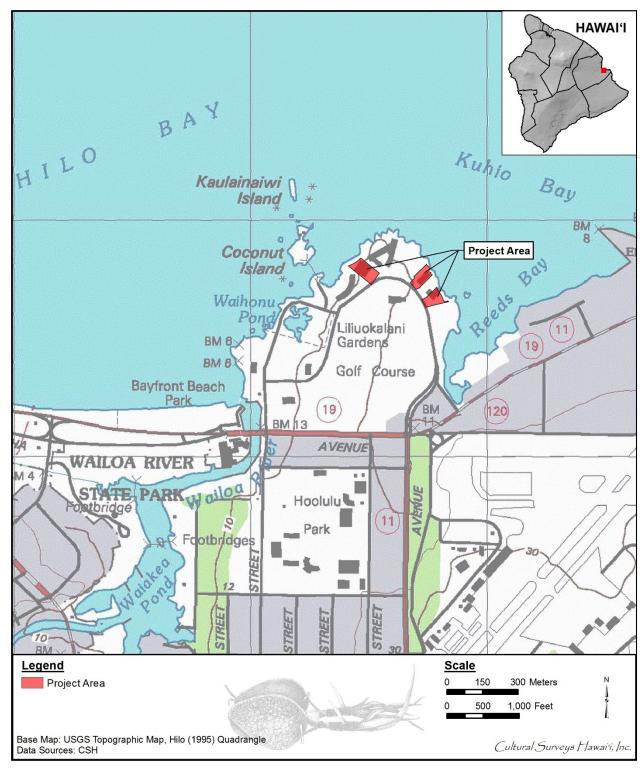


Figure 1. Portion of the 1995 Hilo USGS 7.5-minute topographic quadrangle showing the location of the project area

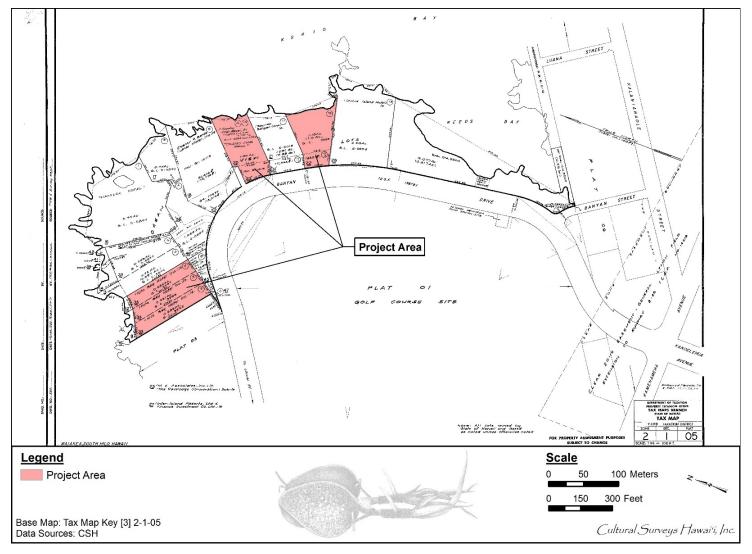


Figure 2. Tax Map Key (TMK) [3] 2-1-005, showing the project area (Hawai'i TMK Service 2014)

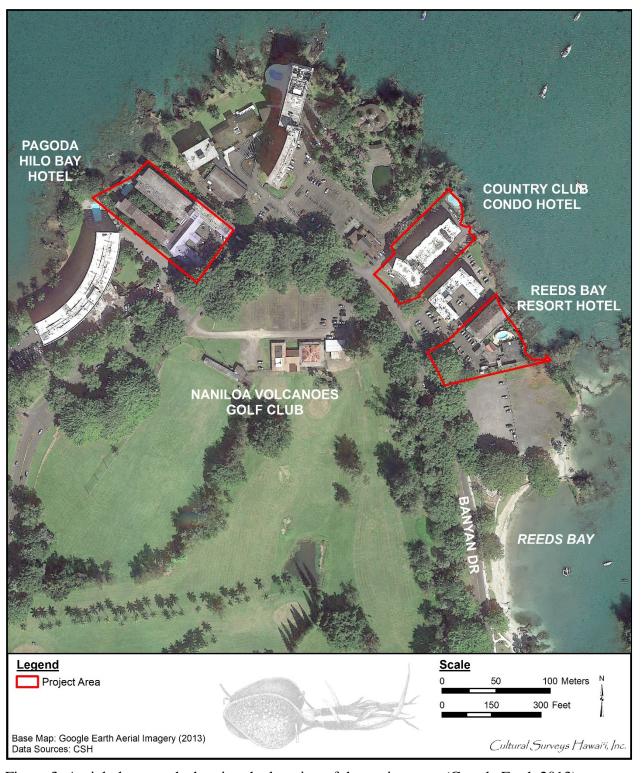


Figure 3. Aerial photograph showing the location of the project area (Google Earth 2013)

other landscaping comprising mostly non-native ornamental trees and plants. The most notable vegetation in the area is the banyan trees (*Ficus benghalensis*) that were planted along Banyan Drive in the early twentieth century.

According to the U.S. Department of Agriculture (USDA) Soil Survey Geographic (SSURGO) database (2001) and soil survey data gathered by Sato et al. (1973), the project area's soils consist of Keaukaha extremely rock muck, 6 to 25% slopes (rKFD) (Figure 4). Keaukaha soils are described as follows:

... well drained, thin organic soils overlying pahoehoe lava bedrock. These soils occupy the low areas of Mauna Loa. They are at an elevation from near sea level to 1,000 feet and receive from 90 to more than 150 inches of rainfall annually . . . The natural vegetation consists of ohia, tree fern, uluhe fern, and guava . . .

Keaukaha soils are used for woodland, pasture, and homesites.

Keaukaha extremely rocky muck, 6 to 20 percent slopes (rKFD).—This soil is near the city of Hilo. It is undulating to rolling and follows the topography of the underlying pahoehoe lava. Rock outcrops occupy about 25 percent of the area. [Sato et al. 1973:27]

1.3.2 Built Environment

The project area is situated along Banyan Drive in Hilo, which accesses various hotel properties, a municipal golf course, restaurants, the Reed's Bay Beach Park, and the Lili'uokalani Park and Gardens. A series of banyan trees were planted along Banyan Drive between the 1930s and 1970s. The current project area includes the Pagoda Hilo Bay Hotel, Country Club Condominium Hotel, and Reeds Bay Resort Hotel. These hotel properties comprise lodging facilities as well as associated restaurants, shops, swimming pools, outbuildings, driveways, parking lots, and landscaped areas. The Pagoda Hilo Bay Hotel property also includes a large koi pond with Japanese-style bridges.

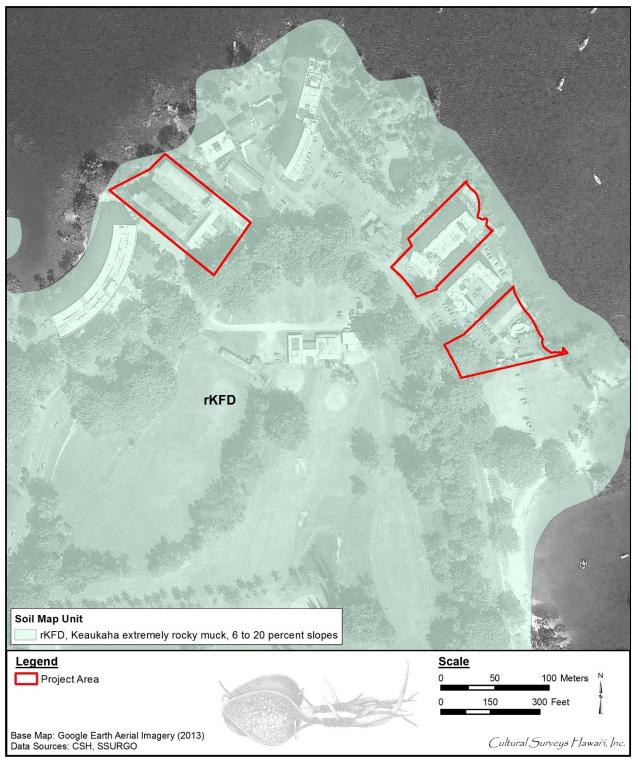


Figure 4. Overlay of *Soil Survey of the Island of Hawaii* (Sato et al. 1973), indicating soil types within and surrounding the project area (U.S. Department of Agriculture Soils Survey Geographic Database [USDA SSURGO] 2001)

Section 2 Methods

2.1 Field Methods

CSH completed the fieldwork component of this study under archaeological permit number 17-08, issued by the SHPD pursuant to HAR §13-282. Fieldwork was conducted on 20 January 2017 by CSH archaeologists Olivier Bautista, B.A., and Sarah Wilkinson, B.A., under the general supervision of Hallett H. Hammatt Ph.D. This work required approximately 2 person-days to complete.

In general, fieldwork included 100% pedestrian inspection of the project area.

2.1.1 Pedestrian Survey

A 100%-coverage pedestrian inspection of the project area was undertaken around the exterior of the existing buildings for the purpose of historic property identification and documentation. The pedestrian survey was accomplished through systematic sweeps spaced 2 m apart.

2.2 Research Methods

Background research included a review of previous archaeological studies on file at the SHPD; review of documents at Hamilton Library of the University of Hawai'i, the Hawai'i State Archives, the Mission Houses Museum Library, the Hawai'i Public Library, and the Bishop Museum Archives; study of historic photographs at the Hawai'i State Archives and the Bishop Museum Archives; and study of historic maps at the Survey Office of the Department of Land and Natural Resources. Historic maps and photographs from the CSH library were also consulted. In addition, Māhele records were examined from the Waihona 'Aina database (Waihona 'Aina 2000).

This research provided the environmental, cultural, historic, and archaeological background for the project area. The sources studied were used to formulate a predictive model regarding the expected types and locations of historic properties in the project area.

Section 3 Background Research

3.1 Traditional and Historical Background

The project area is located on the Waiākea Peninsula in the *ahupua'a* (traditional land division) of Waiākea. The rich and varied resources that Waiākea offered made it one of the most important locales on Hawai'i Island throughout history. Traditional accounts concerning Waiākea include references to its being the seat of chiefly residences as early as ca. AD 1550 (Kelly et al. 1981). Chiefly associations with Waiākea continued through traditional times and into the historic era.

3.1.1 Mythological and Traditional Accounts

The *ahupua* 'a of Waiākea, in the *moku* or district of South Hilo, is large, encompassing some 95,000 acres. It extends from the coast to approximately the 6,000-ft elevation on the windward slope of Mauna Loa. Waiākea literally means broad waters (Pukui et al. 1976:221), but is also a type of taro (*kalo*) grown in Kona, Hawai'i (*lehua ke* 'o *ke* 'o, a variety of taro called *waiākea*) (Pukui and Elbert 1986:377). Waiākea, with its rich natural resources of forests and the sea, has long been a traditional habitation center and is often mentioned in Hawaiian folklore and legends. According to many legends, Waiākea was also associated with the Hawaiian royalty (*ali* 'i).

There are abundant references to Waiākea in the myths and legends of Hawai'i recorded by the early ethnographers Thrum, Emerson, Westervelt, and Fornander. One early account of the Hawaiian chiefdom Waiākea is told by Samuel Kamakau (1992:15–17) in a story of the unification of the Island of Hawai'i under chief 'Umi-a-Liloa. The legend establishes Waiākea as a relatively early residence of Hawaiian *ali'i*.

Directly west of the Waiākea Peninsula and also within Waiākea Ahupua'a is the area known as Keaukaha (literally, "the passing current" [Pukui et al. 1976:104]). The legend of Punia implies that Keaukaha was a place known to be "inhabited by ghosts" (Elbert 1959:14).

Table 1 is a list of Hawaiian tales set in Waiākea. These legends were primarily found in the *Hawaiian Legends Index* (Revised edition) compiled by Lillian Ching and edited by Dr. Masae Gotanda, Director of Hawai'i State Library (1989). Many of these stories merely mention Waiākea in passing, including Fornander's "Legend of Pamano" (1916-1919:304–305) and "Brief Stories of Ghosts and Cunning" (1916-1919:422–423); and Pukui and Green's "The Story of Pele and Hi'iaka" (1995:25). The "Legend of Halemano" tells of love between Halemano and his wife Kamalalawalu and their home in Waiākea, in an area called 'Uluomālama, apparently above the cliffs of Pana'ewa, Hilo. Halemano looked at his wife, and when he saw tears in her eyes his love for her again welled up within him as he remembered how they had lived at 'Uluomālama in Waiākea, Hilo; so he chanted as follows:

We once lived in Hilo, in our own home.

Our home that was in Panaewa . . .

The streams of Hilo are innumerable, The high cliff was the home where we lived

. .

From the waters of Wailuku where the people are carried under,

Which we had to go through to get to the many cliffs of Hilo,

Those solemn cliffs that are bare of people . . .

Table 1. Legends of Waiākea, Hawaiʻi

Author	Original Publication and Year	Legend Title	
Emerson, Nathaniel	Pele and Hiʻiaka (1915)	Pele and Hiʻiaka	
Fornander, Abraham	Fornander Collection of Hawaiian Antiquities and Folk lore, Volume 1 (1916-1919)	The Story of Umi	
Fornander, Abraham	Fornander Collection of Hawaiian Antiquities and Folk lore, Volume 2 (1916 – 1919)	Legend of Kuapakaa	
Fornander, Abraham	Fornander Collection of Hawaiian Antiquities and Folk lore, Volume 2 (1916 – 1919)	Legend of Halemano	
Fornander, Abraham	Fornander Collection of Hawaiian Antiquities and Folk lore, Volume 1 (1916 – 1919)	Legend of Kapuaokaoheloai	
Fornander, Abraham	Fornander Collection of Hawaiian Antiquities and Folk lore, Volume 1 (1916 – 1919)	Legend of Kaipalaoa, the Hoopapa Youngster	
Fornander, Abraham	Fornander Collection of Hawaiian Antiquities and Folk lore, Volume 2 (1916 – 1919)	Famous Men of Early Days	
Fornander, Abraham	Fornander Collection of Hawaiian Antiquities and Folk lore, Volume 2 (1916 – 1919)	Legend of Pamano	
Fornander, Abraham	Fornander Collection of Hawaiian Antiquities and Folk lore, Volume 2 (1916 – 1919)	Brief Stories of Ghosts and Cunning	
Gowen	Hawaiian Idylls of Love and Death (1908)	Keala	
Pukui and Green	Folk tales from Hawaii (1995)	The Story of Pele and Hiʻiaka	
Hale'ole, S. N.	The Hawaiian Romance of Laieikawai (1919)	Kaipalaoa	
Thrum, Thomas G.	More Hawaiian Folk Tales (1923)	Umi's Necklace War Tradition	
Thrum, Thomas G.	More Hawaiian Folk Tales (1923)	Kai a Kahinali'i	
Thrum, Thomas G.	More Hawaiian Folk Tales (1923)	Ulu's Sacrifice	
Thrum, Thomas G.	More Hawaiian Folk Tales (1923)	The Hinas of Hawaiian Folk-lore	
Thrum, Thomas G.	Hawaiian Folk Tales (1998)	Stories of the Menehunes: As Heiau Builders	
Westervelt, William	Legends of Gods and Ghosts (1915)	Keaomelemele, The Maid of the Golden Cloud	
Westervelt, William	Legends of Gods and Ghosts (1915)	Keaunini	

Noho i Hilo i o maua hale-e, He hale noho i Panaewa e . . . He kini, he lehu, kahawai o Hilo e, Pali kui ka hale a ke aloha i alo ai . . . Mai ka wai lumalumai kanaka o Wailuku, A kaua i alo aku ai i na pali kinikini o Hilo, O ia mau pali anoano kanaka ole . . . [Fornander 1916-1919:5(2):250-251]

Another brief mention of Waiākea is found in Pukui and Green's "The Story of Pele and Hi'iaka" in *Hawaiian Stories and Wise Sayings*. Hi'iaka, Pele's sister, "slept at Waiakea, Hilo, and in the morning kept on as far as Kukui-lau-mania, where she turned to gaze back over the country, then continued her journey toward the cliffs of Hilo" (Pukui and Green 1995:25).

Waiākea was often visited by Hawaiian chiefs of high rank. In Westervelt's "Keaomelemele, The Maid of the Golden Cloud," chief Kahanai-a-ke-Akua (adopted son of the gods) and his friend Waiola (water of life) "went down to Waiākea, a village by Hilo . . . The men were invited to sport, but only Waiola went because Kahanai himself was of too high rank" (Westervelt 1915:133).

In the legend "Keala" (Gowen 1908:43–50), "well-known landmarks" of Waiākea are viewed by Ahi, a Hawaiian priest, in his spirit form:

The green water below was the bay of Hilo, the mountain was the terrible Kilauea, where in Halemaumau, the house of everlasting fire, the goddess Pele was wont to ride the red surges with her sisters and tilt with lances of flaming lava. The road was the mountain-path from Waiakea to Kapapala . . . [Gowen 1908:47]

John Papa 'Ī'ī makes two general references to Waiākea, Hilo. According to 'Ī'ī, at the time of Kamehameha I (ca. 1800):

The lands of the chief of Kau were divided within their own district, each being given a portion and each asking for what he wanted. For this reason, a skilled war leader whose name I have forgotten said to Keoua Kuahuula, son of Kalaniopuu and half brother of Kiwalao, perhaps you should go to the chief and ask that these lands be given us. Let Waiākea and Keaau be the container from whence our food is to come and Olaa the lid. ['Ī'ī 1959:13–14]

'Ī'ī 's second reference notes the well-known surf of "Kanukuokamanu in Waiākea, Hilo" ('Ī'ī 1959:134). Kanukuokamanu, on the western side of Wailoa River, was also mentioned in the sixteenth-century story by Kamakau (1992:15–17) as a beach where chiefs and people gathered "at night . . . to amuse themselves with hula dancing, chanting, and the playing of games calling for forfeits of entertainment or sexual favors" (Kelly et al. 1981:1). This summary was likely drawn from two legends: "Story of Umi" and "Umi's Necklace War Tradition."

The "Story of Umi" describes the chiefly residences at Hilo and the king of Hilo, Kulukulua. The legend tells of the chiefs of Hilo gathering at a place called Kanukuokamanu, in Waiākea:

One night there was a grand entertainment for all the chiefs of Hilo at Kanukuokamanu, in Waiākea; there was dancing and games of *papahene*, *kilu* and

 $l\bar{o}k\bar{u}$. (A he po le 'ale 'a nui no na 'lii o Hilo a pau ma Kanukuokamanu ma Wai \bar{a} kea, he hula, he papahene, a he kilu, a me a ka $l\bar{o}k\bar{u}$). [Fornander 1916-1919:220–221]

A similar story, "Umi's Necklace War Tradition," also mentions the festive night at Kanukuokamanu, Waiākea, and 'Umi's marriage to 'Ī'iwalani, the daughter of the king of Hilo (Thrum 1923).

The "Legend of Kapuaokaokeloai" makes a passing reference to Waiākea as a place where the people of "high chief rank of Hilo" lived (Fornander 1916-1919:540–541). This story is also told in "The Hina's of Hawaiian Folklore" (Thrum 1923). Of note is Pukui et al.'s (1976) description of Kaula'ināiwi, a small islet located just north of Coconut Island and approximately 350 m northwest of the Waiākea Peninsula in Hilo Bay. The name of this islet literally translates as "dry the bones;" Pukui et al. (1976:93) assert that "bones of chiefs were dried here." The traditional name for Coconut Island is Moku'ola, which literally translates as "healing island." According to Pukui et al. (1976:156), "[p]eople came here for spring water believed to have healing qualities; umbilical cords of infants were hidden here under a flat stone known as Pap-a-Hina [stratum of Hina] to protect them from rats."

Another reference to the associated royalty of Waiākea can be found in the "Legend of Kaipalaoa, the Hoopapa Youngster" (Fornander 1916-1919:574–575). According to the legend, "Kaipalaoa" (a relative of Kukuipahu, the king of Kona) "was born in Waiākea, Hilo."

The rich resources of Waiākea were well known and sought after by many. According to the legend, "Ulu's Sacrifice," Waiākea was the home of 'Ulu (literally translated as "breadfruit") (Thrum 1923). During a famine, 'Ulu died of starvation and he was laid to rest near a stream. The following morning, there was a breadfruit tree standing where he was buried, ending the famine (Pukui et al. 1976:219–220). Incidentally, Pukui et al. (1976:156) note 'Ulu was father to Moku'ola.

Pukui and Green (1995:95–96) recall another tale of Hilo called "The Hole of Blood," or "Kaluakoko." While it does not specifically name Waiākea, the story takes place in Reed's Bay (traditionally known as Kanakea), which bounds the Waiākea Peninsula to the east, and is thereby situated in near vicinity to the current project area. This tale does not involve the *ali'i* but rather a common man:

In ancient times, a man and his wife lived near that place. He was a fisherman and on calm days went fishing in his canoe. After a time, he met a woman of Keaukaha, and the two became fond of each other. The wife made no fuss when she heard of this and ordered her husband when he made a good catch to take some to the other woman. This went on for some years. One day, the husband turned to his wife and said, 'My dear wife, it would be a good thing for your *punalua* [sister who was also his wife] to live with us, instead of my going fishing and taking her share to her and yours to you.' The wife answered, 'That is a good plan. Fetch my *punalua* and bring her here, and we will live together.' He fetched the woman of Keaukaha and brought her to live with them.

Strangely enough, it was the new wife who became jealous of the old, but she did not dare show her hatred. One day before going fishing, the husband forbade his wives to go fishing until his return. As soon as the canoe had gone, the new wife said to her companion, 'I say! The fish spawn must be thick on the beach; let us go catch it in a net.'

The other answered, 'No, our husband forbade us to go fishing. Let us stay in the house.'

'Even so, let us go to the sea and catch shrimps and come right back.' The *punalua* was so persistent that the other finally consented, and they went to catch shrimps. While the first wife was engaged in the shrimp catching and had come very close to the mouth of the hole, her *punalua* quickly shoved her in and covered the hole with a stone so that she could not get out. There she remained until she died. The new wife went home without the shrimps and with a dry fishnet so that it might not be known that she had gone to the beach.

At the wife's death, blood came out from her mouth and went on the sea foam to the place where the husband was fishing and encircled the canoe. When he saw the blood, he thought of his wife and stopped fishing. He turned his canoe, and the blood went before him and guided the canoe to the hole. It made its way to the mouth of the hole and entered within. The husband moved the stone at the entrance and found the corpse of his wife. He carried it to a place near their house and hid it. Then seeing the other woman standing at the door of the house, he asked, 'Where is your companion?'

The woman said, 'I do not know. She asked me to go with her to catch shrimps, and when I would not go, she went alone with the net. She has not yet returned.'

The man was furious. He said, 'You are a lying woman. It is you who have murdered my dear wife. I loved her dearly. While I was fishing, her blood came to me and guided me to her.' Then she was beaten to death by the husband. He took the first wife and hid her body in a burial cave. The second wife he left for her relatives to bury. The man did not return to live there again. It is for this reason that the hole is called the Hole of Blood, Kaluakoko. [Pukui and Green 1995:95–96]

Many legends tell of the abundant fish and shrimp of Waiākea. The fishpond of Waiākea was so valued that Kamehameha I sent runners from Kawaihae and Kailua to fetch live mullet from Waiākea. Fornander's (1916-1919:490–491) work describes Kamehameha I sending his fastest runners, Makoa and Kāneaka'ehu, to "Hilo to get mullet from the pond of Waiākea, on the boundary adjoining Puna" (o ka nanawa ia o Makoa e holo ai i Hilo i ka 'anae o ka loko o Waiākea, aia ma ka palena e pili la me Puna).

Westervelt's story "Keaunini" tells of the abundant mullet of "Lolakea" and Waiākea. "The people feasted on the mullet of Lolakea and the baked dogs of Hilo and the humpbacked mullet of Waiakea and all the sweet things of Hawai'i" (Westervelt 1915:191). Figure 5 shows fisherman bringing in their catch of *aku* (bonito) fish, ca. 1901.

In the "Legend of Kuapakaa," the shrimps of Waiākea are mentioned, suggesting their value as a resource. Figure 6 shows a woman gathering 'ōpae in Hilo, ca. 1906. The king of Hilo, Kulukulua, is also mentioned again in a chant as follows:

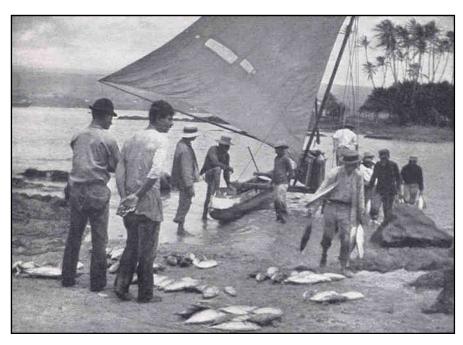


Figure 5. Photograph ca. 1901, showing *aku* caught on the Waiākea coast (Freshwater and Marine Image Bank, Plate 26b)



Figure 6. Photograph ca. 1906, showing a woman gathering 'ōpae in Hilo (Freshwater and Marine Image Bank, Plate II)

Our chief of Hilo, Kulukulua, is not a chief [by birth];

He is a snarer of the shrimps of Waiākea;

After the snaring,

He places the outside covering of the coconut on his ears.

O ua lii o makou o Hilo, o Kulukulua, aohe alii;

He pahelehele opae no Waiākea;

A pau ke pahelehele ana,

Kau ae la i ka pulu niu i ka pepeiao.

[Fornander 1916-1919:84-85]

This chant suggests the chief of Hilo participated in tasks of the commoners and plainly states he was not a chief by birth. The chant also may be the source of the saying "Waiākea of the ears that hold coconut-fiber snares" (Waiākea pepeiao pulu 'aha), which is one of two passages that mention Waiākea in Pukui's (1983) 'Ōlelo No 'eau: Hawaiian Proverbs & Poetical Sayings. Passage number 2901 is a proverbial saying which refers to the small fish (i'a), shrimp ('ōpae), and crab ('a'ama) resources of Waiākea: "Waiākea of the ears that hold coconut-fiber snares" (Waiākea pepeiao pulu 'aha). The saying is further explained:

Snares for small fish, shrimp, or crabs were made of a coconut midrib and the fiber from the husk of the nut. When not in use the snare was sometimes placed behind the ear as one does a pencil. This saying is applied to one who will not heed—he uses his ears only to hold his snare. [Pukui 1983:318]

The second saying is a common expression used in chants of Hilo and refers to "The sparkling sand of Waiolama" (*Ke one 'anapa o Waiolama*) "a place between Waiākea and the town of Hilo. It was said to have sand that sparkled in the sunlight" (Pukui 1983:190, Number 1773).

"Kai a Kahinalii" is the tale of a disastrous flood that devastated the island of Hawai'i. After the waters ebbed, two survivors, a fisherman and his wife, descended "the gentle slope that leads to the bay of Waiākea. There they built a temple and offered sacrifices to the gods" (Thrum 1923:234). Perhaps this temple is one of the recorded *heiau* described in Section 3.2.1.

3.1.1.1 Subsistence and Settlement

In 1979, Holly McEldowney prepared an archaeological and historical literature search and research design as part of a lava flow control study (McEldowney 1979). In her report, McEldowney describes five zones of land use and associated resources. The five zones, which are applicable to Waiākea, include I. Coastal Settlement; II. Upland Agricultural; III. Lower Forest; IV. Rain Forest; and V. Sub-Alpine or Montaine (McEldowney 1979:14).

The project area is situated within Zone I, the Coastal Settlement zone. Zone I is defined as ranging "from sea level to roughly 20 to 50 ft. elevation or 1/2 mile inland." The zone was described by early visitors to Hilo Bay as follows:

... a nearly continuous complex of native huts and garden plots interspersed with shady groves of trees, predominately breadfruit (*Artocarpus altilis*) and coconut (*Cocos nucifers*). Other than these residential complexes, canoe sheds, several heiau, and large complexes catering to chiefs and their retainers were mentioned. Gardens, outlined by windbreaks or small plantations of bananas (*Musa* hybrids),

sugarcane (*Saccarum officinarum*), and *wauke* (*Broussonetia papyrifera*) were primarily planted with dryland taro, mixed with sweet potatoes (*Ipomoea batatas*) and minor vegetable crops. [McEldowney 1979:16]

McEldowney (1979:15) notes Hilo Bay was one of several settlements on the east coast of the Big Island and was "an elongate complex paralleling the coastline." The abundance of marine resources and access to fresh and brackish water, including the numerous fishponds, influenced settlement patterns.

Handy and Handy (1972) recorded the agricultural methods used to grow taro, sweet potatoes, and sugarcane in Waiākea in the 1930s. They describe the natural habitat and agricultural development of Waiākea and South Hilo:

In lava-strewn South Hilo there were no streams, whose valleys or banks were capable of being developed in terraces, but [taro] cuttings were stuck into the ground on the shores and islets for many miles along the course of the Wailuku River far up into the forest zone. In the marshes surrounding Waiākea Bay, east of Hilo, taro was planted in a unique way known as *kanu kipi* (mounded taro patches) . . . On the lava-strewn plain of Waiākea and the slopes between Waiākea and the Wailuku River, dry taro was formerly planted wherever there was enough soil. There were forest plantations in Pana'ewa and in the lower fern-forest zone above Hilo town and along the course of the Wailuku River. [Handy and Handy 1972:538–539]

Handy and Handy cite a 1922 article in the Hawaiian language newspaper, $Ka\ N\bar{u}pepa\ K\bar{u}$ 'oko 'a, that refers to planting sweet potatoes and sugar cane on $p\bar{a}hoehoe$ lava fields:

. . . There are *pāhoehoe* lava beds walled in by the ancestors, in which sweet potatoes and sugar cane were planted and they are still growing today. Not only one or two but several times forty (*mau ka'au*) of them. The house sites are still there, not one or two but several times four hundred in the woods of Pana'ewa. Our indigenous bananas are growing wild, these were planted by the hands of our ancestors. [Handy and Handy 1972:131–132]

3.1.2 Early Historic Period

Land use during the early historic period was still essentially subsistence-based. Settlement was primarily focused on the coastal zone as was most of the agricultural production of both indigenous food crops and newly introduced plants. Significant alterations to these life ways began occurring in the 1800s. The establishment of the American Board of Commissioners for Foreign Missions (ABCFM) station in Hilo, the sandalwood trade, and the arrival of whalers began the shift from subsistence to a market-based economy.

In 1823, Reverend William Ellis conducted a two-month journey around the entire island of Hawai'i, utilizing a route primarily along the coast. During his journey Ellis made observations of indigenous Hawaiian agriculture and population densities. Ellis estimated some 2,000 people resided in "400 houses or huts along Hilo Bay." Ellis described the coastal inhabitants of the North Hilo and Hāmākua districts, implying that these areas were not as abundant as Waiākea in South Hilo:

... the inhabitants, excepting at Waiakea, did not appear better supplied with the necessaries of life than those of Kona, or the more barren parts of Hawaii. They had better houses, plenty of vegetables, some dogs, and few hogs, but hardly any fish, a principle article of food with the natives in general. [Ellis 1963:252]

T. Stell Newman (2000) conducted an ethno-historical study utilizing the observations of Ellis in conjunction with modern environmental data in an attempt to define indigenous Hawaiian land use patterns ca. 1823. Through an analysis of Ellis's journal writings, Newman was able to reconstruct Ellis's route around the island. The route was then plotted onto a map and all references by Ellis about indigenous Hawaiian agriculture, population density, soil type, water resources, and botany were matched to the route, allowing Newman (2000) to establish four agricultural zones: Irrigation, Dryland Farming, Scattered Farms, and Field Systems (Figure 7). Based on a review of Newman's map, it appears the project area falls into the Scattered Fields agricultural zone, which is defined as having a low population density, dispersed settlement with few fishing villages at the coast, and scattered fields and gardens with no major field systems (Newman 2000). Crops that would have been cultivated consisted of dryland taro, sweet potato, bananas, yams, breadfruit, sugarcane, and paper mulberry. Note that number 25 shows the location of Hilo, which is identified as "Waiakea." It is likely this model better fit the lands located somewhat upslope from the shoreline within Hilo, in line with McEldowney's land use zones (see Section 3.1.1.1).

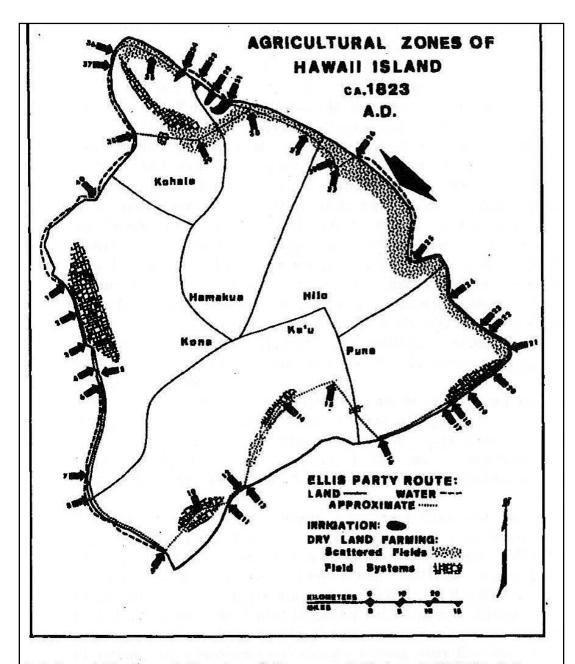
C.S. Stewart, an American missionary traveled to Hilo in 1825 with Lord Byron on the HMS *Blonde*. He described the Waiākea vicinity as the ship landed at Coconut Island:

The beach is covered with varied vegetation, and ornamented by clumps and single trees of lofty cocoa-nut, among which the habitations of the natives are seen, not in a village, but scattered everywhere among the plantations, like farm-houses in a thickly inhabited country . . . At a very short distance from the beach, the bread-fruit trees were seen in heavy groves, in every direction intersected with pandanus and tutui [kukui], or candle-tree, the hibiscus and the acacia, &c. The tops of these rising gradually one above another, as the country gently ascended towards the mountains in the interior, presented for twenty or thirty miles in the south-east, a delightful forest scene. [Stewart 1970:362–363]

The ABCFM established themselves in Hilo in the mid-1820s. The years following the missionaries' arrival were spent introducing a new religion that was not accepted by the general population until the late 1830s (McEldowney 1979:33, 34, 36).

A "religious revival" occurred in Hilo in the late 1830s due in part to the preaching of Titus Coan and several other factors. The Hawaiian population had been considerably reduced at this point due to the introduction of new diseases and a decline in the birth rate. Alterations to traditional religion and life-ways were prevalent and this devotion to the new religion intensified these changes:

During the revival's height [between 1837 and 1840], as many as 10,000 people congregated in Hilo at one time. Among other consequences, this led to the severe alteration of traditional habitation and garden sites within the Hilo area, the permanent or temporary abandonment of entire villages in outlying areas, and a



1. Kailua; 2. Keauhou; 3. Kaawaloa; 4. Honaurau; 5. Keokea; 6. Kalshiki; 7. Kapua; 8. Kaulanamauna; 9. Kailikii; 10. Waiohinu; 11. Honuspo; 12. Hilea; 13. Punakuu; 14. Kapapala; 15. Kilauea Volcano; 16. Kealakomo; 17. Kalapana; 18. Kaimu; 19. Kamaili; 20. Keahialaka; 21. Kapoho; 22. Kahuwai; 23. Honolulu; 24. Keaau; 25. Waiakea (present city of Hilo); 26. Laupahoehoe; 27. Humuula; 28. Kaula Valley; 29. Manienie; 30. Kapulena; 31. Waipio Valley; 32. Waimanu Valley; 33. Honokane Valley; 34. Polulu Valley; 35. Halawa; 36. Awalua; 37. Mahukona; 38. Kawaihae; 39. Waimea (also called Kamuela) 40. Kiholo.

Figure 7. Map of Hawai'i Island showing the route of Reverend William Ellis and the agricultural zones delineated by Newman (2000)

deeper disruption of traditional Hawaiian beliefs and subsistence patterns. [McEldowney 1979:36]

3.1.3 The Māhele and the Kuleana Act

The Organic Acts of 1845 and 1846 initiated the process of the Māhele, the division of Hawaiian lands, which introduced private property into Hawaiian society. In 1848, the crown and the *ali'i* received their land titles. Kuleana awards to commoners for individual parcels within the *ahupua'a* were subsequently granted in 1850. It is through records for Land Commission Awards (LCAs) generated during the Māhele that the first specific documentation of life in Hawai'i, as it had evolved up to the mid-nineteenth century come to light. Although many Hawaiians did not submit or follow through on claims for their lands, the distribution of LCAs can provide insight into patterns of residence and agriculture. Many of these patterns of residence and agriculture probably had existed for centuries past. By examining the patterns of *kuleana* (commoner) LCA parcels in the vicinity of the project area, insight can usually be gained to the likely intensity and nature of Hawaiian activity in the area.

Waiākea Ahupua'a was held by Kamehameha I. When he died in 1819, his son Liholiho received the lands. The Kamehameha dynasty's control over the valuable property was affirmed in Waiākea's status as Crown Land during the Māhele, with the 'ili (subdivision of an ahupua'a) of Pi'opi'o awarded to Victoria Kamāmalu (LCA 7713:16), a granddaughter of Kamehameha I and heir to Ka'ahumanu as well. Pi'opi'o was located directly west of the peninsula along Hilo Bayfront; its location is shown on Figure 8 in relation to the project area.

Twenty-six LCAs were granted within Waiākea, none of which are within or in the immediate vicinity of the project area. Most LCAs were focused around the edges of the large fishponds of Waiākea to the south and west. Land use information from these *kuleana* awards generally refers to cultivated fields with house lots, indicating habitation and agricultural production within the same zone, unlike leeward Hawai'i Island where in many cases *kuleana* included coastal house lots with associated upland agricultural lots, because of elevation-dependent rainfall.

3.1.4 Mid- to Late 1800s

The coastal zone continued to contain the vast majority of the population. Hilo was being transformed into an entirely wooden-framed "New Bedford type Whaling Town." Whaling ships requiring supplies visited the port causing the export economy to grow. More foreigners were settling in Hilo and began purchasing Hawaiian lands (McEldowney 1979:38).

Isabella Bird describes the country area around Hilo in 1873 and the variety of crops grown: "Above Hilo, broad lands sweeping up cloud wards with their sugar-cane, *kalo* (taro), melons, pine-apples, and banana groves suggest the boundless liberality of nature" (Bird 1964:38). McEldowney describes other land usage activities in Waiākea: "Other examples of business, not directly related to sugar cultivation, were the continued use of the Waiākea fishponds, an active Chinese fish market, small pastures above Hilo supporting dairy cattle, and scattered vegetable gardens" (McEldowney 1979:39). Cattle ranching and timber for firewood and housing were the primary interior land uses during this period.

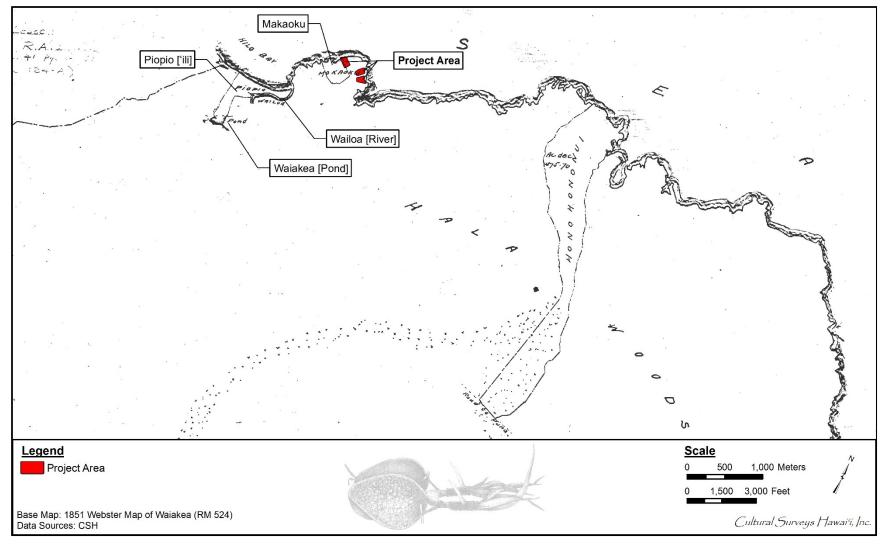


Figure 8. Portion of the 1851 map of Waiākea by William Webster, showing the location of the project area

Large-scale commercial sugarcane production began in Waiākea in the late 1870s with the establishment of the Waiakea Mill Company. The Waiakea Mill Company leased Waiākea Crown lands extending from the town of Hilo up to 1,100-ft elevation. The mill was located at the head (mauka end) of Waiākea Fishpond and sugar was transported by barge through the pond and down Wailoa River to Hilo Bay. The location of the mill in Hilo is shown on maps from 1882 (Figure 9) and 1886 (Figure 10); while Figure 9 depicts some scattered structures (perhaps representing homes) within the southern half of the peninsula, none are shown within the project area and the majority of the peninsula appears undeveloped. Figure 10 indicates the main body of the plantation lands were adjacent to the mill to the south.

In 1879, a 3-mile segment of railroad was constructed from the Waiakea Mill to the cane fields, "the first in the 'Sandwich Islands' to haul sugar cane with a steam locomotive" (Condé and Best 1973:117). Three years later, on 1 October 1882, Queen Emma visited the Waiākea plantation "to take a ride on the railroad…and a pleasant trip was made into the cane fields, a distance of four miles from the mill" (Condé and Best 1973:118).

Until the 1880s, houses and stores were concentrated in the northern half of Hilo Bay, somewhat removed from Waiākea, because at the time the main pier for Hilo was at the mouth of the Wailuku River. Development of the Waiākea Peninsula began in the late 1800s. In his archaeological investigation for Reed's Bay Beach Park, located immediately south of Reed's Bay Hotel, Wolforth (2006) noted the following:

New-style house building began on Waiakea peninsula in 1897 when several immigrant families raised buildings along the shoreline . . . John A. Scott erected a 'mansion' on the northern portion of the project area [present Reed's Bay Beach Park] on land that he leased from the Territory. [Wolforth 2006:14]

The Scott home is depicted on a 1912 map (Figure 11) just south of the Reed's Bay Resort property, along with a number of other homes on coastal lots belonging to the "Ocean View Lots" subdivision. Homes belonging to a "Wilson" and "Shaw" are indicated in the current project area.

3.1.5 1900s

Sugar and its associated industries continued to expand during the early 1900s. The Hawaii Consolidated Railway was built in 1900; a 1901 map (Figure 12) depicts the route of the "Hilo Railroad" extending from "Makaoku" on the Waiākea Peninsula southeast to the Olaa Sugar Mill in present Kea'au, Puna. In 1913, the railroad was extended "from Waiākea Mill and wharf through Puna, most of 'Ōla'a and along the N and S Hilo coast" (McEldowney 1979:41). A 1914 topographic map (Figure 13) provides a relatively detailed view of the railroad route in the vicinity of the peninsula as well as other developments, including some structures within the western and central portions of the project area.

A 1915 map of Waiākea (Figure 14) shows the railroad and plantation features, and the proximity of the project area to areas of economic development—including development on and adjacent to the peninsula. Many of the immigrant laborers from the late 1800s moved off the plantation, replaced by new Filipino laborers. Hilo continued to grow and became the second largest urban center in the new Territory of Hawaii. Ranching in the Hilo area, although not specifically in Waiākea, came under the control of two large enterprises: the Parker and Shipman

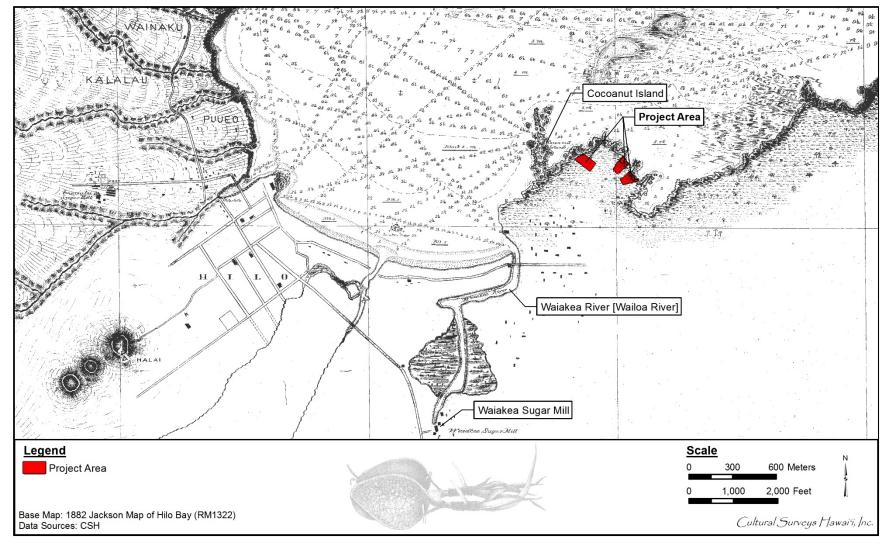


Figure 9. Portion of the 1882 map of Hilo Bay by G.E. Jackson, showing the location of the project area

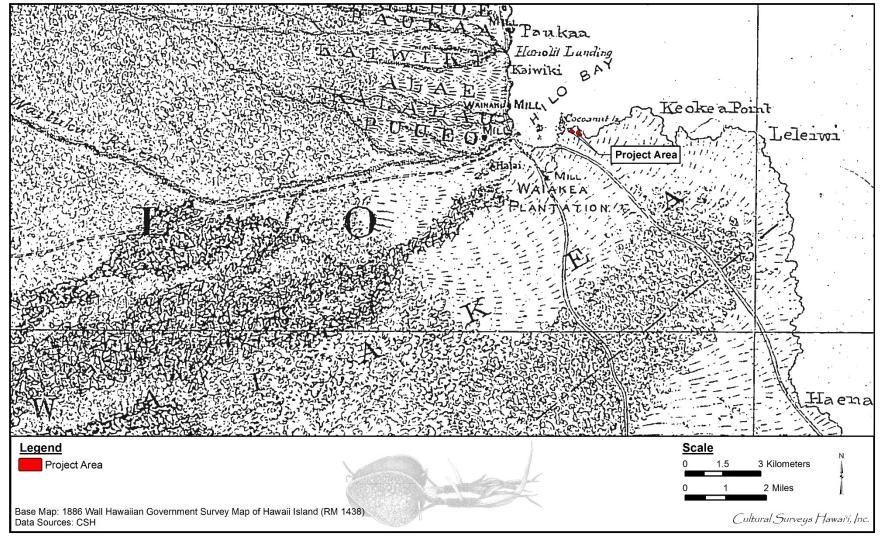


Figure 10. Portion of the 1886 Hawaiian Government Survey Map of Hawaii Island by Walter A. Wall, showing the location of the project area

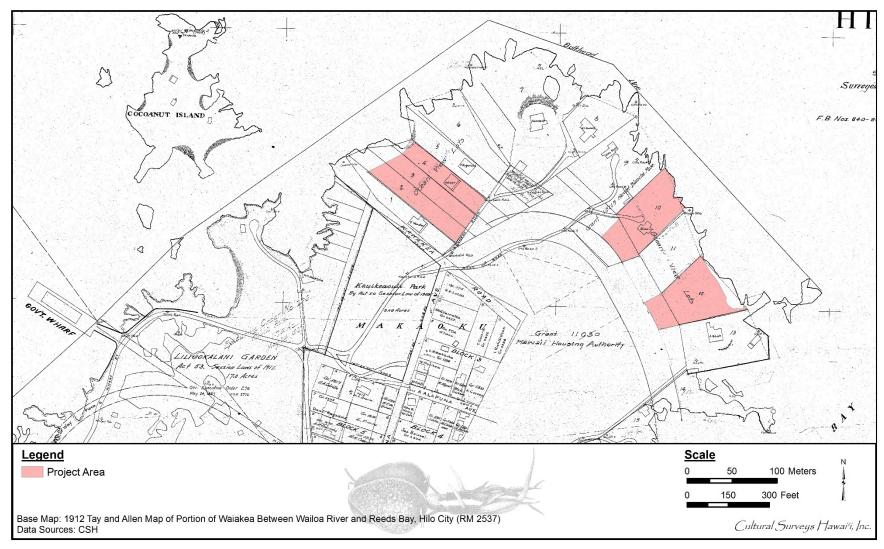


Figure 11. Portion of the 1912 map of Waiākea between Wailoa Rover and Reeds Bay by Tay and Allen, showing the location of the project area

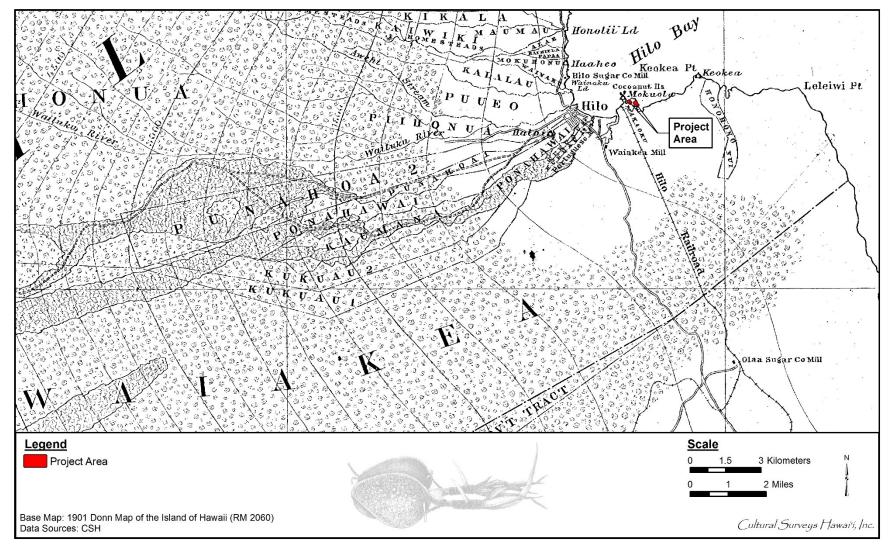


Figure 12. Portion of the 1901 map of the Island of Hawai'i by J.M. Donn, showing the location of the project area

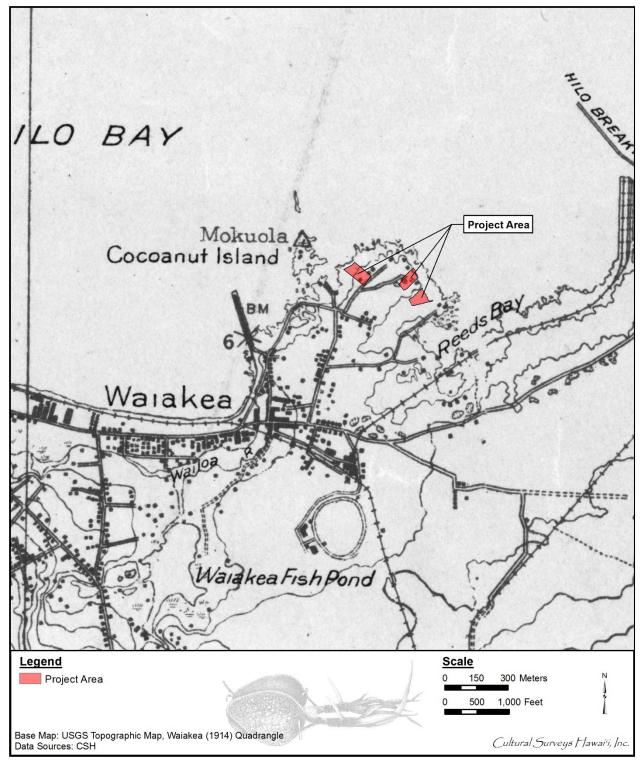


Figure 13. Portion of the 1914 Waiakea USGS 7.5-minute topographic quadrangle showing the location of the project area

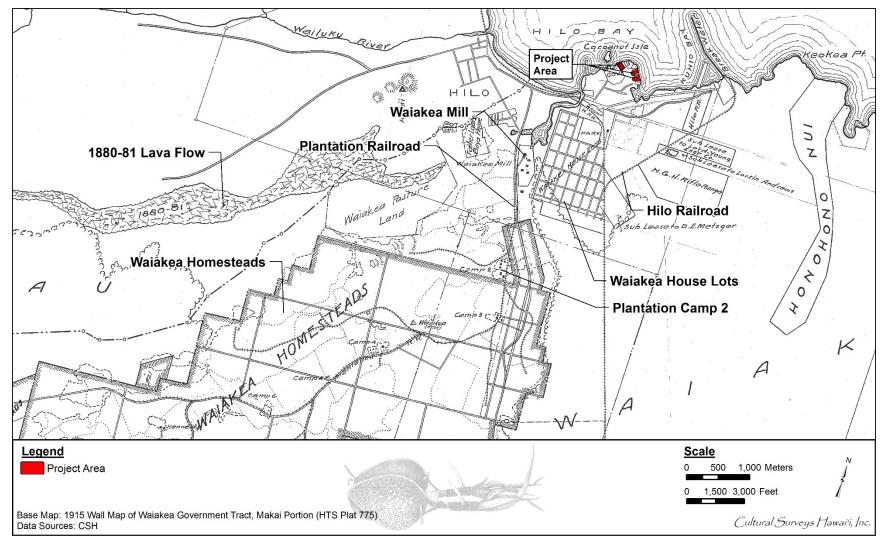


Figure 14. Portion of the 1915 map of Waiakea Government Tract by W.E. Wall, showing the location of the project area

ranches. In Waiākea a large portion of the upland agricultural zone that was too rocky for sugarcane cultivation became available for lease as Waiākea pasture lands. The specific use of the pasture land is not known but McEldowney notes a "substantial amount of grazing land adjacent to Hilo or to sugarcane fields supported dairy cows for Hilo's several dairies" (McEldowney 1979:41).

The public Lili'uokalani Gardens Park was constructed in 1917 on land donated by the Queen to honor thousands of immigrant Japanese working at the Waiakea Sugar Plantation (Hilo Downtown Improvement Association 2009). The garden, constructed around the Waihonu Pond, features Yedo-style landscaping. A notation on the 1912 map (see Figure 11) indicates the park land was set aside previously, in 1911. This map also depicts the railroad right-of-way crossing through the park, the "gov't wharf," another park, various roads, and other developments to the east.

In 1918, the 30-year lease of the Waiakea Mill Company expired and, because Hawai'i had become a territory:

... the land fell under homesteading laws that required the government to put some of it up for lease to homesteaders who would be willing to grow sugar cane on it. Waiākea Mill was to grind the crop for them. A total of about 700 acres of land was divided into cane lots (between 10 and 76 acres each) and house lots ranging from 1 to 3 acres ... [Kelly et al. 1981:121]

The large Waiakea Homesteads area *mauka* of the Waiakea Mill is shown on the 1915 map (see Figure 14). The plantation railroad system and several plantation camps are also indicated within the homestead area. The homestead and cane lots eventually reverted to the overall mechanized cultivation and the homestead and cane lot experiment "was declared a failure" (Kelly et al. 1981:121). In contrast, the homesteads in Keaukaha were described as "an unqualified success" (Kelly et al. 1981:229). By 1930 some 200 house lots had been leased to qualified Hawaiian families (Akoi 1989:44). This was despite the Hawaiian Homes Commission (1925:12) statement that the 2,000 acres settlement was "not suited to agriculture."

By the 1920s the Waiakea Mill Company had some 7,000 acres in cane production. During that decade large tracts of remaining forests in Waiākea were "designated as forest reserve" to maintain the "forest as a 'watershed' to capture, retain, and support the continuous flow of water necessary to the sugar industry" (McEldowney 1979:42). Clearly, sugar was the dominant economic factor during this period including the institution of settlements (i.e., camps).

A 1927 map (Figure 15) evidences little change at Waiākea Peninsula from the previous decade. This map indicates the three parcels presently occupied by the Pagoda Hilo Bay Hotel were being leased (from west to east) by J.R. Ried, F.J. Loncke, and A.M. Wilson; the land presently occupied by Country Club Condominium Hotel was leased by W.H. Beers; and the current Reeds Bay Resort property was leased by A.L. Burdick. All of these leases were set to expire in June 1928. A 1928 map (Figure 16) confirms new ownership, though the exact names are difficult to make out. Burdick continued to hold a lease on the present Reeds Bay Resort property. The 1928 map depicts between one and six structures on each of the subject parcels, presumably residences and related outbuildings; additional structures, roadways, and other features are depicted on the surrounding parcels. The Hilo Yacht Club is shown at the northern point.

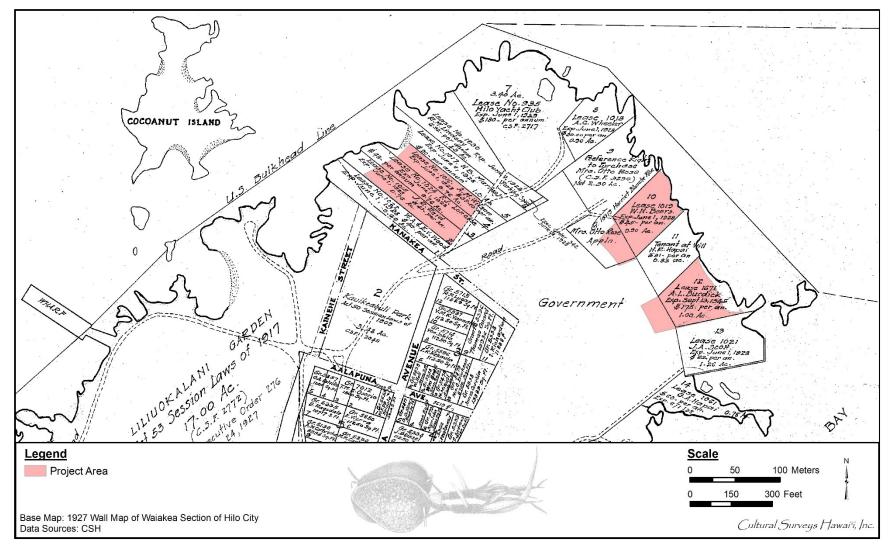


Figure 15. Portion of the 1927 map of Waiakea Section of Hilo City by W.E. Wall, showing the location of the project area

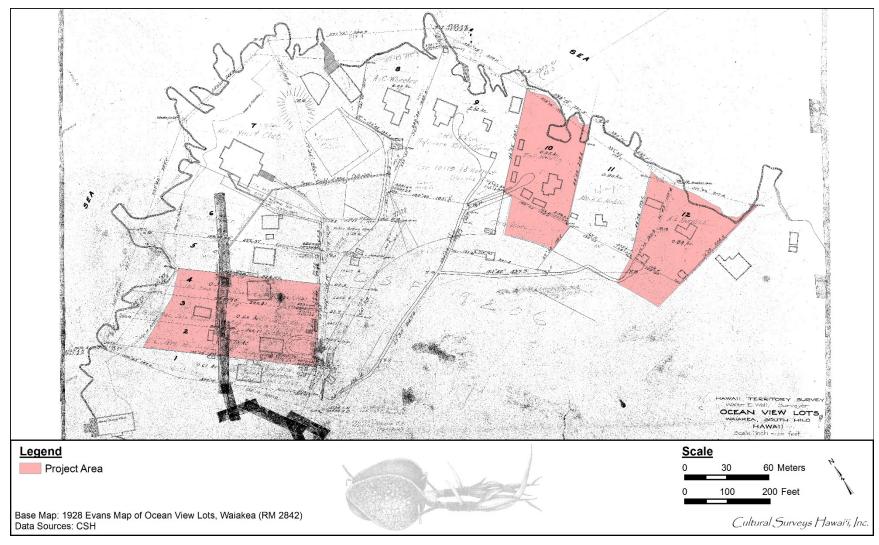


Figure 16. Portion of the 1928 map of Ocean View Lots, Waiākea by R.J.K. Evans, showing the location of the project area

In 1931, the Hawaiian Cane Products Company, Ltd. began a firm that developed a new product, a fiber board product called "canec." Canec was made from bagasse, the fibrous byproduct of sugar production that was usually burned by sugar factories for fuel. The Waiakea Mill began selling their bagasse to the canec plant, which was located approximately 200 yards from Waiakea Sugar Mill (Condé and Best 1973:119).

Several major construction projects were completed in the Hilo area in the 1920s and 1930s, including Hilo Airport and the Hilo Bay wharves, breakwater, and bridges. Some wharf projects were related to damage caused during the winter of 1923 that included storm surf in January and a tidal wave in February (Kelly et al. 1981:171). The Scott and Richardson properties once located at the present Reed's Bay Beach Park site were claimed by the Territorial Government for harbor development, and were abandoned in 1932 (Wolforth 2006:14). A public diving board (State Inventory of Historic Places [SIHP] # 50-10-35-24918) was erected on the former Scott property; in 1941 the American Legion constructed a clubhouse on the same property (Wolforth 2006:14). Banyan Drive, which fronts the three project area parcels, was constructed in 1934; it was named for the trees planted along it, the first of which was planted in 1933.

During the 1940s World War II period in Hilo, projects related to the military presence on the island included the expansion and designation of Hilo Airport as General Lyman Field and the construction of Saddle Road. Sugar production began to decrease and the Waiakea Mill Company ceased operations in 1948. The tsunami of 1946 had dealt a crippling blow to the already struggling operation; it also destroyed many residential and commercial buildings throughout coastal Hilo, including many straddling Kamehameha Avenue in Waiākea. Another devastating tsunami struck Hilo in 1960, once again leveling many of the buildings along Hilo Bay. The Bayfront area was redesigned as a "greenbelt" of parkland intended to act as a buffer for the town in the event of another tsunami. The 1963 topographic map (Figure 17) illustrates how, following the 1960 tsunami, development shifted inland; compare the number of structures shown in the vicinity of the peninsula to the 1914 topographic map (see Figure 13).

Following statehood in 1959 and the demise of the sugar mill and canec plant, tourism became the economic mainstay. In Waiākea, C. Brewer & Company built a hotel complex at the site of the old canec plant. Other hotels were developed on the Waiākea Peninsula. In 1967, the Orchid Island Hotel was built at the site of the Legionnaire Clubhouse. According to Wolforth (2006:12) "Ownership changed hands a couple of times, and then the hotel went out of business and finally closed in 1977. The building burned in 1986, and the lot was cleared." The property is now part of Reed's Bay Beach Park. County of Hawai'i Tax records were researched for information about hotel construction within the project area. The Pagoda Hilo Bay Hotel was constructed in 1964 (as the Hilo Bay Hotel), the Country Club Condominiums Hotel was constructed in 1969, and work for the Reed's Bay Resort Hotel was started in the late 1960s and completed in 1978. The Naniloa Golf course was constructed in the once marshy area located directly across the project area to the south. *Mauka* (inland, toward the mountains) of the peninsula, large tracts of former Waiakea Homestead and cane lots were converted to housing and sub-division tracts. Many of these changes are depicted on a 1977 orthophoto (Figure 18).

3.1.6 Contemporary Land Use

The Waiākea Peninsula has changed little over the last 50 years. Many of the hotels, some of which have been renovated and rebranded, are still in use. The Naniloa Golf Course, Lili'uokalani

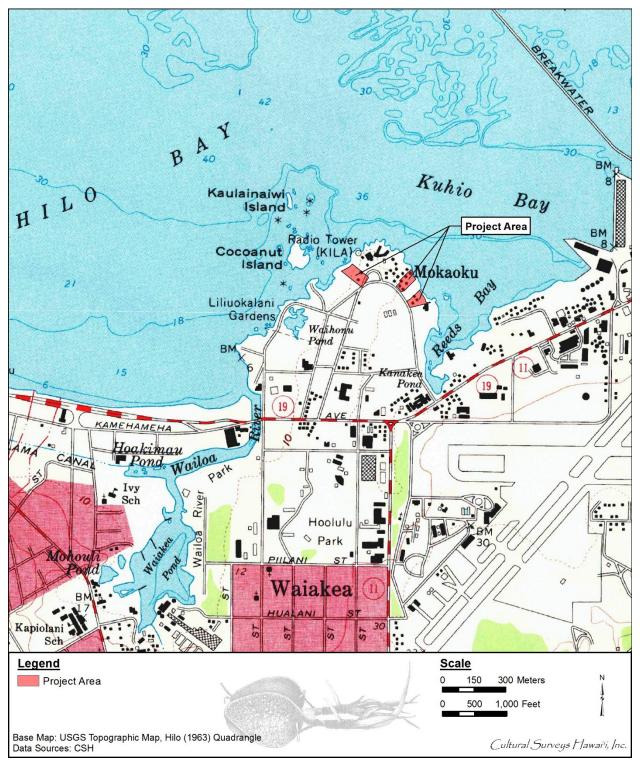


Figure 17. Portion of the 1963 Hilo USGS 7.5-minute topographic quadrangle, showing the location of the project area

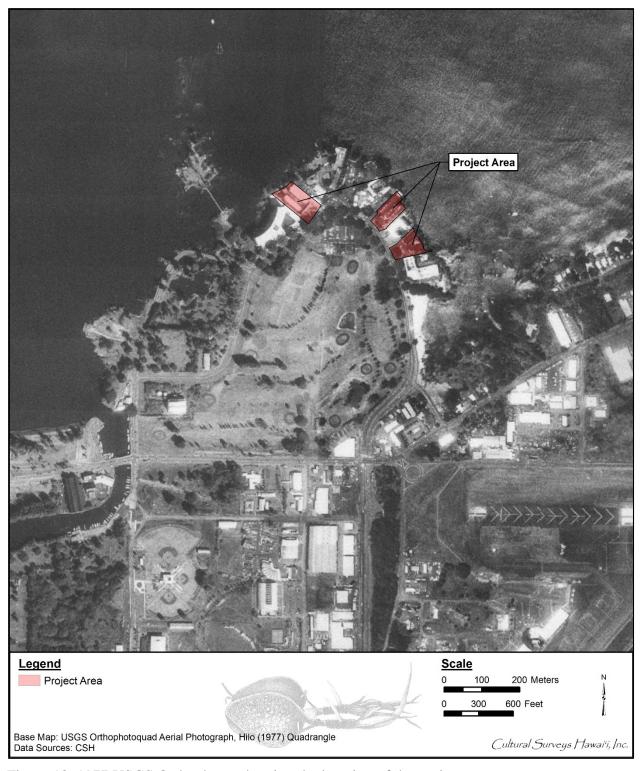


Figure 18. 1977 USGS Orthophoto, showing the location of the project area

Gardens, and Reed's Bay Beach Park are used for recreational activities by tourists and locals alike. Recently, the existing walking path surrounding the Lili'uokalani Gardens has been incorporated within the larger Hilo Bayfront walking trail, which extends west into downtown Hilo and includes interpretive signage.

3.2 Previous Archaeological Research

3.2.1 Heiau of Waiākea

Thrum (1907a:40–41) lists and describes 16 *heiau* in the district of Hilo, remarking that "little evidence of their existence now remains" (Thrum 1907b:55). The three *heiau* located near Waiākea's coastline are Maka'okū Heiau (*luakini* [sacrificial temple] class, SIHP # 50-10-35-18843), Kapā'ie'ie Heiau (unknown class, SIHP # 50-10-35-18883), and Ohele Heiau (*luakini* class, SIHP # 50-10-35-18884).

According to Thrum, Maka'okū Heiau was located

. . . on the shore opposite Cocoanut Island, Hilo, of luakini class, connected with the noted Mokuola place of refuge; dimensions unknown, though it is said to have had a high pyramid of stone as if for a place of observation. The stones of this heiau were taken by Capt. Spencer in the [eighteen] sixties for a boat landing. [Thrum 1907a:40]

Thrum (1907b:56) further notes, "the area of [Moku'ola] included also a portion of the mainland adjoining. The *heiau* connected with it, named Makaoku, was of the *luakini* class." According to Keaukaha resident Terri Napeahi, Maka'okū was actually the name for the area in which the *heaiu* was situated, while the *heiau* itself was called Kuaka'ananu'u (Gotay and Rechtman 2015:41). That the area was called Maka'okū is evidenced by its notation on historic maps (see Figure 8 and Figure 12); these maps indicate that the northern boundary of the Maka'okū area was just south of the Pagoda Hilo Bay Hotel portion of the current project area, in the vicinity of the present Hilo Hawaiian Hotel. According to notes written by Theodore Kelsey (n.d. in Gotay and Rechtman 2015:41), the *heiau* "was a pyramidal structure about 60 ft high perhaps . . . the victims were killed by two priests who stood on either side and dropped a heavy stone named Makaoku'i ka lani . . ." Some of its stones have been recovered and relocated to an area across the harbor at Wailoa Rover State Park (Big Island Video News 2016).

A modern study of Waiākea Ahupua'a specifically mentions Kapā'ie'ie within Waiākea (Rosendahl 1994:5). Kapā'ie'ie Heiau was originally recorded by A.E. Hudson in a 1932 manuscript of archaeological and historical literature research of east Hawai'i (Hudson 1932). According to Rosendahl (1994:5), Kapā'ie'ie Heiau was located "along the old Hilo-'Ōla'a trail (not far from the route of modern-day Kīlauea Avenue)." Hudson writes,

There was a *heiau* named Kapaieie near Honokawailani in Waiākea. Bloxam who passed the site on his way from Hilo to the volcano says that its center was marked by a single coconut tree. At the time of his visit nothing remained but ruined walls choked with weeds. He was told that the priests would lie in wait for passersby and dispatch them with clubs. Thrum [1908:40] states that the site was famed in the Hilo-Puna wars but its size and class are unknown. No remains of any kind could

be found and no Hawaiians with whom I talked had ever heard of it. [Hudson 1932:240]

Thrum also reported on Ohele Heiau in Waiākea near the "old Pitman store." It was reportedly "a small *luakini* class *heiau* measuring 60 feet square. It was destroyed before Pitman's time," (Stokes and Dye 1991:155). The location of this *heiau* is indicated in Figure 19.

Akoi's (1989:22) oral history of Keaukaha mentions a fishing *heiau* called Puhi, and another *heiau* that "is in the pond of the Kepoo family." Another *heiau* not previously identified was reported northwest of the project area on the eastern point of Reed's Bay on the eastern side of Reed's Bay (Kam 1983; see Section 3.2.2).

3.2.2 Recent Archaeological Studies

Numerous archaeological studies have been conducted within Waiākea Ahupua'a, with many concentrated near the coast. Eleven previous archaeological investigations are in the vicinity of the current project area (Figure 20 and Table 2). These studies provide a context for the current project area and aid in developing predictions about anticipated finds.

In 1983, the SHPD investigated a claim of a *heiau* depicted on a modern TMK: [3] 2-1-007, east of the project area across Reed's Bay (Kam 1983; see Figure 20). No records were found at that time pertaining to the *heiau*; Kam (1983:1) recommended it be recorded and photographed. This site was assigned as SIHP # 50-10-35-18695, but no formal documentation ever occurred. In 2000, Haun and Associates came upon the *heiau* just outside the bounds of their survey of two parcels near Hilo Harbor (see discussion for the 2000 investigation below). Haun and Henry (2000:22) described the *heiau* but did not formally document it.

In 1988 Paul H. Rosendahl, Ph.D., Inc. (PHRI) reported on the results of an archaeological reconnaissance of five proposed locations for the Hilo Judiciary Complex, including two locations southwest of the project area around Waiākea Pond (Rosendahl 1988; see Figure 20). The lack of archaeological findings was attributed largely to extensive land modifications associated with urban development.

Also in 1988, PHRI conducted an archaeological reconnaissance survey for three potential irradiation plant sites in Waiākea, including one site south of the project area near the Hilo airport (Rosendahl and Talea 1988; see Figure 20). No archaeological remains of any kind were identified.

In 1988, a single set of human remains was identified near the mouth of the Wailoa Stream across from the Suisan Fish Market, southwest of the current project area. The remains were assigned as SIHP # 50-10-35-11115, and assessed as characteristic of a middle aged Polynesian male (Pietrusewsky 1989; see Figure 20). The site was later excavated for additional study (Smith and Tourtellotte 1988; see Figure 20).

In 2000, Haun and Associates undertook a survey of two parcels near the Hilo Harbor, east of the current project area (Haun and Henry 2000; see Figure 20). A historic-era concrete slab complex, SIHP # -22486, was documented. According to Haun and Henry (2000:22), the site "consist[s] of two concrete slabs (Features A and B), a set of parallel concrete curbs (Feature C), and two displaced sections of concrete slab located at the water's edge (Feature D)." The site was interpreted as remnants of an early 1900s U.S. Engineer facility. Haun and Henry also came upon

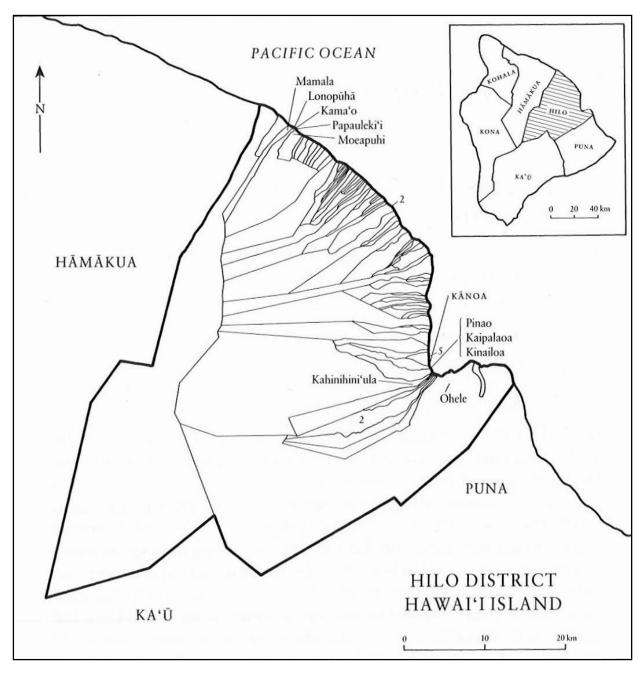


Figure 19. Locations of *heiau* documented by John F.G. Stokes in the Hilo District (Stokes and Dye 1991:155)

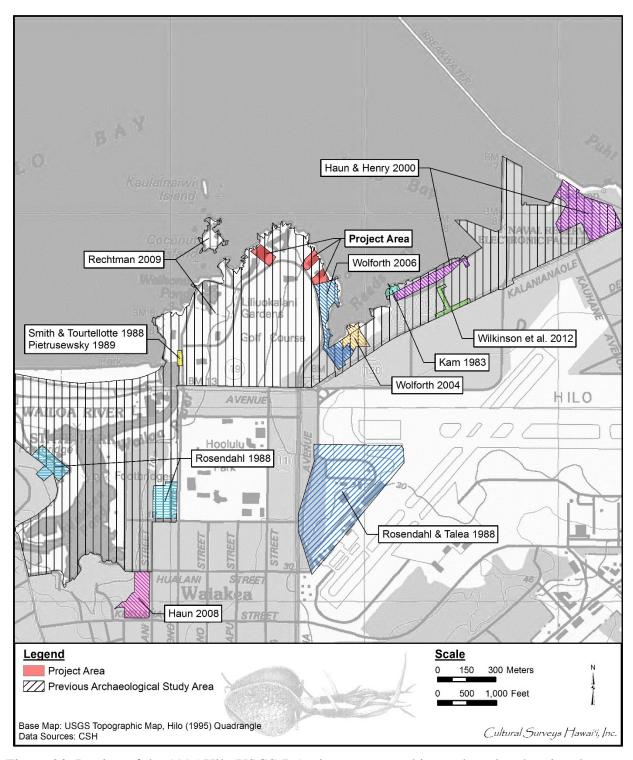


Figure 20. Portion of the 1995 Hilo USGS 7.5-minute topographic quadrangles showing the location of the project area in relation to previous archaeological studies in the vicinity

Table 2. Previous archaeological studies in the vicinity of the project area

Reference	Type of Study	Location	Results
Kam 1983	Records check	State lands at Reed's Bay, Waiākea, TMK: [3] 2-1-007:011	Identified a <i>heiau</i> west of the current project area; <i>heiau</i> assigned SIHP # 50-10-35-18695
Rosendahl 1988	Archaeological reconnaissance survey	Hilo Judiciary Complex five locations each 5+ acres, TMKs: [3] 2-2; 2-2-002:001, 054, 055, 056, 062; 2-2- 010:016; 2-2-033:011, 012, 013, 014, 019, 020; 2-3-015:001, and 2-3-044:009	No historic properties identified
Rosendahl and Talea 1988	Archaeological reconnaissance survey	Waiākea, TMKs: [3] 2-1-012:106; 2-1-012: Var.; 2-1-025: por. 086	No historic properties identified
Smith and Tourtellote 1988	Burial removal	Wailoa Bridge, Lihiwai St, Waiākea, TMK: [3] 2-1-001:012	Excavation and study of burial site SIHP # 50-10-35-11115
Pietrusewsky 1989	Burial documentation	Wailoa Bridge, Lihiwai St, Waiākea, TMK: [3] 2-1-001:012	Documentation of a single set of human remains in area near mouth of Wailoa Stream, in vicinity of the current Suisan Fish Market (SIHP # 50-10-35-11115)
Haun and Henry 2000	Archaeological inventory survey	Hilo Harbor, Waiākea, TMKs: [3] 2-1- 009:002, 012, 041, 042 and 2-1-007:020– 037	Documented one historic property: SIHP # 50-10-35-22486; historicera site consists of two concrete features (Features A and B), a set of parallel concrete curbs (Feature C), and two displaced sections of concrete slab located at the water's edge (Feature D)
Wolforth 2004	Archaeological inventory survey	Kanakea Fishpond at Reed's Bay, TMK: [3] 2-1-006:013 and 015	Documented previously identified Kanakea Pond (SIHP # 50-10-35-18896), another small-unnamed pond (SIHP # 50-10-35-24230), and a remnant feature (SIHP # 50-10-35-7413) of the former railroad

Reference	Type of Study	Location	Results
Wolforth 2006	Archaeological inventory survey	Reed's Bay Beach Park, Waiākea, TMKs: [3] 2-1- 005:001 and 028; and 2-1-006:010	Documented two previously identified sites (SIHP #s 50-10-35-18896 and 50-10-16-7413) and three new historic properties: Reed's Bay Beach (SIHP # 50-10-35-24917), the Scott-Legionnaire-Orchid Hotel (SIHP # 50-10-35-24918) and three pecked basins (SIHP # 50-10-35-24919)
Haun 2008	Archaeological inventory survey (recorded as archaeological assessment)	Waiākea, TMKs: [3] 2-2-020:012 and 019	No historic properties identified
Rechtman 2009		Hilo Bayfront Trails project, Pi'ihonua, Punahoa, Pōnāhawai, Kūkūau, and Waiākea Ahupua'a	No historic properties identified
Wilkinson et al. 2012	Archaeological literature review and field inspection	Pier 4, Hilo Harbor, Waiākea, TMK: [3] 2- 1-007	No historic properties identified

the *heiau* noted by Kam (1983) just outside the bounds of their project area. They described the *heiau* as follows:

... a platform on State land near the northwest corner of the Western Project Area [present Ocean View Lease Lots]. The platform probably corresponds with the heiau reported by Kam (1983). The feature, which was viewed from a distance of approximately 10m, is situated in a grove of ironwood trees in the backyard of a house on Parcel 20 of TMK: 3-2-1-07. The feature is roughly 3-4 m square at the top and tapers to approximately 5-6 m at the base. It is approximately 1.5 m high with sloping sides. There is a c. 0.5 m deep depression in the center of the paved upper surface. [Haun and Henry 2000:22]

In 2004 and 2006, Scientific Consultant Services (SCS) undertook archaeological studies for proposed parks around Reed's Bay south of the project area (Wolforth 2004 and 2006; see Figure 20). The 2004 study for Kūhiō-Kalaniana'ole Park documented three sites, Kanakea Pond (SIHP # -18896), a second unnamed pond (SIHP # -24230), and a remnant (SIHP # -7413) of the former railroad that once crossed the small bay. The 2006 study for Reed's Bay Beach Park reidentified the Kanakea Pond and the railroad remnant, as well as three newly identified sites, SIHP # -24917 (Reed's Bay Beach), SIHP # -24918 (location of the former Scott-Legionnaire Hotel), and SIHP # -24919 (pecked basins). Both of the ponds and the railroad remnant were recommended for preservation.

In 2008, Haun and Associates undertook an archaeological inventory survey (recorded as an archaeological assessment) of two parcels totaling 6.23 acres located roughly 2 km southwest of the project area (Haun 2008; see Figure 20). No archaeological sites or features were identified during the survey, likely due to prior land disturbances.

In 2009, Rechtman Consulting conducted an archaeological inventory survey (recorded as an archaeological assessment) for the Proposed Hilo Bayfront Trails project, which comprised the coastal portions of Pi'ihonua, Punahoa, Pōnāhawai, Kūkūau, and Waiākea Ahupua'a (Rechtman 2009b; see Figure 20). While no historic properties were identified, the study noted the potential for subsurface burials, citing the earlier investigations by Pietrusewsky (1989) and Smith and Tourtellote (1988). Development of an archaeological monitoring plan was recommended for the project.

In 2012, CSH completed an LRFI for an improvement project at Pier 4 at Hilo Harbor, east of the current project area (Wilkinson et al. 2012; see Figure 20). No archaeological features were observed, despite the fact that a portion of the project area overlapped the historic Hawaii Consolidated Railroad right-of-way. The historic-era site (SIHP # -22486) documented by Haun and Henry (2000) was confirmed outside the project area.

3.3 Background Summary and Predictive Model

Waiākea, with its rich natural forest and the ocean resources, has long been a center of habitation for Hawaiians and is often mentioned in Hawaiian folklore and legends. Hawaiian gods and goddesses frequented Waiākea including Pele, Hi'iaka, and Pana'ewa. Many legends have associated Waiākea with Hawaiian *ali'i* since the sixteenth century and describe it as a gathering place for ceremonies. The rich mountain resources of taro and sweet potato and the abundant

marine resources, particularly shrimp and fish, made Waiākea very valuable to the Hawaiian people. At least three major *heiau* stood within Waiākea.

The project area is situated within the lower elevations of what McEldowney (1979) defined as the coastal settlement zone. The zone was described by early Hilo Bay visitors as "a nearly continuous complex of native huts and garden plots interspersed with shady groves of trees," interspersed with canoe sheds, *heiau*, and other structures (McEldowney 1979:16).

During the mid-nineteenth century sugarcane agriculture and ranching became prominent in Waiākea Ahupua'a. Both of these enterprises flourished until their gradual decline in the early twentieth century, which brought the onset of urban development to the district of South Hilo. The Waiākea Peninsula began to be leased for private residence, largely to foreigners. Beginning in the 1900s, the lands adjacent to the project area were impacted by developments including the Hilo Harbor, Hilo airport, a railroad, the breakwater, and other commercial and residential developments. In 1917, construction was completed for the Lili'uokalani Gardens, located on the Waiākea Peninsula adjacent to the project area.

The 1946 tsunami damaged much of the new infrastructure and facilities in Waiākea and greater Hilo; while most of the damage was quickly repaired, the railroad was largely abandoned. Portions of its remnant infrastructure are present in the vicinity of the project area—i.e., the trestle crossing Kanakea Pond at Reed's Bay (SIHP # -7413). During the World War II period in Hilo, expansion and designation of Hilo airport as General Lyman Field was a major project undertaken as part of the substantial military presence on the island. Private development continued on Waiākea Peninsula.

After statehood (1959) and with the closing of the Waiakea Mill, tourism became the next economic mainstay, and large tracts of former Waiakea Homestead and cane lots were converted to housing or sub-division tracts. Resort development began on the Waiākea Peninsula. The current project area lands were developed into resorts during the 1960s and 1970s.

Given the extensive development of the general area and its inundation by tsunamis, it is unlikely any pre-Contact sites are present within the project area lands. Very little—if any—of the natural landscape remains. It is unlikely burials might be encountered, as there are no sand deposits within the project area and the shallow, stony soil found here lies directly atop *pāhoehoe* bedrock. If burials are present they are likely to be found within lava tubes. While resort development has also likely obliterated any post-Contact surface features, there remains some potential for subsurface features associated with historic era land uses, particularly residential use. Numerous residential structures were known to have been present across the three project area parcels by the 1920s.

Section 4 Results of Fieldwork

CSH completed the fieldwork component of this literature review and field inspection under archaeological fieldwork permit number 17-08. Fieldwork was conducted on 20 January 2017 by CSH archaeologists Sarah Wilkinson, B.A., and Olivier M. Bautista, B.A., under the general supervision of Principal Investigator Hallett H. Hammatt, Ph.D. This work required approximately 2 person-days to complete.

4.1 Pagoda Hilo Bay Hotel

The Pagoda Hilo Bay Hotel, formerly Uncle Billy's Hilo Bay Hotel, is in active operation. The hotel is bounded by Banyan Drive to the southeast, the Hilo Hawaiian Hotel to the southwest, Hilo Bay to the northwest, and the Grand Naniloa Hotel to the northeast (see Figure 3). The hotel parking lot fronts the property and is accessed from Banyan Drive (Figure 21 and Figure 22). Landscaping at the entrance along Banyan Drive includes modern rock walls and ornamental plants. In addition, three banyan trees planted in the 1930s and 1960s are present: one is located adjacent to the hotel entrance at the eastern corner of the property, another is located near the western parking lot entrance, and the third is situated at the southern corner of the property next to the restaurant; signage at each tree indicates the date planted and the associated individual (Figure 23 through Figure 25). The grounds along the western side of the hotel are landscaped in tropical foliage (Figure 26). The grounds along the eastern side of the hotel consist of a Japanese-style garden with concrete and wood-rail walkways meandering through a series of unmaintained koi ponds (Figure 27). The rear of the hotel is bounded by a seawall situated at the shoreline of Hilo Bay (Figure 28). Hotel guests are provided access to the shoreline by a concrete walking path. A small swimming pool is also located at the rear of the hotel (Figure 29). No historic properties were identified during the field inspection of the Pagoda Hilo Bay Hotel.



Figure 21. Photo of the parking lot fronting the Pagoda Hilo Bay Hotel; view to west



Figure 22. Photo of the entrance to the Pagoda Hilo Bay Hotel; view to northwest



Figure 23. Photo of the banyan tree located at the eastern corner of the Pagoda Hilo Bay Hotel, and its associated signage; view to northwest



Figure 24. Photo of the banyan tree near the western entrance to the Pagoda Hilo Bay Hotel; view to north



Figure 25. Photo of the banyan tree at the southern corner of the Pagoda Hilo Bay Hotel property; view to north



Figure 26. Photo of the tropical landscaping along the western side of the Pagoda Hilo Bay Hotel; view to northwest



Figure 27. Photo of the koi ponds and Japanese-style landscaping at the Pagoda Hilo Bay Hotel; view to southeast



Figure 28. Photo of the seawall along the *makai* boundary of the Pagoda Hilo Bay Hotel; view to southwest



Figure 29. Photo of the swimming pool at the rear of the Pagoda Hilo Bay Hotel; view to southeast

4.2 Country Club Condominium Hotel

The Country Club Condominium Hotel is in active operation (Figure 30). The hotel is bounded by the Grand Naniloa Hotel to the northwest, Banyan Drive to the southwest, the Bay View Banyan apartments to the southeast, and Kūhiō Bay to the northeast (see Figure 3). Parking for the residents is located under and on both sides of the condominium; only the very narrow margins of the property are not under concrete or asphalt (Figure 31 and Figure 32). Ornamental landscaping defines the property boundaries. Shooters Bar and Grill is located on the ground level at the front of the condominiums. Residents can access the shoreline via a gate that leads over the seawall down a stairway and onto a concrete walkway (Figure 33). A swimming pool is located at the northwestern corner of the property along the bay, and is surrounded by ornamental landscaping (Figure 34). No historic properties were identified during the field inspection of the Country Club Condominium Hotel.



Figure 30. Photo of the front of the Country Club Condominium Hotel; view to northeast



Figure 31. Photo of the parking area along the northwestern side of the County Club Condominium Hotel; view to southwest



Figure 32. Photo of the parking area along the southeastern side of the Country Club Condominium Hotel; view to southwest



Figure 33. Photo of the seawall, concrete stairs and walkway along the *makai* side of the Country Club Condominium Hotel; view to west



Figure 34. Photo of the swimming pool at the rear of the Country Club Condominium Hotel; view to north

4.3 Reeds Bay Resort Hotel

The Reeds Bay Resort Hotel is in active operation. The hotel is bounded to the northwest by the Bay View Banyan apartments, Kūhiō Bay to the northeast, Reeds Bay Beach Park to the southeast, and Banyan Drive to the southwest (see Figure 3). The hotel parking lot fronts the property and is accessed from Banyan Drive (Figure 35). The majority of hotel grounds are covered by asphalt and concrete, with the exception of a few landscaped areas along the hotel boundaries and surrounding the swimming pool area (Figure 36 through Figure 39). A seawall bounds the *makai* side of the property; a concrete walkway provides access to the shoreline (Figure 40). A banyan tree planted in 1936 is present near the hotel entrance on Banyan Drive (Figure 41). No historic properties were identified during the field inspection of the Reeds Bay Resort Hotel.



Figure 35. Photo of the entrance to the Reeds Bay Resort Hotel and hotel parking lot; view to northeast



Figure 36. Photo of ornamental landscaping along the southern Reeds Bay Resort Hotel boundary; view to west



Figure 37. Photo of ornamental landscaping along the northwestern Reeds Bay Resort Hotel boundary; view to southwest



Figure 38. Photo of a landscaped area near the pool at the Reeds Bay Resort Hotel; view to east



Figure 39. Photo of the swimming pool at the Reeds Bay Resort Hotel; view to west



Figure 40. Photo of the sea wall along the *makai* side of the Reeds Bay Resort Hotel; view to southeast



Figure 41. Photo of the banyan tree near the entrance to the Reeds Bay Resort Hotel; view to southeast

Section 5 Summary and Recommendations

At the request of R.M. Towill, CSH has prepared this LRFI for the Pagoda Hilo Bay Hotel (formerly Uncle Billy's Hotel), Country Club Condominium Hotel, Reeds Bay Resort and Related Facilities project, Waiākea Ahupua'a, South Hilo District, Hawai'i Island, TMKs: [3] 2-1-005:020, 022, 033, 034, and 035. These three hotels are located on the *makai* side of Banyan Drive, on the Waiākea Peninsula adjacent to Hilo Bay on Hawai'i Island.

Background research indicates Waiākea was a favorite residence of Hawaiian *ali'i* in pre-Contact times, valued for its abundant resources. Early accounts note the presence of *heiau* and other sacred sites within Waiākea, including a *heiau* at Maka'okū, across from Moku'ula (Coconut Island) southwest of the project area. Moku'ula was named for its healing springs. After Contact, Waiākea became a center of commerce and associated residence. The sugar industry affected much of Waiākea throughout the twentieth century, and prompted the construction of the Hilo Railroad, a portion of which was present on the Waiākea Peninsula. The northern and eastern edges of the peninsula, where the project area is located, were leased for private residences through the mid-1900s. Banyan Drive was constructed in the early 1930s. The devastating tsunamis of 1946 and 1960 pushed development within Waiākea somewhat inland. During the 1960s, the economic focus shifted to tourism; the Waiākea Peninsula was redeveloped as a resort and recreation area. The hotels on the project area parcels were constructed in the 1960s-1970s.

The fieldwork component of the LRFI was accomplished on 20 January 2017. No archaeological sites were identified within the project area; however, this investigation was limited to a brief surface inspection. Four historic-era banyan trees planted in the 1930s and 1960s are located adjacent to the Pagoda Hilo Bay Hotel and Reeds Bay Resort entrances along Banyan Drive. The parcels comprising the project area exhibit substantial disturbance associated with past resort construction and landscaping, and very little if any of the original ground surface is thought to remain.

Archaeological materials such as cultural layers potentially containing artifacts, human burials, and/or other features could occur subsurface in undisturbed portions of the project area. If and when specific plans are made for development involving ground disturbance, consultation with SHPD should take place to determine the appropriate scope for further archaeological investigation and mitigation.

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APPENDIX E

Biological and Water Quality Surveys AECOS, Inc.

Biological and water quality surveys for the Banyan Drive Buildings Demolition Project Hilo, Hawai'i







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March 17, 2017

Biological and water quality surveys for the Banyan Drive Buildings Demolition Project Hilo, Hawai'i¹

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 $^{^{1}}$ Report prepared for R.M. Towill for use in project permitting. This document will become part of the public record for the project.

Introduction

This report details results of environmental surveys to assess resources around and offshore of three existing buildings located on Banyan Drive in Hilo Bay, on the northeast coast of the Island of Hawai'i (Figure 1). The proposed action (the "Project") involves the demolition of three Hilo Bay hotel properties: 1) Hilo Pagoda (formerly Uncle Billy's): TMK (3) 2-1-005: 033, 034, and 035; 2) Reeds Bay Resort Hotel, Ltd.: TMK (3) 2-1-005: 022; and 3) Country Club Condominium Hotel: TMK (3) 2-1-005: 020. Our surveys were conducted in February 2017, and included terrestrial plants, water quality and marine resources. This report details the findings of those surveys.

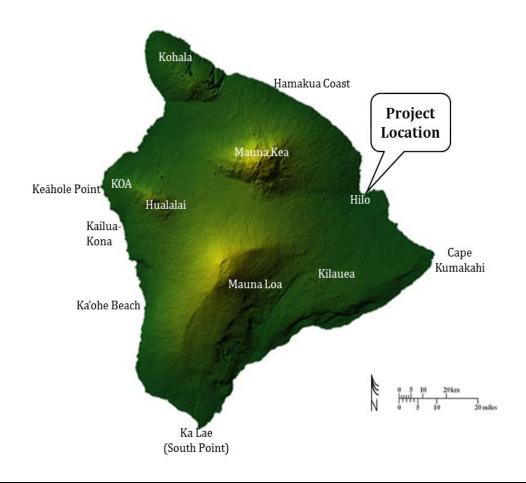


Figure 1. Project location on the Island of Hawai'i.

Site Description

Hilo Bay within the breakwater (Hilo Harbor) has nearly $6.4~\rm km^2$ ($2.5~\rm mi^2$) surface area with approximately $6~\rm mi$ ($9~\rm km$) of the perimeter bordered by land. The outer margin of the Harbor is delineated by a $1.8~\rm mi$ ($3~\rm km$) long breakwater, with a $0.9~\rm mi$ ($1.5~\rm km$) wide mouth opening to the Pacific Ocean. The depth ranges down to $-15~\rm m$ ($-50~\rm ft$).

Hilo Bay watershed is the largest in the state of Hawai'i, and its surface water inputs are dominated by two rivers: Wailuku and Wailoa (Juvik and Juvik, 1998). Wailuku River is the largest perennial river in the state with headwaters starting near 3,500 m (8,843 ft) in elevation on the slopes of Mauna Kea (Juvik and Juvik, 1998). It is the main source of surface water entering Hilo Bay with an average daily flow around 1 million cubic meters (264,200,000 gal; M & E Pacific 1980). In contrast, Wailoa River is a groundwater-fed, flood-control channel that discharges into Waiākea Pond prior to entering Hilo Bay and the largest source of groundwater entering Hilo Bay at Reed's Bay (M & E Pacific 1980). It is estimated that 1.8 million cubic meters (475,560,000 gal) of groundwater flows into the Bay from this area daily (M & E Pacific 1980).

The fresh water input in Hilo Bay creates a fresh water layer lying on a deeper salt-water layer. This layered system is a salt-wedge estuary and is present year round, although most marked in the wet season when the fresh water layer is thicker due to greater freshwater inputs. The saltwater wedge moves in and out with tide, and the upper layer tends to be pushed towards shore by the predominant Tradewinds. Because of low wave energy inside the breakwater, mixing of the layers is weak. Also, the low wave energy allows sediments carried by Wailuku and Wailoa rivers to settle into the lower salt-water layer, where they are carried toward shore with incoming tides (Silvius et al., 2005).

No long-term studies of the fauna and aquatic flora of Hilo Bay exist. Algae surveys in Hilo Bay have been conducted by the Hawai'i Coral Reef Initiative (HCRI). Results of these surveys indicate the presence of mat-forming invasive macroalgal species *Gracilaria salicornia*. NOAA-NOS benthic habitat maps (Batista et al., 2007) can be used to identify physical zones (i.e., reef flat, channel, reef crest, fore reef and bank/shelf) and biological cover (i.e., percent coral, percent macroalgae, percent turf, percent coralline algae, and uncolonized). A NOAA-NOS benthic habitat map shows the area fronting Hilo Pagoda to be hard bottom with 50 to 90% macroalgae cover, and the area fronting Reed's Bay Resort Hotel and Country Club Condo Hotel to be hard bottom with 10 to 50% macroalgae cover (Figure 2).

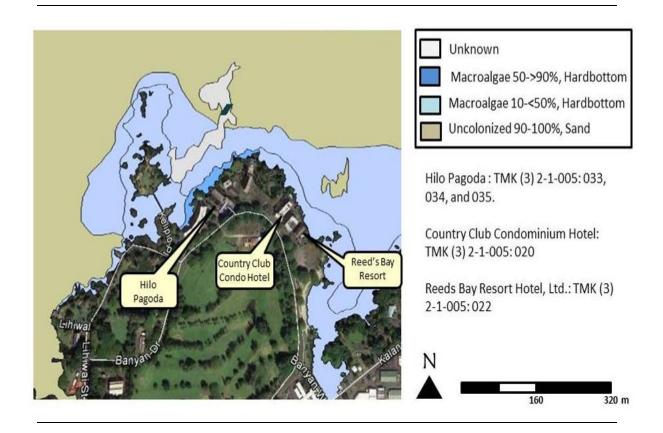


Figure 2. Benthic habitat characterization off Project vicinity (from Battista et al, 2007).

"Hilo Harbor" is a regulated fishing area under the State of Hawai'i Department of Land and Natural Resources, Division of Aquatic Resources. "Hilo Harbor" refers to that portion of the bay bounded seaward by the breakwater, and a line from the tip of the breakwater southwestward to 'Āle'ale'a Point. "Wailoa River" is that part of Wailoa River bounded by a line drawn across the mouth of the river and the footbridge at the mouth of Waiākea Pond, and includes Waiolama Canal upstream to the highest wash of the tidal water. "Wailuku River" is that part of Wailuku River between the Māmalahoa Highway bridge and Wainaku Avenue bridge (Figure 3; HAR 13-47, HRS 188-34). Permitted uses within this regulated area include thrownets, 'opae nets not exceeding three feet in any dimension, and *nehu* nets not longer than fifty feet to take for family consumption or bait purposes and taking of crabs with baited lines, provided that a dip net may be used to land crabs lured to the bait, or with not more than five crab nets not exceeding two feet in longest straight line dimension and stretched mesh of not less than two inches, provided such nets are attended to at all times. Commercial marine licensees with a bait license may take baitfishes. Licensed pond owners or operators may take young mullet (*pua*) or other small fish for stocking a fishpond, except in Wailoa River. The following activities are prohibited:

- To catch or possess more than 20 fish of all species of mullet, moi and ulua (including pāpio and 'ōmilu), provided such bag limit shall not include more than 15 moi. Mullet and moi may not be taken during their closed seasons.
- To fish with more than two poles with one line each, or two handlines, or with more than two hooks or lures per line.
- To use traps.
- To take or possess more than three Samoan crabs per day, or any crab with external eggs or with missing or mutilated abdomen or tail, or with a puncture wound; also, to spear crabs.
- To snag any fish.
- To use or possess a thrownet or spear in Wailoa River.

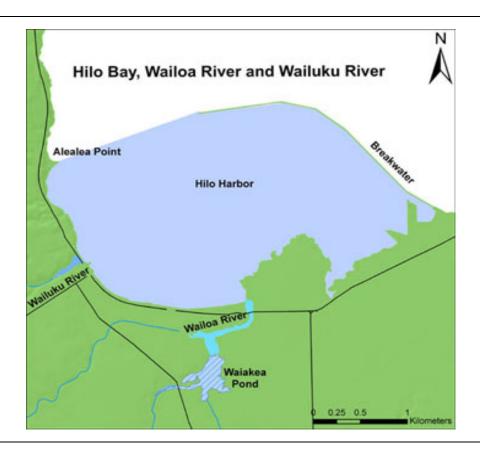


Figure 3. Map of "Hilo Harbor," Wailoa River and Wailuku River Fishery Management Area (HAR 13-47, HRS 188-34).

Methods

On February 15, 2017, *AECOS* biologists conducted surveys in the Project area and vicinity. Methods for those surveys are described here.

Water Quality

Water quality samples were collected February 15, 2017 at six stations in the nearshore waters off Banyan Drive (Figure 3). Temperature, salinity, pH, and dissolved oxygen (DO) were measured *in situ*. The remaining samples were collected, chilled, and returned to the *AECOS* laboratory for analysis (*AECOS* Log No. 33695). The following parameters were measured in the laboratory: salinity, turbidity, total suspended solids (TSS), ammonia nitrogen, nitrate+nitrite nitrogen, total nitrogen (total N), total phosphorus (total P), and chlorophyll a. Table 1 lists the instruments and analytical methods used for field and laboratory analyses.



Figure 4. Water quality and sediment stations sampled February 15, 2017.

Table 1. Analytical methods and instruments used for water quality analyses for the Banyan Drive building demolition Project.

Analysis	Method	Reference	Instrument
Temperature	SM 2550B	SM (1998)	YSI Model 550 DO meter thermistor
Salinity	SM 120.1	SM (1998)	YSI 85 Meter
pН	SM 4500H+	SM (1998)	pH pHep HANNA meter
Dissolved Oxygen	SM 4500-0 G	SM (1998)	YSI Model 550 DO meter
Turbidity	EPA 180.1, Rev. 2.0	USEPA (1993)	Hach 2100Q Turbidimeter
Total Suspended Solids	SM 2540D	SM (1998)	Gravimetric (analytical balance)
Ammonia	Kérouel and Aminot (1997)	Kérouel and Aminot (1997)	Seal AA3 Autoanalyzer, colorimetric
Nitrate + Nitrite	Grasshoff	Grasshoff et al. (1999)	Seal AA3 Autoanalyzer, colorimetric
Total Nitrogen	Grasshoff 9.6.3	Grasshoff et al. (1999)	Seal AA3 Autoanalyzer, UV
Total Phosphorus	Grasshoff 9.1.5	Grasshoff et al. (1999)	Seal AA3 Autoanalyzer, UV
Chlorophyll α	SM10200H(M)	SM (1998)	Fluorometric

Terrestrial Biology

Botanical Survey — The botanist conducted a walking survey on February 15, 2017 to identify terrestrial plants within the Project areas. A Trimble GNSS unit programmed with the shape map of each site allowed the botanist to confine the survey area to the respective TMKs. Each shoreline was included as part of the land parcel's boundary. The botanist identified and noted relative abundance of all ferns, fern allies, gymnosperms, and flowering plants growing in the survey areas. Field notes were translated into a flora listing. For the most part, plant names given in the listing follow *Manual of the Flowering Plants of Hawai'i* (Wagner et al., 1990, 1999) for native and naturalized flowering plants, *Hawai'i's Ferns and Fern Allies* (Palmer, 2003) for ferns, and *A Tropical Garden Flora* (Staples and Herbst, 2005) for ornamental plants. Some names

have been updated to reflect more recent taxonomic or nomenclatural changes as presented in Imada (2012).

<u>Fauna Survey</u> — The biologist made a list of mammal and bird species observed in the survey areas as he conducted botanical surveys. Visual observations of tracks, scat, and other signs of mammalian use of the Project area were noted.

Marine Biology

AECOS biologists conducted a biological reconnaissance survey of marine resources on February 15, 2017 looking at marine assemblages in the nearshore waters off the three buildings in the Project area. Biologists snorkeled in waters offshore along the entire length of Reeds Bay Resort Hotel property (approximately 64 m [210 ft]) out to approximately 80 m (262 ft) from shore; the entire length of Country Club Condo Hotel property (approximately 40 m [131 ft]) out to approximately 50 m (16 ft) from the shore; and the entire length of the Hilo Pagoda property (approximately 82 m [269 ft]) out to approximately 50 m (16 ft) from the shoreline. Our survey began at 8:30 AM, approximately 180 minutes after a predicted +2.03-ft high tide (relative to mean lower low water [MLLW], Hilo Station, ID: 1617760; NOAA, 2014). Water visibility during the survey was about 3 m (10 ft). Marine algae, fishes, and macroinvertebrates were identified in the field and verified with various texts (Hoover, 1999; Huisman, et al. 2007). A listing, including relative abundances of marine organisms in each of the three survey areas (off Reeds Bay, Country Club Condo and Hilo Pagoda) is presented as Appendix A.

Protected Species

Biologists recorded observations of any listed (threatened or endangered) or proposed for listing terrestrial or marine species (DLNR, 1998, 2009, 2014, 2015; USFWS, 2015) encountered during the course of the survey in 2017.

Results

Water Quality

The results of the water quality sampling on February 15, 2017 are shown in Table 2. There were no apparent spatial or temporal distribution patterns in physical water quality water parameters with the possible exception of DO saturation which tended to increase from Sta. 1 to Sta. 6, except at Sta. 4. This

increase may have actually been related to an increase in photosynthesis with time (i.e., more sunlight as the morning progressed). Particulate levels (turbidity and TSS) were highest at Sta. 5, as was chlorophyll α concentration. Considerable variation was present between stations in nitrogen component concentrations, especially nitrate+nitrite nitrogen.

Table. 2. Water quality results from February 15, 2017 in Hilo Bay.

Station	Time	Temp (°C)	Salinity (PSU)	DO sat. (%)	pН	Turbidity (NTU)
Sta. 1	0948	25.0	31.32	94	8.03	2.10
Sta. 2	0959	25.4	31.67	99	8.07	1.26
Sta. 3	1019	25.4	29.67	99	8.10	1.14
Sta. 4	1025	25.0	27.71	96	8.07	1.20
Sta. 5	1042	25.0	30.22	108	8.14	3.67
Sta. 6	1049	25.6	29.54	119	8.10	1.32
Station	TSS (mg/L)	ΝΗ ₃ (μgN/L)	NO₃+NO₂ (μgN/L)	Total N (μgN/L)	Total P μgP/L)	Chl. α (μg/L)
Sta. 1	9.2	1	54	173	33	0.50
Sta. 2	9.3	9	43	157	30	0.94
Sta. 3	7.0	12	78	169	31	0.33
Sta. 4	8.2	6	142	222	40	0.30
Sta. 5	15.0	15	51	178	43	1.52
Sta. 6	8.6	11	109	250	41	0.94

Terrestrial Biology

<u>Plants</u> — No areas of natural vegetation occur on any of the three properties. The grounds of each of the three are occupied by the existing building footprint, driveway entries and exits, parking lots, sidewalks and walkways, and landscaping. Small pockets of minimal, low maintenance landscaping are located primarily along property lines. Red Ginger (*Alpinia purpurata*) is commonly used along boundaries, as are various tree species, many of mature size. Grass lawn areas are minimal, and a few are dried out to the point of being dead. For this survey, potted plants were not inventoried.

A listing and qualitative abundance for all plants encountered in the survey is presented in Table 3. Because the vegetation present at each site is planted as landscaping, our normal approach to presenting abundance information does not apply well. Each site uses much the same material, though in differing amounts. The rating of "PL"= present in landscape - acknowledges a species as present in some given amount. A subscript to PL is used to note the overall prevalence of a given species as it used in the various landscapes. Many species also occur naturally at each site that are not planted as landscape specimens. Their presence is noted with the conventional Nat, End, Ind, Pol to indicate their status in the Hawaiian Islands. An asterisk (*) in the left column of the plant list indicates that a species is noteworthy in some respect, as with the banyans along Banyan Drive or specimen *Ficus lyrata* or Palms.

Table 3. Flora listing for the Banyan Drive Demolition Project survey area.

Species listed by family	Common name	Status	Abundance	Site
FERNS A	ND FERN ALLIES			
PSILOTACEAE				
Psilotum nudum (L.) P. Beauv.	moa	Ind	R	1,2,3
BLECHNACEAE				
Blechnum appendiculatum Willd.		Nat	R	1
DICKSONIACEAE				
Cibotium glaucum (Sm.) Hook.&Arn.	hapu'u	End	PL_r	2,3
NEPHROLEPIDACEAE				
Nephrolepis multiflora (Roxb.)	swordfern	Nat	U	1,2,3
Jarrett ex Morton	-	- 10-0		
Nephrolepis falcata hyb.?	fishtail fern	Orn	PL_{r}	1
POLYPODIACEAE		** .	-	
Phlebodium aureum (L.) J. Sm.	hare's foot fern	Nat	R	2,3
Phymatosorus grossus (Langsd. &	laua'e	Nat	PL_o	1,2
Fisch.) Brownlie	allah awa ay ata ah awa faysa	0.444	11	1 2 2
Platycerium sp.	elkhorn or staghorn fern		U	1,2,3
Christella parasitica (L.) Levi	wood-fern	Nat	R	3
CVA	INOSPERMS			
Species listed by family	Common name	Status	Abundance	Site
species fisced by fairing	Common name	Status	Abundance	Site
CYCADACEAE				
Cycas circinalis L.	queen sago	Orn	PL_r	1,2
Cycas revoluta Thunberg	sago palm		PL_{o}	1
,	U 1		-	

Table 3 (continued).

FLOWERING PLANTS DICOTYLEDONES

DIC	OTYLEDONES			
Species listed by family	Common name	Status	Abundance	Site
ACANTHACEAE				
Graptophyllum pictum (L.) Griffith	caricature plant	Orn	PL_o	2
Ruellia squarrosa (Fenzl.)		Orn	PL_r	1
Cufodontis		OTII	ı Lr	1
ANNONACEAE		_		
Annona muricata L.	soursop	Orn	PL_r	
APOCYNACEAE			D.	
Plumeria rubra L	plumeria	Orn	PL_c	1
Vinca minor L.	periwinkle	Nat	PL_r	3
ARALIACEAE				
Schefflera actinophylla (Endl.)	octopus tree	Nat	0	2,3
Harms	-	0	DI	1
Polyscias fruticosa (L.) Harms ASTERACEAE (COMPOSITAE)	parsley panax	Orn	PL_r	1
Ageratum conyzoides L.	maile hohono	Nat	0	1,2,3
Conyza bonariensis (L.) Cronq.	hairy horseweed	Nat	0	1
Emilia sonchifolia (L.) DC.	Flora's paintbrush	Nat	0	1,3
Synedrella nodiflora (L.) Gaertn.		Nat	0	2
Youngia japonica (L.) DC.	Oriental hawksbeard	Nat	С	1,2
BALSAMINACEAE				
Impatiens hawker W. Bull	New Guinea impatiens	Orn	PL_U	1
BEGONIACEAE Begonia hirtella Link	hearded beganis	Nat	С	1
BIGNONIACEAE	bearded begonia	Nat	C	1
Spathodea campanulata P. Beauv.	African tulip tree	Nat	U	1
BUDDLEIACEAE	Affican tunp tree	Ivai	U	1
Buddleia asiatica Lour.	dog tail	Nat	0	1,3
CACTACEAE	uog tun	riac	Ü	1,0
Hylocereus undatus Britton & Rose	night-blooming cereus	Nat	PL_{r}	2
Opuntia ficus-indica (L.) Mill.	pānini	Nat	$\operatorname{PL}_{\mathrm{r}}$	1
CARICACEAE	F		1	
Carica papaya L.	papaya	Nat	PL_{r}	1,3
CARYOPHYLLACEAE				•
Drymaria cordata (L.) Willd. ex		NI . i	C	1.2
Roem. & Schult.	pipili	Nat	С	1,3
CASUARINACEAE				
Casuarina equisetifolia L.	ironwood	Nat	0	1,2,3
CHENOPODIACEAE				
CLUSIACEAE				
<i>Clusia rosea</i> N. Jacq.	autograph tree	Nat	PL_{u}	2
COMBRETACEAE				
Terminalia catappa L.	tropical almond	Nat	PL_c	1,3
CONVOLVULACEAE				
Ipomoea triloba L.	little bell	Nat	R	1

Table 3 (continued).

Species listed by family	Common name	Status	Abundance	Site
EUPHORBIACEAE				
	eefsteak plant	Orn	PL_r	2
	roton	Orn	PL_{c}	1,2,3
	raceful spurge	Nat	C	1
	nilk-striped candlestick	Orn	PL_r	3
•	rown-of-thorns	Orn	PL_0	1,2
F	oinsettia	Orn	PL_r	2
	encil tree	Orn	PL_{r}	1
	oingabing	Nat	R	1,2
ERICACEAE	migaumg	Nat	K	1,2
Rhododendron macrosepalum Maximowicz	ndian azalea	Orn	PL_{u}	3
FABACEAE				
	oartridge pea	Nat	0	1,2
	panish clover	Nat	Ü	1,2
	ensitive plant	Nat	Ö	1,3
_	ea bean	Nat	R	2
GOODINACEAE				
Scaevola sericea L. n HYDRANGEACEAE	aupaka kahakai	Ind	PL_r	1,3
<i>Hydrangea macrophylla</i> Seringe h LAURACEAE	ıydrangea	Orn	PL_r	1
	vocado	Nat	PL_r	2
LINACEAE				
Linum grandiflorum Desfontaines fl MALVACEAE	lowering flax	Orn	PL_r	3
	Chinese hibiscus cult.	Orn	PL_c	1,3
	libiscus hybrids	Orn	PL_{c}	1,3
Sida ciliaris L		Nat	0	3
	Cuba jute	Nat	R	1
The specia nonulnea (I) Sol av	,			
Corrêa	nilo	Ind?		1,3
C	iddle-leaf fig; very old Chinese banyan; dated	Orn	PL_o	3
tı	ree	Nat	PL_o	1,2,3
MORINGACEAE				
<i>Moringa oleifera</i> Lam. h NYCTAGINACEAE	orseradish tree	Nat	PL_r	1
	ougainvillea	Orn	PL_o	1,2
OLEACEAE	_			
Jasminum sambac W. Aiton p OXALIDACEAE	ikake	Orn	PL_{r}	1
Oxalis debilis var. corymbosa (A.P. 'i	ihi pehu, pink wood- orrel	Nat	С	1
	ilikoi, passion fruit	Nat	R	1

Table 3 (continued).

Species listed by family	Common name	Status	Abundance	Site
PLANTAGINACEAE				
Plantago major L.	laukahi	Nat	С	1
PLUMBAGINACEÁE				
Plumbago auriculata Lam.	Blue Plumbago	0rn	PL_{r}	3
POLYGONACEAE				
Polygonum capitatum F. Ham.		Nat	0	2
RUBIACEAE				
Coffea arabica L.	coffee	Nat	PL_r	1
Gardenia augusta var. fortuniana Lindley	"Gardenia veitchii"	Orn	PL_o	1,3
Gardenia taitensis A.P. de Candolle	Tahititan Gardenia	Orn	PL_o	1,3
Ixora chinensis Lam.	ixora	Orn	PL_c	3
Ixora coccinea L.	dwarf ixora	Orn	PL_c	3
Paederia foetida L.	maile pilau	Nat	R	1,2
<i>Pentas lanceolata</i> Deflers RUTACEAE	pentas	Orn	PL_u	1,3
Citrus lemon N.L. Burman	rough lemon	Orn	PL_{r}	2
<i>Murraya paniculata</i> (L.) Jack	mock orange	Nat	PL_{r}	1
SCROPHULARIACEAE				
Torenia glabra Osbeck	<i>Ola'a</i> beauty	Nat	С	1
SOLANACEAE				
Brunfelsia australis Bentham	yesterday-today- tomorrow	Orn	PL_r	3
Capsicum annum L.	nioi, red pepper	Nat	PL_r	1,2
Cestrum nocturnum L.	night cestrum	Nat	R	2
URTICACEAE	ingire cesti airi	1141	10	-
Pilea microphylla (L.) Lieb.	artillery plant	Nat	С	1,2,3
THEACEAE				, ,-
Camelia sinensis (L.) Kuntze	tea	Orn	PL_{r}	3
VERBENACEAE				
Citharexylum spinosum L.	fiddlewood	Nat	R	1,2
Duranta erecta L.	golden dewdrop	Orn	PL_{r}	1
	ERING PLANTS			
	COTYLEDONES			
AGAVACEAE				
Agave attenuata salm-Dyck	swan's-neck agave	Orn	PL_r	1
Cordyline fruticosa (L.) A. Chev.	ki, green ti	Pol	PL_a	1,2,3
Cordyline fruticosa (L.) A. Chev.	ornamental ti	Orn	PL_c	1,2,3
Draggeng marginata Lam	fragrant dracaena	Orn Orn	PL_{o}	1,2,3
Dracaena marginata Lam. Dracena "tricolor"	money tree tricolor dracaena	Orn	${ m PL_c} \ { m PL_o}$	1,3
Dracena uncolor Dracena sanderiana M.T. Masters	sanderiana, pleomele	Orn	PL_0	1 2,3
Sansevieria trifasciata Prain	bowstring-hemp	Nat	PL_0	2,3 1,3
ALOEACEAE	bowsumg-nemp	ivat	ı Lu	1,0
Aloë sp.	aloe	Orn	PL_r	1

Table 3 (continued).

Species listed by family	Common name	Status	Abundance	Site
ARACEAE				
Aglaonema commutatum Schott.	aglaonema	Orn	PL_{r}	3
Anthurium amnicola type	"Lavender Lady"	Orn	=	2,3
Anthurium x ferrierense M.T.	-	Orn	-	•
Masters & T. Moore	anthurium	0111	PL_{r}	2
Alocasia macrorrhiza (L.) Schott	'ape	Nat	R	1
Colocasia esculenta (L.) Schott.	kalo	Pol	PL_{u}	3
Dieffenbachia sp.	dumbcane	Orn		1
Epipremnum pinnatum (L.)Engler	taro vine, pothos	Nat	PL_{o}	1,3
Monstera delicosa Liebmann	monstera	Orn		1,2
Philodendron scandens K.Koch &		Nat	-	
Sello	heart leaf philodendron	Nac	PL_{o}	1
Spathyphyllum var.	spathyphylum	0rn	PL_{u}	2,3
Xanthosoma sp.		Nat	PL_{r}	1
ARECACEAE				
Caryota mitis Loureiro	Fishtail palm	Orn	PL_{u}	2,3
Cocos nucifera L.	coconut palm	Pol	PL_c	1,3
Dypsis lutescens (H. Wendl.) Beentje	areca palm	Orn	PL_o	1,2,3
& J. Dransfield	arcea pann	OTII	1 110	1,2,5
<i>Livistona chinensis</i> (Jacq.) R. Br. ex Mart.	Chinese fan palm	Nat	PL_{u}	3
Ptychosperma macarthurii (Veitch) J. D. Hook.	Macarthur palm	Orn	PL_r	3
Rhapis sp.	lady palm	Orn	PL_c	1,2,3
Veitchia merrillii (Beccari) H.E.	Manila palm	Orn	PL_o	2
Moore	Maima paim			
<i>Veitchia</i> sp.		Orn	PL_{o}	1
BROMELIACEAE				
Ananas comosus (L.) Merril	pineapple	Orn	PL_{r}	1,3
COMMELINACEAE				_
Tradescantia spathacea Swartz	oyster plant	Orn	PL_{r}	2
CYPERACEAE				
Cyperus alternifolius flabelliformis	umbrella sedge	Nat	R	1,3
(Rottb.) Kukenth.	J			
Kyllinga nemoralis Dandy ex	white kyllinga	Nat	С	3
Hutchinson & Dalziel	-			
HELICONIACEAE		0	DI	2.2
Heliconia psittacorum L fil LILIACEAE	parrot heliconia	Orn	PL_o	2,3
Chlorophytum comosum (Thunb.)				
Jacq.	airplane plant	Orn	PL_{u}	1
Crinum cf. asiaticum L.	giant lily	Nat	PL_{u}	1
Molineria capitulata Herbert	molineria, whale-back	Orn		1,3
Ophiopogon japonicus Ker Gawl.	mondo grass	Orn	-	1,2,3
MARANTACEAE	U		1	, ,-
Calathea sp.		Orn	PL_r	2

Table 3 (continued).

Species listed by family	Common name	Status	Abundance	Site
MUSACEAE				
Musa cf. acuminata Colla	banana	Orn	PL_{o}	1,2
ORCHIDACEAE				
Cymbidium sp.	cymbidium orchid	Orn	PL_{r}	3
Dendrobium hybrid	dendrobium	Orn	PL_{u}	1
Oncidinae sp. hybrid		Orn	PL_{u}	1
PANDANACEAE				
Pandanus tectorius Z.	hala	Ind	0	1,3
POACEAE				
Axonopus compressus (Swartz) P. Beauv.	brd-lvd. carpetgrass	Nat	PL_a	1,3
Bambusa cf. multiplex (Lour.) J.A. & J.H. Schultes	hedge bamboo	Orn	PL_r	1
Cenchrus echinatus L.	sand bur	Nat	R	1
Cynodon dactylon (L.) Pers.	Bermuda grass	Nat	0	1
Eragrostis amabilis (L.) Wight & Arnott	Japanese lovegrass	Nat	С	1
Paspalum conjugatum Bergius	Hilo grass		PL_{r}	1,2,3
Paspalum fimbriatum Kunth	Panama grass	Nat	R	2
Paspalum vaginatum Sw.	seashore paspalum	Nat	U	1,2
Saccharum officinarum L.	sugar cane	Orn	PL_{r}	1
<i>Sporobolus diandrus</i> (Retz.) P. Beauv.	Indian dropseed	Nat	С	1,2
Zoysia matrella (L.) Merril	zoysia grass	Orn	PL_{r}	2
STRELITZIACEAE				
Ravenala madagascariensis Sonnerat	traveler's palm	Orn	PL_{r}	3
Strelitzia reginae Dryander	bird-of-paradise	Orn	PL_{o}	1,3
ZINGIBERACEAE	-			
Alpinia purpurata K. Schumann	red ginger	Orn	PL_c	1,3
Hedychium coronarium J. Konig	white ginger	Nat	PL_o	1,3
Hedychium gardnerianum Ker Gawler	kahili ginger	Orn	PL_r	1
Zingiber zerumbet (L.) Sm.	<i>'awapuhi</i> , shampoo ginger	Pol	PL_r	1

Legend to Table 3.

ABUNDANCE = occurrence ratings for plant species:

-- - Species not present in area.

R - Rare seen in only one or perhaps two locations.

seen at most in several locations U - Uncommon

0 - Occasional seen with some regularity

observed numerous times during the survey C - Common A - Abundant

found in large numbers; may be locally dominant.

Table 3 (continued).

NOTES:

PL=Present in Landscape.

Subscript: letter reflection abundance rating (for example, r=rare in landscape).

SITE LOCATION KEY;

1=Reed's Bay Condo

2=Country Club Condominium

3=Pagoda Hilo Bay Hotel

<u>Fauna</u> — A single mongoose (*Herpestes javanicus*) was observed in an interior garden at Hilo Pagoda. Two (male and female) Mallard ducks (*Anas platyrhynchos*) were observed sitting in the pond of the same garden. Golden Plover or *Kōlea*, Spotted Dove (*Streptopelia chinensis*), Zebra Dove (*Geopelia striata*) and Red-crested Cardinal (*Paroaria coronata*) were observed throughout the Project area.

Marine Biology

Descriptions of marine assemblages off the three properties are provided following. Appendix A contains a check list of marine organisms observed in the survey areas in 2017.

Reeds Bay Resort — Figure 5 presents representative photos of the nearshore structure and biota fronting Reeds Bay Resort. Fronting the shoreline are basalt boulders with sand patches that extend gradually into deeper water. At the south end of the property, a basalt bench is present in shallow water. Here, freshwater input was noticeable by cooler water temperature and schlieren effect created by the fresh water. A moderate amount of coralline algae and algal turf grow on the basalt bench and boulders, including *Boodlea composita*, Chaetomorpha atennina, Cladophoropsis sundanensis, Ahnfeltiopsis flabelliformis, Amansia glomerata, Gracilaria salicornia, Martensia fragilis, Pterocladiella and *Hydrolithon* spp. Hawaiian mussel (*Brachiodontes* crebristriatus) occur in large numbers, forming mats on the basalt bench and on some boulders. A conspicuous purple sponge (Leucetta sp.) was abundant in this area. Barnacles (Chthamalus proteus and Nesochthamalus intertextus) and nerite snail (Nerita picea) are common in the intertidal zone. Other macroinvertebrates observed include limpet (Siphonaria normalis), worm snails (Serpulorbis variabilis and Petaloconchus keenea), brown purse shell (Isognomon perna), and Hawaiian oyster (Dendostrea sandvicensis). Sea urchins (*Echinometra mathaei* and *E. oblonga*) are rare. Corals are uncommon throughout this survey area, and no coral occurs within 5 m (15 ft) of the shore. Further offshore (approximately 50 m), biologists encountered one small (5- to 10 cm) *Pocillopora damicornis* colony.

A total of 28 fish taxa was observed in our Reeds Bay Resort survey area. Fishes were abundant in the shallow waters: Hawaiian flagtail or āholehole (K. xenura) and goatfish (M. flavolineatus and M. vanicolensis) were observed schooling around the basalt boulders in shallow waters. Other common fishes are surgeonfish (Acanthuridae), including convict tang or manini (A. triostegus) and ringtail surgeonfish (A. blochii), damselfish: sergeants (Abudefduf abdominalis and A. sordidus); goatfishes, including square-spot goatfish (Mulloidichthys flavolineatus), manybar goatfish (Parupeneus multifasciatus) and yellowfin goatfish (M. vanicolensis); butterflyfishes: threadfin butterflyfish (Chaetodon



Figure 5. A basalt shelf, coated with mussels occurs at the south end of Reeds Bay Resort (top left). Basalt boulders host coralline algae (top right), and schools of fish (*K. xenura*, *A. triostegus*, and *Parupeneus* spp.; bottom left). One green sea turtle was observed (bottom right).

auriga) and flagtails (Kuhlia xenura). Moorish idols (Zanclus cornutus) are also common. Other fishes observed include: Hawaiian gregory (Stegastes marginatus), bright eye chromis (Plectroglyphidodon sindonis), bluelined surgeonfish (A. nigroris), yellowfin surgeonfish (A. xanthopterus), bluespine surgeonfish (Naso unicornis), saddle wrasse (Thalassoma duperrey), Christmas wrasse (T. trilobatum), surge wrasse (T. purpureum), belted wrasse (Stethojulis balteata), palenose parrotfish (Scarus psittacus), milletseed butterflyfish (C. miliaris), raccoon butterflyfish (C. lunula), blacktail snapper (Lutjanus fulvus). Snowflake moray (Echidna nebulosa) and bluestripe squirrelfish (Sargocentron tiere) are rare in the area. One green sea turtle (Chelonia mydas) was observed during the survey.



Figure 6. The shore fronting Country Club Condominium Hotel is basalt, encrusted with mussels (top left). About the middle of the property is a cove, with a steep basalt shore (top right). Sand and boulders make up the bottom in this cove (bottom left). A few small *Poc. damicornis* occur approximately 15 m (50 ft) from the shore (bottom right).

<u>Country Club Condominium Hotel</u> — Figure 6 (above) presents representative photos of the nearshore bottom and biota fronting Country Club Condominium Hotel. The shoreline here is similar to that fronting Reeds Bay Resort. A steep basalt shore fronts segments of the property and a small cove with sand bottom and cobbles occurs approximately midway along the property shore. Algae composition is similar to that described for Reeds Bay Resort. The basalt boulders host mussels (*B. crebristriatus*) and barnacles (*C. proteus* and *N. intertextus*). Small, unidentified, non-stinging jellyfish were abundant ast the time off the Country Club Condominium Hotel. Urchins (*E. mathaei* and *Tripneustes gratilla*) are uncommon in the area. Corals (*Montipora capitata* and *Poc. damicornis*) are rare in this area, with a few small colonies observed approximately 50 ft (15 m) off the shore.

Hilo Pagoda (formerly Uncle Billy's) — Figure 7 presents representative photos of the nearshore bottom and biota off Hilo Pagoda. The shore is a narrow sand and basalt cobble beach. Offshore of the beach on the east side of the property, the seafloor is sand with scattered basalt rocks that host algal growth (*Hydrolithion* spp., *Amansia glomerata*, *G. salicornia*). Tide pools, of depths up to 1 m (3 ft) deep occur along the shore. Children were seen swimming and playing in the tide pools during our survey. Common biota of the littoral zone on basalt boulders are crustose coralline algae (*Hydrolithion* spp.), nerite or *pipipi* (*N. picea*), barnacles (*C. proteus* and *N. intertextus*), and urchins (*E. mathaei* and *E. oblonga*). Beyond the tide pools, a submerged basalt platform, interspersed with channels, occurs. Common fishes here include convict tang or *manini* (*A. triostegus*), Hawaiian sergeant (*A. abdominalis*), butterflyfishes (*C. lunula* and *C. auriga*) and goatfishes (*Mulloidichthys* spp.). Flagtails (*Kuhlia xenura*) and moorish idols (*Zanclus cornutus*) were also frequently observed in this area.

On the west side of the property, the seafloor off the narrow sand beach is a basalt bench extending seaward some 50 m (164 ft). Here, several above-water remnant concrete structures dot the nearshore area, and a few submerged concrete slabs occur (See Fig. 7). The bench and concrete structures host algal growth including *C. atennina, Amansia glomerata*, coralline algae (*Hydrolithion* spp.), and *Martensia fragilis*. Fishes (*A. triostegus, A. abdominalis, C. lunula, C. auriga*, and *Mulloidichthys* spp.) aggregate around these subsurface concrete slabs. Urchins (*E. mathaei, E. oblonga* and *Echinothrix calamaris*) and scattered corals (*M. capitata, Poc. damicornis, P. compressa*, and *Leptastrea bewickensis*) occur on the basalt bench. A single pearl oyster (*Pinctada margaritifera*) was observed.



Figure 7. A basalt bench extends seaward approximately 50 m from the shore off the west side of the Hilo Pagoda property. Here, several above-water concrete structures dot the nearshore area, and a few subsurface concrete slabs occur (top left). Fishes aggregate around the submerged concrete slabs (top right). Small corals (*Poc. damicornis*) are uncommon (bottom left). A reef platform with sand channels is present off the east side of the Hilo Pagoda property (bottom right).

Discussion

Water Quality

Hilo Harbor is classified as a Class A embayment in State of Hawai'i, Water Quality Standards (HDOH, 2014a). Locations within Hilo Bay are listed on the HDOH 2014 list of impaired waters in Hawai'i, prepared under Clean Water Act §303(d) (HDOH, 2014b). These impaired listings—based on water quality data collected by HDOH in the Bay—indicate that Hilo Harbor may not meet the Hawai'i water quality standards for certain parameters, specifically turbidity at

stations Hilo Bay (Lighthouse), Hilo Bay (Offshore), Hilo Bay (Canoe Beach), Honoli'i Beach Park, and Hilo Harbor (inshore of breakwater and nearshore waters from Wainaku to Paukaa).

State water quality criteria for embayments incorporate "wet" and "dry" criteria values based on average percent of freshwater inflow: Thus, when average freshwater input exceeds one percent of embayment volume per day, wet criteria apply. When average fresh water inflow is less than one per cent of embayment volume, dry criteria apply. In this case, wet criteria apply, supported by salinity showing a dilution closer to 10% from oceanic salinity (35.2 PSU) for this region of the Pacific (SOEST, 1996). As noted, large amounts of freshwater input to the harbor via surface flows (Wailoa and Wailuku Rivers) and groundwater discharge typically result in a stratification of fresh and sea water in the harbor throughout the year (HDOH, 2005).

State water quality criteria for embayments are shown in Table 4. Criteria for temperature, salinity and pH are based on "deviations from ambient conditions"; i.e., pertain essentially to discharges that might cause deviations. Our results would be regarded as measurements of ambient conditions. Criteria for DO saturation are based upon not-to-exceed values. Criteria for turbidity, nutrients, and chlorophyll α are based on geometric means not to exceed specific values. Since geometric means require a minimum of three separate samples per stations, our single-sample per station results cannot be compared with state geometric mean criteria. These state geometric criteria may be useful guides for what could be considered normal water quality.

Physical water quality parameters, with the exception of turbidity, were in line with state criteria. Turbidity was elevated at Stas. 1 and 5 compared with the state geometric mean. No state criteria for TSS in embayments have been established, but this parameter is often measured where project activities might result in particulates pollution.

Ammonia and nitrate+nitrite concentrations were mostly higher than state geometric criteria, while Total N concentrations were, with two exceptions, less than the state geometric mean criterion. Total P concentrations were higher than the state geometric mean criterion at all stations, while chlorophyll α values were within the state geometric mean criterion.

Table 4. Selected state water quality criteria (wet season) applicable to embayments after HAR §11-54-6.3(b) (HDOH, 2014).

Parameter	Geometric Mean value not to exceed this value	Value not to be exceeded more than 10% of the time	Value not to be exceeded more than 2% of the time
Total Nitrogen	200.0	350.0	500.0
(μg N/L) Ammonia (μg N/L)	6.0	13.0	20.0
Nitrate+Nitrite	8	20.0	35.0
(μg N/L) Total Phosphorus (μg/L)	25.0	50.0	75.0
Chlorophyll α	1.5	4.5	8.5
(μg/L) Turbidity (NTU)	1.50	3.00	5.00

Other "standards":

- pH units shall not deviate more than 0.5 units from a value of 8.1, except locations, where and when freshwater from steam, storm drain or groundwater discharge may depress the pH to a minimum level of 7.0.
- Dissolved oxygen shall not decrease below 75% of saturation.
- Temperature shall not vary more than 1Co from ambient conditions.
- Salinity shall not vary more than 10% from ambient.

Protected and Listed Species

No plants that are proposed or listed as threatened or endangered as set forth in the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543; USFWS, 2015), were seen in our February 2017 survey. For plants, state listing follows the federal listing.

Two species are flagged (*) in Table 3: *Ficus lyrata* and *Ficus microcarpa*; neither of these banyans enjoys any special legal protections. However, these trees are very old specimens and the Chinese banyans are planted trees with honorarium plaques giving dates (1935-1964) and names. Preservation of these trees (mostly on the Pagoda Hotel grounds) should be considered after inspection by a certified arborist that the trees are in a healthy condition.

One marine protected species was observed in the 2017 surveys: green sea turtle or *honu* (*Chelonia mydas*). The Project does not include any in-water work. In nearby marine waters, ESA-listed species occur and may be exposed to project-related activity. Sea turtles and marine mammals typically avoid human activity, so exposure to such activity and equipment operation would be infrequent and non-injurious, resulting in insignificant effects on the ESA-listed marine species. Protected species BMPs require that the project manager and contractor reduce the likelihood of interactions by watching for and avoiding protected species before commencing work and by postponing or halting operations when protected species are within 50 yards of project activities (USACE, 2012).

<u>Sea turtles</u> — Of the sea turtles found in the Hawaiian Islands, only green sea turtle is likely to occur in the Project vicinity. Hawksbill sea turtle (Eretmochelys imbricata) is rare in the Hawaiian Islands and only known to nest on beaches in the southern reaches of the state (NOAA-PIFSC, 2010). The green sea turtle was listed as a threatened species under the Endangered Species Act in 1978. Since protection, the green sea turtle has become the most common sea turtle in the Hawaiian Islands with a steadily growing population (Chaloupka et al., 2008). On February 16, 2012, NMFS and the USFWS received a petition from the Association of Hawaiian Civic Clubs to identify the Hawaiian green turtle population as a distinct population segment (DPS) and delist the Hawai'i DPS under the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 et seg.). In April 2016, NOAA-NMFS published a final rule to reclassify the green sea turtle into 11 DPS, but continue protection of the Hawai'i DPS as a threatened species under the ESA (USFWS & NOAA, 2016). One green sea turtle was observed in our survey offshore of Reeds Bay Resort.

<u>Shellfishes</u> — Shellfishes, including pearl oyster (*Pinctada margaritifera*), are regulated throughout the State of Hawai'i, where it is prohibited to "catch, take, kill, possess, remove, sell or offer for sale", without a permit, pearl oysters and six other shellfishes (DLNR, 2009). One pearl oyster was observed in our survey offshore of Hilo Pagoda.

Monk Seal — The endangered Hawaiian monk seal (Monachus schauinslandi) is known to occur in the waters of the Harbor. The Hawaiian monk seal was listed as an endangered species pursuant to the ESA on November 23, 1976 (41 FR 51612) and remains listed as endangered. In that same year, the Hawaiian monk seal was designated as "depleted" under the Marine Mammal Protection Act (MMPA). Critical habitat for Hawaiian monk seals has been designated (NOAA-NMFS, 2015) and includes the seafloor and marine habitat to 10 m above the seafloor from the 200 m depth contour through the shoreline and extending into terrestrial habitat 5 m inland from the shoreline between

identified boundary points. These terrestrial boundary points define preferred pupping areas and significant haul-out areas (NOAA-NMFS, 2015). Terrestrial critical habitat along the shoreline of the Project area falls within assigned boundary points HA 201 to HA 202: Lehia Beach Park through Hilo Harbor. As such, the Project occurs in designated terrestrial and marine critical habitat area (NOAA-NMFS, 2015). Cliffs and manmade shorelines and structures in existence are not included in the designation because these areas do not meet the definition of critical habitat. Segments of the shoreline fronting Country Club Condominium property are steep basalt "cliffs", which would be excluded from designated terrestrial critical habitat.

<u>Humpback whale</u> — The humpback whale or *koholā* (*Megaptera novaeangliae*) was listed as endangered in 1970 under the ESA. In 1993 it was estimated that there were 6,000 humpback whales in the North Pacific Ocean, and that 4,000 of those regularly came to the Hawaiian Islands. The population is estimated to be growing at between 4 and 7% per year and today, as many as 10,000 humpback whales may visit Hawaiii each year (HIHWNMS, 2014). The waters of the Project area are not within the Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS, 2016).

<u>Coral</u> - Corals are protected under Hawai'i state law. State law prohibits the breaking or damaging, with any implement, any stony coral from the waters of Hawai'i, including any reef or mushroom coral (HAR §13-95-70, DLNR, 2002). It is also unlawful to take, break or damage, with any implement, any rock or coral to which marine life of any type is visibly attached (HAR §13-95-71, DLNR, 2002). On August 27, 2014, NOAA issued a final rule for listing 20 coral species as threatened under ESA (NOAA-NMFS, 2014). None of these listed corals occurs in Hawai'i.

Conclusions

The primary purpose of this report is to document the flora and fauna on three Banyan Drive properties and nature of the marine biological assemblages and water quality off the shore of these properties. Our survey establishes a baseline and provides assessment of any natural resources of special concern. No in-water work is proposed for the Project. However, building demolition activities may result in airborne distribution of particulates being carried to marine waters, requiring that effective Best Management Practices (BMPs) be implemented. Based on the existing conditions observed in our February 2017 surveys, BMPs to minimize potential negative effects to Hilo Bay water quality should include measures to:

- Control initial dust and particle containment measures immediately following demolition to prevent airborne distribution to Hilo Bay waters;
- Prevention of subsequent demolition waste material runoff to Hilo Bay.

Other BMPs to protect Hilo Bay water quality may be required by HDOH Solid and Hazardous Waste Division.

<u>Endangered Species Protection</u> - The following endangered species BMPs may be applicable during the proposed work (USACE, 2012):

- All on-site project personnel shall be apprised of the status of any listed species potentially present in the Project area and the protections afforded to those species under federal law.
- The Project foreman shall designate an appropriate number of competent observers to survey the area adjacent to the proposed action for protected species. The Project foreman shall also have in his/her possession at the jobsite a handout with photographs of protected species that may enter the construction site to assist with identification of the protected species. U.S. Fish and Wildlife Service-Pacific Islands Fish and Wildlife Office (PIFWO) will provide the information handout.
- To ensure that no protected species are in the Project area (typically considered within 50 yards of the work activity), surveys of the project area shall be made prior to the start of work each day, and prior to resumption of work following any break of more than one half hour, All work shall be postponed or halted when protected species are present, and shall only begin/resume after the animals have voluntarily departed the area.
- These and other requirements may be designated by the Honolulu District as appropriate for specific projects, including all conservation measures and/or BMPs required by any ESA consultation for the project.

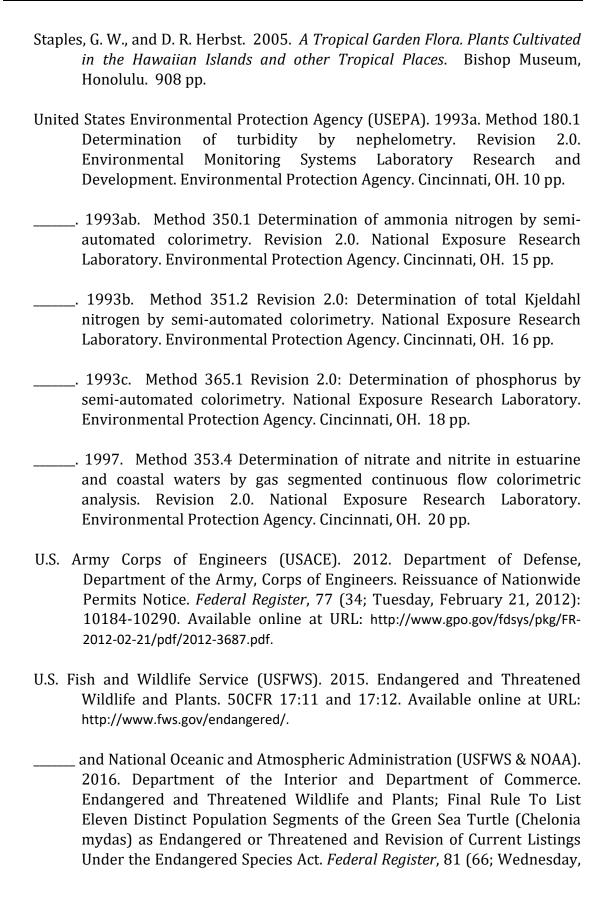
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Appendix A

Inventory of marine biota observed in the Banyan Drive building Project area and vicinity, Hilo, Hawaiʻi, February 15, 2017.

PHYLUM, CLASS, ORDER, FAMILY	Common name & Hawaiian name Status		Abundance by location			
	Hawanan name		Reeds	cation		
Genus species			Bay Hotel	Country Club Condo	Hilo Pagoda	
	ALGAE					
CHLOROPHYTA	GREEN ALGAE					
Bryopsis pennata		Ind.	R	R	R	
Boodlea composite	composite seaweed	Ind.	0			
Chaetomorpha atennina	brush chaetomorpha	Ind.	0		0	
Cladophoropsis						
sundanensis	mat cladophora	Ind.	С	0		
RHODOPHYTA	RED ALGAE					
Ahnfeltiopsis flabelliformis	fan seaweed	Ind.	С	0		
Amansia glomerata	conglomerate seaweed	Ind.	U	0	0	
Gracilaria salicornia		Nat.	A	0		
Hydrolithon gardineri		Ind.	С	С	С	
Hydrolithon onkodes		Ind.	0	С	С	
Hydrolithon reinboldii		Ind.	0	С	С	
Pterocladiella caerulescens		Ind.	0	0		
Martensia fragilis	fragile martensia	Ind.	С		A	
OCHROPHYTA	BROWN ALGAE					
Dictyota sp.		Ind.		R		
	INVERTEBRATES					
CNIDARIA, SCYPHOZOA	JELLIES					
unidentified jelly		Ind.		Α		
PORIFERA, DEMOSPONGIAE,						
DYSIDEIDAE	SPONGES					
Leucetta spp.		Ind.	Α	0	0	
CNIDARIA, ANTHOZOA,						
SCELRACTINIA	HARD CORALS					
ACROPORIDAE						
Montipora capitata	rice coral	Ind.		R		
POCILLOPORIDAE						
Pocillopora damicornis	lace coral	Ind.	R	U	0	
PORITIDAE						
Porites compressa	finger coral	End.			U	
FAVIIDAE						
Leptastrea bewickensis	bewick coral	Ind.		U	U	
ANNELIDA, POLYCHAETA,						
SABELLIDAE	WORMS					
Sabellastarte spectabilis	feather duster worm	Ind.	R			

PHYLUM, CLASS, ORDER,	Common name &					
FAMILY	Hawaiian name	Status	Abundance by location			
			Reeds	Country		
Genus species			Bay Hotel	Club Condo	Hilo Pagoda	
MOLLUSCA, GASTROPODA,	SNAILS and SLUGS					
NERITIDAE						
Nerita picea	common nerite; pipipi	End.	С	С	С	
PATELLIDAE						
Siphonaira normalis	limpet; 'opihi'awa	Ind.	R			
VERMETIDAE	WORM SNAILS					
Serpulorbis variabilis	variable worm snail	Ind.	С	С	С	
Petaloconchus keenae	Keen's worm snail	Ind.	С	С	С	
MOLLUSCA, BIVALVIA,						
PTERIIDAE	BIVALVES					
Pinctada margaritifera	black-lipped pearl oyster	Ind.			R	
ISOGNOMONIDAE						
Isognomon perna	brown purse shell,					
	nahawele	Ind.	0			
OSTREIDAE						
Dendostrea sandvicensis	Hawaiian oyster	End.	R		R	
MYTILIDAE						
Brachiodontes	Hawaiian mussel;					
crebristriatus	nahawele	End.	Α	С	С	
ARTHROPODA, CRUSTACEA,	BARNACLES					
CIRRIPEDIA	DIMMIGLES					
Chthamalus proteus	Proteus' rock barnacle	Ind.	С	С	U	
Nesochthamalus	purple rock barnacle;					
intertextus	pī'oe'oe	Ind.	С	С	U	
GRAPSIDAE						
Grapsus tenuicrustatus	thin-shelled rock crab,					
	ʻaʻama	Ind.	R			
ECHINODERMATA,						
ECHNOIDEA,						
ECHINOMETRIDAE	SEA URCHINS					
7	rock boring urchin	T 1	D		0	
Echinometra mathaei	ʻina kea	Ind.	R	U	С	
Echinometra oblonga	oblong boring urchin; 'ina	Ind.	R		R	
TOXOPNEUSTIDAE	11 , 1 , 7	T 1		TY		
Tripneustes gratilla	collector urchin, hawae	Ind.		U		
DIADEMATIDAE	handad ·····-l·:··	L. J			D	
Echinothrix calamaris	banded urchin	Ind.			R	

PHYLUM, CLASS, ORDER, FAMILY	Common name &	Common name & Hawaiian name Status		Abundance by location			
FAMILI	nawanan name		Reeds	Country	ation		
Genus species			Bay Hotel	Club Condo	Hilo Pagoda		
HOLOTHUROIDEA,							
HOLOTHURIDAE	SEA CUCUMBERS						
	white spotted sea						
Actinopyga varians	cucumber	Ind.	R				
VERTEBRATA, PISCES							
ACTINOPTERYGII	BONY FISHES						
KUHLIIDAE	FLAGTAILS						
Kuhlia xenura	Hawaiian flagtail;	End.	A	С	0		
	<i>āholehole</i> SURGEONFISHES and	Ena.	А	C	0		
ACANTHURIDAE	UNICORNFISH						
Acanthurus nigroris	bluelined surgeonfish,						
	maiko	Ind.	R	R	R		
Acanthurus triostegus	convict tang, manini	Ind.	С	Α	С		
Acanthurus xanthopterus	yellowfin surgeonfish,	T 1	0	11	11		
Acanthurus blochii	<i>pualu</i> ringtail surgeonfish; <i>pualu</i>	Ind.	0	U	U		
Ctenochaetus strigosus	goldring surgeonfish; <i>kole</i>	Ind.	С	U	U		
Naso unicornis	bluespine unicornfish;	End.			R		
Trade amoorms	kala	Ind.	R				
SYNODONTIDAE	LIZARDFISH						
Synodus binotatus	twospot lizardfish	Ind.	R				
ZANCLIDAE							
Zanclus cornutus	Moorish idol, <i>kihikihi</i>	Ind.	С	0	С		
POMACENTRIDAE	DAMSELFISH						
Abudefduf abdominalis	Hawaiian sergeant; mamo	End.	С	Α	Α		
Abudefduf sordidus	blackspot sergeant; <i>kūpīpī</i>	Ind.	С	O	U		
Dascyllus albisella	Hawaiian dascyllus, <i>ʻāloʻiloʻi</i>	End	R		D		
Plectroglyphidodon	bright-eye chromis	End.	K		R		
imparipennis	21-6-10 1) 1 1-1-1	Ind.	R				
Stegastes marginatus	Hawaiian gregory	End.	0				
LABRIDAE	WRASSE						
Coris venusta	elegant coris	End.			R		
	saddle wrasse; hinalea						
Thalassoma duperrey	lauwili	End.	0	0	0		
Thalassoma trilobatum	Christmas wrasse; 'awela	Ind.	0	O	U		
Thalassoma purpureum	surge wrasse; hou	Ind.	U		R		
Stethojulis balteata	belted wrasse, 'omaka	End.	0	U	0		
SCARIDAE	PARROTFISH						
Scarus psittacus	palenose parrotfish, uhu	Ind.	U		U		

PHYLUM, CLASS, ORDER, FAMILY	Common name & Hawaiian name Status		Abundance by location Reeds Country			
Genus species			Bay Hotel	Club Condo	Hilo Pagoda	
CHAETODONTIDAE	BUTTERFLYFISH					
	milletseed butterflyfish;					
Chaetodon miliaris	lauwiliwili	End.	0	R	R	
	raccoon butterflyfish,					
Chaetodon lunula	kīkākapu	Ind.	0	0	Α	
	threadfin butterflyfish;					
Chaetodon auriga OSTRACIIDAE	kīkākapu	Ind.	С	0	С	
Ostracion meleagris MULLIDAE	spotted boxfish; <i>moa</i> GOATFISH	Ind.			R	
Parupeneus pleurostigma	sidespot goatfish; malu	Ind.	0	0		
Parupeneus multifasciatus Mulloidichthys	manybar goatfish, <i>moano</i> square-spot goatfish;	Ind.	С	0	С	
flavolineatus Mulloidichthys	<i>weke'a</i> yellowfin goatfish;	Ind.	Α	С	A	
vanicolensis	weke'ula whitesaddle goatfish;	Ind.	A		0	
Parupeneus porphyreus	kūmū	End.	0		R	
HOLOCENTRIDAE	SQUIRRELFISH					
Sargocentron tiere	bluestripe squirrelfish;		_	_		
LUTJANIDAE	ʻalaʻihi	Ind.	R	R		
Lutjanus kasmira	SNAPPER	N T .			**	
Lutjanus fulvus	bluestripe snapper; <i>ta'ape</i>	Nat.			U	
MURAENIDAE	blacktail snapper; <i>toʻau</i>	Nat.	U	U		
Echidna nebulosa	MORAY EELS snowflake moray; <i>puhi</i> <i>kāpā</i>	Ind.	R			
CHORDATA, REPTILIA	REPTILES	11141				
CHELONIIDAE	TEL TIBEO					
Chelonia mydas	green sea turtle, honu	Ind.	R		R	

APPENDIX F

Banyan Drive Demolition Project Cost Estimates Rider Levett Bucknall



Our Reference: KOA00199-6

Location Summary

GFA: Gross Floor Area Rates Current At October 2017

Location		GFA SF	Cost/SF	Total Cost USD
S SITE				160,280
	ESTIMATED NET COST			\$160,280
MARGINS & ADJUSTMENTS				
Mobilization - First				\$21,433
General Conditions				\$29,492
Insurances & Bonds	2 %			\$4,224
Overhead and Profit	8 %			\$17,234
Tax	2 %			\$4,653
Escalation	10 %			\$23,732
	ESTIMATED TOTAL COST			\$261,048

Location Elements Item

S SITE

Rates Current At October 2017

Description	Unit	Qty	Rate	Total USD
G1020 Site Demolition and Relocations				
3 Pool/Deck Demolition	LS	1.0	32,800.00	32,800
4 AC Paving Demolition	SF	13,020.0	2.50	32,550
5 Rock Wall Demolition	SF	1,513.0	5.00	7,565
9 Landscape/Tree Removal	SF	17,473.0	5.00	87,365
Site Demolition and Relocations				\$160,280
SITE				\$160.280

Location Summary

GFA: Gross Floor Area Rates Current At October 2017

Location		GFA SF Cost/SF	Total Cost USD
B BUILDING			2,518,814
	ESTIMATED NET COST		\$2,518,814
MARGINS & ADJUSTMENTS			
Mobilization - Second			\$21,433
General Conditions			\$463,461
Insurances & Bonds	2 %		\$60,074
Overhead and Profit	8 %		\$245,103
Tax	2 %		\$66,178
Escalation	10 %		\$337,506
	ESTIMATED TOTAL COST		\$3,712,569

Location Elements Item

B BUILDING

Rates Current At October 2017

Description	Unit	Qty	Rate	Total USD
A1020 Special Foundations				
1 GSF	SF	124,044.0	0.00	0
Special Foundations	;			\$0
F2010 Building Elements Demolition				
2 Building Demolition	LS	124,044.0	20.00	2,480,880
6 Disposal Hauling to Westside - Allowance	LS	1.0	224,000.00	224,000
10 Ground Floor Slab/Foundation	LS	-1.0	186,066.00	-186,066
Building Elements Demolition	1			\$2,518,814
BUILDING				\$2,518,814



Our Reference: KOA00199-7

Location Summary

GFA: Gross Floor Area Rates Current At October 2017

Location		GFA SF	Cost/SF	Total Cost
G SITE				115,955
	ESTIMATED NET COST			\$115,955
MARGINS & ADJUSTMENTS				
Mobilization - First				\$10,042
General Conditions				\$21,336
Insurances & Bonds	2 %			\$2,947
Overhead and Profit	8 %			\$12,022
Tax	2 %			\$3,246
Escalation	10 %			\$16,555
	ESTIMATED TOTAL COST			\$182,103

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Location Elements Item

G SITE

Rates Current At October 2017

Description	Unit	Qty	Rate	Total
F1010 Special Structures				
61 Demo -New Pool & Deck	LS	1.0	36,800.00	36,800
Special Structures				\$36,800
G1020 Site Demolition and Relocations				
64 Demo -AC Pavement	SF	31,662.0	2.50	79,155
Site Demolition and Relocations				\$79,155
SITE				\$115,955

Location Summary		Rates		oss Floor Area October 2017
Location		GFA SF	Cost/SF	Total Cost
A FRONT TOWER				
B BACK TOWER				
C GROUND FLR				-100,523
D SECOND FLR				151,776
E THIRD - SIXTH FLR (IN 4 NO.)				775,425
F SHELL	_			312,651
	ESTIMATED NET COST			\$1,139,329
MARGINS & ADJUSTMENTS				
Mobilization - Second				\$10,042
General Conditions				\$209,636
Insurances & Bonds	2 %			\$27,180
Overhead and Profit	8 %			\$110,895
Tax	2 %			\$29,942
Escalation	10 %			\$152,702
	ESTIMATED TOTAL COST			\$1,679,726

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Location Elements Item

C GROUND FLR

Rates Current At October 2017

Description		Unit	Qty	Rate	Total
A1010 Standard Foundations					
65 Demo - Concrete Foundations		LS	-1.0	120,000.00	-120,000
	Standard Foundations				(\$120,000)
A1020 Special Foundations					
18 GSF		SF	9,953.0		Excl.
	Special Foundations				Excl.
A1030 Slab on Grade					
2 Demo - 6" Concrete SOG		SF	-9,684.0	3.00	-29,052
B0040 Festavian Walla	Slab on Grade				(\$29,052)
B2010 Exterior Walls 58 Demo -Balcony dividers - concrete		SF	413.3	4.00	1,653
56 Demo -CMU - wall		SF	4,702.0	4.00	18,808
30 Demo - Civio - Wali	Exterior Walls		4,702.0	4.00	\$20,461
B2030 Exterior Doors	=xtorrer rrane				Ψ20,401
10 Demo -Door - exterior - sgl		EA	19.0	50.00	950
17 Demo -Door - exterior - dbl		EA	2.0	75.00	150
	Exterior Doors				\$1,100
C1020 Interior Doors					
11 Demo -Door - interior		EA	9.0	50.00	450
	Interior Doors				\$450
C1030 Fittings					
59 Demo -Countertop		SF	55.9	5.00	279
54 Demo -Cabinet - upper		LF	32.0	10.00	320
55 Demo -Cabinet - base	Eittingo	LF	32.0	10.00	320
C3010 Wall Finishes	Fittings				\$919
43 Demo -Tile - wall		SF	312.7		Incl.
- Bellio - File - Wali	Wall Finishes		012.7		Incl.
C3020 Floor Finishes	Truii Timonos				11101.
41 Demo -Tile flooring		SF	3,968.0		Incl.
42 Demo -Carpet		SF	5,692.7	1.00	5,693
·	Floor Finishes				\$5,693
C3030 Ceiling Finishes					
27 Domo Coiling point		SF	9,953.0		Incl.
27 Demo -Ceiling paint					

Location Elements Item

GROUND FLR (continued)		Rates Current At October			October 20
Description		Unit	Qty	Rate	Tota
D3030 Cooling Generating Systems 30 Demo -HVAC		SF	9,953.0	2.00	19,906
oo Bellio 1177.C	Cooling Generating Systems			2.00	\$19,900
	GROUND FLR				(\$100,523

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Location Elements Item

D SECOND FLR

Description		Unit	Qty	Rate	Total
A1020 Special Foundations					
18 GSF		SF	12,987.8		Excl.
	Special Foundations				Excl.
B1010 Floor Construction					
1 Demo - Concrete floor system		SF	14,439.9	5.00	72,200
	Floor Construction				\$72,200
B2010 Exterior Walls					
3 Demo -Ext concrete wall		SF	802.9	4.00	3,212
4 Demo -Concrete column		EA	63.0	200.00	12,600
58 Demo -Balcony dividers - concrete		SF	245.0	4.00	980
57 Demo -Balcony dividers		SF	361.9	1.50	543
	Exterior Walls				\$17,335
B2030 Exterior Doors					
10 Demo -Door - exterior - sgl		EA	32.0	50.00	1,600
12 Demo -Door - lanai slider		EA	24.0	100.00	2,400
	Exterior Doors				\$4,000
C1010 Partitions					
5 Demo -Rated partitions		SF	5,350.5	1.50	8,026
6 Demo -Non-rated partitions	Dantitiana	SF	3,001.8	1.00	3,002
C1020 Interior Decre	Partitions				\$11,028
C1020 Interior Doors		_^	20.0	FO 00	4 000
11 Demo -Door - interior		EΑ	36.0	50.00	1,800
13 Demo -Door - bi-fold	Interior Deere	EA	4.0	35.00	140
C1030 Fittings	Interior Doors				\$1,940
C1030 Fittings 7 Demo -Cabinet - lav - small		EA	17.0	35.00	595
8 Demo -Cabinet - lav big		EA	10.0	50.00	500
9 Demo -Cabinet base		LF	21.0	25.00	525
20 Demo -Mirror		EA	29.0	25.00	725
26 Demo -Towel bar		EA	24.0	25.00	600
25 Demo -Toilet paper holder		EA	27.0	25.00	675
59 Demo -Countertop		SF	39.1	5.00	196
44 Demo -Built-in counter		EA	30.0	75.00	2,250
48 Demo -Built-in shelf (1)		EA	28.0	35.00	980
45 Demo -Towel ring		EA	29.0	25.00	725
46 Demo -Towel bar		EA	29.0	25.00	725

Location Elements Item

D SECOND FLR (continued)

Rates Current At October 2017

Description		Unit	Qty	Rate	Total
47 Demo -Toilet paper holder		EA	29.0	25.00	725
	Fittings				\$9,221
C3010 Wall Finishes					
15 Demo -Paint - interior		SF	16,704.1		Incl.
43 Demo -Tile - wall		SF	5,867.3		Incl.
	Wall Finishes				Incl.
C3020 Floor Finishes					
39 Demo -Lanai waterproof		SF	1,365.6		Incl.
41 Demo -Tile flooring		SF	2,631.0		Incl.
42 Demo -Carpet		SF	10,075.5	1.00	10,076
	Floor Finishes				\$10,076
C3030 Ceiling Finishes					
27 Demo -Ceiling paint		SF	12,987.8		Incl.
	Ceiling Finishes				Incl.
D3030 Cooling Generating Systems					
30 Demo -HVAC		SF	12,987.8	2.00	25,976
	Cooling Generating Systems				\$25,976
	SECOND FLR				\$151,776

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Location Elements Item

E THIRD - SIXTH FLR (IN 4 NO.)

Tales cultert At Oct				
Description	Unit	Qty	Rate	Total
A1020 Special Foundations				
18 GSF	SF	50,685.2		Excl.
Special Foundati	ions			Excl.
B1010 Floor Construction				
1 Demo - Concrete floor system	SF	55,741.1	5.00	278,705
Floor Construc	tion			\$278,705
B1020 Roof Construction				
19 Demo -Roof slab	SF	12,672.0	5.00	63,360
Roof Construc	tion			\$63,360
B2010 Exterior Walls				
3 Demo -Ext concrete wall	SF	24,157.1	4.00	96,628
4 Demo -Concrete column	EA	136.0	200.00	27,200
58 Demo -Balcony dividers - concrete	SF	774.7	4.00	3,099
57 Demo -Balcony dividers	SF	1,448.1	1.50	2,172
Exterior W	/alls			\$129,099
B2030 Exterior Doors				
10 Demo -Door - exterior - sgl	EA	136.0	50.00	6,800
12 Demo -Door - lanai slider	EA_	104.0	100.00	10,400
Exterior Do	oors			\$17,200
B3010 Roof Coverings				
37 Demo -TPO Roofing	SF 	14,256.0	3.00	42,768
Roof Coveri	ings			\$42,768
C1010 Partitions				
5 Demo -Rated partitions	SF	29,652.5	1.50	44,479
6 Demo -Non-rated partitions	SF 	15,895.2	1.00	15,895
Partiti	ions			\$60,374
C1020 Interior Doors	- •	4.40.0	50.00	7 400
11 Demo -Door - interior	EA_	148.0	50.00	7,400
Interior Do	oors			\$7,400
C1030 Fittings	- 4	00.0	05.00	0.000
7 Demo -Cabinet - lav - small	EA	92.0	35.00	3,220
8 Demo -Cabinet - lav big	EA	36.0	50.00	1,800
20 Demo -Mirror	EA	124.0	25.00	3,100
26 Demo -Towel bar	EA	128.0	25.00 25.00	3,200
25 Demo -Toilet paper holder	EA	120.0	25.00	3,000
44 Demo -Built-in counter	EA	120.0	75.00	9,000
48 Demo -Built-in shelf (1)	EA	124.0	35.00	4,340

Location Elements Item

E THIRD - SIXTH FLR (IN 4 NO.) (continued)

Rates Current At October 2017

Description		Unit	Qty	Rate	Total
45 Demo -Towel ring		EA	124.0	25.00	3,100
46 Demo -Towel bar		EA	124.0	25.00	3,100
47 Demo -Toilet paper holder		EA	124.0	25.00	3,100
	Fittings				\$36,960
C3010 Wall Finishes					
15 Demo -Paint - interior		SF	91,093.9		Incl.
	Wall Finishes				Incl.
C3020 Floor Finishes					
39 Demo -Lanai waterproof		SF	5,353.4		Incl.
41 Demo -Tile flooring		SF	10,658.0		Incl.
42 Demo -Carpet		SF	38,189.8	1.00	38,189
	Floor Finishes				\$38,189
C3030 Ceiling Finishes					
27 Demo -Ceiling paint		SF	50,685.2		Incl.
	Ceiling Finishes				Incl.
D3030 Cooling Generating Systems					
30 Demo -HVAC		SF	50,685.2	2.00	101,370
	Cooling Generating Systems				\$101,370
	THIRD - SIXTH FLR (IN 4 NO.)				\$775,425

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Location Elements Item

F SHELL

Des	scription		Unit	Qty	Rate	Tota
B10	20 Roof Construction					
19	Demo -Roof slab		SF	2,073.0	5.00	10,365
49	Demo -Copper fascia		LF	190.0	3.00	570
		Roof Construction				\$10,935
B20	010 Exterior Walls					
3	Demo -Ext concrete wall		SF	12,404.0	4.00	49,616
4	Demo -Concrete column		EA	89.0	200.00	17,800
34	Demo -CMU - screen		SF	1,137.0	2.00	2,274
		Exterior Walls				\$69,690
B20	020 Exterior Windows					
50	Demo -Window - Jalosies		SF	604.0	2.00	1,208
35	Demo -Windows - big		EA	75.0	55.00	4,125
36	Demo -Windows - small		EA	34.0	35.00	1,190
		Exterior Windows				\$6,523
C10	030 Fittings					
52	Demo -Roof ladder		EA	1.0	200.00	200
31	Demo -Railing		LF	2,130.0	5.00	10,650
40	Demo -Building signage		LS	1.0		Incl
		Fittings				\$10,850
C20	010 Stair Construction					
38	Demo -Stairs		EA	20.0	350.00	7,000
		Stair Construction				\$7,000
C30	010 Wall Finishes					
16	Demo -Paint - exterior		SF	36,570.0		Incl
32	Demo -Rock veneer		SF	1,952.0	4.00	7,808
		Wall Finishes				\$7,808
C30	030 Ceiling Finishes					
53	Demo -Drop ceiling/framing/finish		SF	1,482.0	2.50	3,705
		Ceiling Finishes				\$3,705
D10	010 Elevators & Lifts					
33	Demo -Elevator		EA	2.0	10,000.00	20,000
		Elevators & Lifts				\$20,000
D20	D20 Domestic Water Distribution					
29	Demo -Plumbing		LS	1.0	1,440.00	1,440
		Domestic Water Distribution				\$1,440

Location Elements Item

F SHELL (continued)

Rates Current At October 2017

Description	Unit	Qty	Rate	Total
D3090 Other HVAC Systems & Equipment				
51 Demo -Mech Louver	EA	1.0	300.00	300
Other HVAC Systems & Equipment				\$300
D5020 Lighting and Branch Wiring				
28 Demo -Electrical/low voltage	LS	1.0	6,400.00	6,400
Lighting and Branch Wiring				\$6,400
F2010 Building Elements Demolition				
62 Disposal Hauling to Westside - Allowance	LS	1.0	168,000.00	168,000
Building Elements Demolition				\$168,000
SHELL				\$312,651

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Our Reference: KOA00199-5

Location Summary

GFA: Gross Floor Area Rates Current At October 2017

Gr	A SF Cost/SF	Total Cost USD
		142,488
ESTIMATED NET COST		\$142,488
		\$8,656
		\$26,218
2 %		\$3,547
8 %		\$14,473
2 %		\$3,908
10 %		\$19,929
ESTIMATED TOTAL COST		\$219,219
	2 % 8 % 2 % 10 %	2 % 8 % 2 % 10 %

Location Elements Item

S SITE

Description	Unit	Qty	Rate	Total USD
G1020 Site Demolition and Relocations				
3 Pool/Deck Demolition	LS	1.0	32,800.00	32,800
4 AC Paving Demolition	SF	18,495.0	2.50	46,238
5 Rock Wall Demolition	SF	1,933.0	5.00	9,665
8 Fence Demolition	LF	301.0	5.00	1,505
9 Landscape/Tree Removal	SF	10,456.0	5.00	52,280
Site Demolition and Relocations				\$142,488
SITE				\$142,488

Location Summary

GFA: Gross Floor Area Rates Current At October 2017

Location		GFA SF Cost/SF	Total Cost USD
B BUILDING			939,451
	ESTIMATED NET COST		\$939,451
MARGINS & ADJUSTMENTS			
Mobilization - Second			\$8,656
General Conditions			\$172,859
Insurances & Bonds	2 %		\$22,420
Overhead and Profit	8 %		\$91,471
Tax	2 %		\$24,697
Escalation	10 %		\$125,955
	ESTIMATED TOTAL COST		\$1,385,509

Location Elements Item

B BUILDING

Description	Unit	Qty	Rate	Total USD
A1020 Special Foundations				
1 GSF	SF	32,010.0	0.00	1
Special Foundations	<u> </u>			\$1
F2010 Building Elements Demolition				
2 Building Demolition	LS	32,010.0	27.00	864,270
6 Disposal Hauling to Westside - Allowance	LS	1.0	140,000.00	140,000
10 Ground Floor Slab/Foundation	LS	-1.0	64,820.00	-64,820
Building Elements Demolition	7			\$939,450
BUILDING	;			\$939,451

APPENDIX G

Summary of Estimated Costs R. M. Towill Corporation

Preliminary Demolition Assessment Former Pagoda Hilo Bay Hotel, Country Club Condominium/Hotel, and Reeds Bay Hotel Summary of Estimated Costs (As of 12.4.17)

Summary of Estimated Costs (As of 12.4.17)								
	1	ORMER AGODA		COUNTRY				
		AGODA ILO BAY		UB CONDO	l l			
ITEM		HOTEL		/ HOTEL	HOTEL		ASSUMPTIONS / QUALIFICATIONS	
							Above ground demolition includes the building ethics up above the ground floor clob	
A. ABOVE GROUND DEMOLITION WORK							Above ground demolition includes the building structure above the ground floor slab and the pool. Pavement and concrete slabs at ground level will remain and the site	
A. ABOVE GROUND DEMOLITION WORK							will not be graded. Shoreline structures including sea walls, boat ramps and piers will remain in place.	
1. Lump Sum Costs							will remain in place.	
a. Demolish Structures/Pools, and							Building slabs and pavement to remain. Includes escalation (2-yr), mobilization,	
Dispose of Materials b. Architectural Reconnaissance Level Survey (RLS)	\$	3,712,569 4,000		1,679,726 4,000		1,385,509 4,000	hauling to West Hawaii landfill.	
c. Civil Sitework	\$		\$	130,000		,	Includes dust/silt fence around perimeter and backfill for pool.	
d. Dispose Electrical Transformers	\$	105,000	\$	72,000	\$	50,000	Includes removal of telephone & CATV services. Capping of underground service	
	+-		_		<u> </u>		ductline near front property line, for temp power during demo work.	
Subtotal - Above Ground Demo (Lump Sum)	\$	3,991,569	\$	1,885,726	\$	1,689,509		
2. As Required	<u> </u>							
a. Hazardous Material Remediation Within Structure b. Architectural Intensive Level Survey (ILS)	\$	430,000 6,000		1,200,000 6,000			Removal of asbestos, lead paint, PCBs, smoke alarms. If needed beyond the Architectural RLS.	
	†			•		,	Up to Level III, if required by SHPD, based on findings of the Architectural RLS or	
c. HABS Documentation	\$	15,000		15,000		15,000	ILS.	
Subtotal - Above Ground Demo (As Required)	\$	451,000	\$	1,221,000	\$	431,000		
Total - Above Ground Demo	\$	4,442,569	\$	3,106,726	\$	2,120,509		
	 						Delever was and demolities in chade a surface account clabs, as a surface and helever	
							Below ground demolition includes surface concrete slabs, pavement, and below ground structures such as foundations and basements. Below ground demolition	
B. BELOW GROUND DEMOLITION WORK							includes backfilling and grading the site to match existing ground elevations. The	
							graded areas will be grassed to stabilize the site. Shoreline structures including sea walls, boat ramps and piers will remain in place.	
1. Lump Sum Costs	<u> </u>						Sou wane, sout rampe and piere will remain in place.	
a. Demolish Slabs, Foundations, Basements,	<u></u>	004.040	٠	400 400	_	040.040	Includes escalation (2 yr), mobilization, basiling to Most Herreit Level(1)	
Pavement, and Dispose Materials	\$	261,048	\$	182,103	\$	219,219	Includes escalation (2-yr), mobilization, hauling to West Hawaii landfill.	
b. Civil Sitework	\$	530,000		300,000			Includes removal of underground pipes, backfill, grading, and grassing.	
Subtotal - Below Ground Demo (Lump Sum)	\$	791,048	\$	482,103	\$	609,219		
2. As Required								
a. Environmental Site Investigation/Remediation b. Archaeological Inventory Survey	\$	800,000 50,000	\$	900,000 50,000			Removal of chlorine, oil, fuel, lead, arsenic, pesticides, others around site. Contingent on SHPD determination.	
5.7 Worldoological Inventory Gurvey			Ė	•		,	Contingent on SHPD determination, demo plans, subgrade findings & construction	
c. Archaeological Monitoring	\$	50,000		50,000		50,000	schedule.	
d. Archaeological Monitoring Report	\$	6,000	\$	6,000	\$	6,000	Based on no subsurface finds. Required if discharge of water groundwater is anticipated. Includes baseline and	
e. NPDES NOI Dewatering Permit	\$	50,000	\$	50,000	\$	50,000	construction sampling for one month, lab analysis, and Discharge Monitoring	
Subtotal - Below Ground Demo (As Required)	\$	956,000	\$	1,056,000	¢	556,000	Report.	
Subtotal - Below Ground Bellio (As Required)	۱ ۵	930,000	Ą	1,030,000	Ψ	330,000		
Total - Below Ground Demo	\$	1,747,048	\$	1,538,103	\$	1,165,219		
C. CONSULTANT FEES								
Phase 2 Environmental Site Assessment	\$	200,000	\$	115,500	\$	80,500	Site sampling and testing for hazardous materials.	
2. Environmental Construction Documents	\$	30,000	_	25,000	_		Plans and specs for site remediation.	
3. Surveying	\$	15,000	\$	10,000	\$,	Topographic survey and shoreline certification.	
Civil Engineering Electrical Engineering	\$	60,000 10,400	\$	60,000 8,400	\$		Preparation of plans, specs, and services during construction. Preparation of plans, specs, and services during construction.	
6. Geotechnical Engineering	\$		\$	18,500	_		Recommendations for preparation of the site for future development	
7. Structural Engineering	\$	•	\$	10,000	_	-,	Contingency if needed for partial removal of structures.	
HRS 343 Environmental Assessment SMA Major Permit	\$	38,000	\$	38,000	\$,	Based on approved demolition plans. Requires accepted FEA/FONSI and shoreline certification.	
,	1	,	Ė		Ť		To be processed with SMA. Requires accepted FEA/FONSI and shoreline	
10. Shoreline Setback Variance	\$	20,000		20,000		20,000	certification	
11. NPDES NOI Construction Stormwater Permit	\$	14,000 5,000	_	14,000 5,000	<u> </u>	14,000 5,000		
12. Archaeological Monitoring Plan13. Construction Management	\$	-	\$	20,000	\$	20,000		
Subtotal - Consultant Fees	\$	470,900	\$	374,400	\$	332,600		
D. DEDMIT FEEG	 							
D. PERMIT FEES 1. Demolition permit	\$	13,000	\$	9,000	\$	6,000		
Grading permit	\$	100	\$	100	\$	100		
3. NPDES NOI Construction Stormwater Permit	\$	500	\$	500	\$	500		
4. SMA Permit Subtotal - Permit Fees	\$	500	\$	500	\$	500 7 100		
Oublotal - Fellill Fees	\$	14,100	\$	10,100	Þ	7,100		
Total - Items A through D	\$	6,674,617	\$	5,029,329	\$	3,625,428		
T (4.4000/)		070.00-	^	000 707		454.00-		
Tax (4.166%) Contingency (20%)	\$ \$	278,065 1,334,923	\$	209,522 1,005,866	\$	151,035 725,086		
Containguing (2070)	Ψ	1,007,020	۳	1,000,000	Ψ	720,000		
TOTAL COST ESTIMATE	\$	8,287,605	\$	6,244,717	\$	4,501,549		
DDEAKDOWN LOAND TOM								
BREAKDOWN - LS AND T&M Lump Sum (Items A through D)	\$	5,267,617	\$	2,752,329	\$	2,638,428		
As Required (Items A and B)	\$	1,407,000	_	2,752,329	_	987,000		
Total	\$	6,674,617	_	5,029,329	\$	3,625,428		
Toy (4.1669/)	ф —	070.005	ሶ	200 500	φ.	454.005		
Tax (4.166%) Contingency (20%)	\$	278,065 1,334,923	\$	209,522 1,005,866	\$	151,035 725,086		
	<u> </u>	,551,020	Ť		Ť	0,000		
TOTAL COST ESTIMATE	\$	8,287,605	\$	6,244,717	\$	4,501,549		