

# FINAL ENVIRONMENTAL ASSESSMENT PROPERTY ACQUISITION FOR KAHULUI HARBOR

District of Wailuku, County of Maui  
Tax Map Key: (2) 3-7-011:017 portion, (2) 3-7-011:019 portion,  
and (2) 3-7-11:023

VOLUME IV OF IV



Proposing Agency:  
STATE OF HAWAI'I, DEPARTMENT OF TRANSPORTATION

November 1, 2019

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# TABLE OF CONTENTS

CHAPTER	PAGE NO.
LIST OF FIGURES .....	v
LIST OF TABLES .....	vi
LIST OF ACRONYMS.....	viii
1.0 INTRODUCTION.....	1
1.1 DESCRIPTION OF THE PROPOSED ACTION.....	2
1.2 PURPOSE AND NEED OF THE PROPOSED ACTION .....	6
1.3 BACKGROUND.....	7
1.4 PROJECT VICINITY.....	10
1.4.1 EXISTING LAND USES .....	10
1.4.2 EXISTING HARBOR USES AND FACILITIES.....	10
1.5 SUMMARY OF IMPACTS AND MITIGATION.....	15
1.6 LIST OF PERMITS AND APPROVALS.....	17
1.7 EARLY CONSULTATION.....	18
1.8 DISTRIBUTION OF DRAFT ENVIRONMENTAL ASSESSMENT ...	21
2.0 DESCRIPTION OF ALTERNATIVES.....	23
2.1 ALTERNATIVE - PARCEL A.....	23
2.2 ALTERNATIVE – PARCEL B (PROPOSED ACTION) .....	25
2.3 ALTERNATIVE – PARCEL C .....	26
2.4 NO-ACTION ALTERNATIVE .....	26
3.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT, POTENTIAL ENVIRONMENTAL IMPACTS, AND MITIGATION MEASURES .....	28
3.1 CLIMATE AND AIR QUALITY .....	28
3.1.1 EXISTING CONDITIONS.....	28
3.1.2 ALTERNATIVE ANALYSIS.....	31
3.2 LAND USE.....	34
3.2.1 EXISTING CONDITIONS.....	34

3.2.2	ALTERNATIVE ANALYSIS.....	37
3.3	NOISE .....	39
3.3.1	EXISTING CONDITIONS.....	39
3.3.2	ALTERNATIVE ANALYSIS.....	39
3.4	GEOLOGIC AND GROUNDWATER CONDITIONS.....	40
3.4.1	EXISTING CONDITIONS.....	40
3.4.2	ALTERNATIVE ANALYSIS.....	44
3.5	WATER QUALITY.....	46
3.5.1	EXISTING CONDITIONS.....	46
3.5.2	ALTERNATIVE ANALYSIS.....	47
3.6	HISTORIC, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES.....	48
3.6.1	EXISTING CONDITIONS.....	48
3.6.2	ALTERNATIVE ANALYSIS.....	54
3.7	BIOTIC COMMUNITIES .....	55
3.7.1	EXISTING CONDITIONS.....	55
3.7.1.1	FLORA.....	55
3.7.1.2	MANDUCA PLANT HOSTS.....	57
3.7.1.3	FAUNA .....	58
3.7.2	ALTERNATIVE ANALYSIS.....	59
3.8	WETLANDS.....	60
3.8.1	EXISTING CONDITIONS.....	60
3.8.2	ALTERNATIVE ANALYSIS.....	61
3.9	FLOODPLAINS .....	61
3.9.1	EXISTING CONDITIONS.....	61
3.9.2	ALTERNATIVE ANALYSIS.....	62
3.10	HAZARDOUS MATERIALS, POLLUTION PREVENTION, AND SOLID WASTE.....	64
3.10.1	EXISTING CONDITIONS.....	64
3.10.2	ALTERNATIVE ANALYSIS.....	71
3.11	SOCIO-ECONOMIC IMPACTS .....	74
3.11.1	EXISTING CONDITIONS.....	74
3.11.2	ALTERNATIVE ANALYSIS.....	77

3.12	SECONDARY SOCIO-ECONOMIC IMPACTS .....	77
3.12.1	EXISTING CONDITIONS .....	77
3.12.2	ALTERNATIVE ANALYSIS .....	78
3.13	TRAFFIC AND CIRCULATION .....	78
3.13.1	EXISTING CONDITIONS .....	78
3.13.2	ALTERNATIVE ANALYSIS .....	81
3.14	UTILITIES .....	82
3.14.1	EXISTING CONDITIONS .....	82
3.14.2	ALTERNATIVE ANALYSIS .....	83
3.15	POLICE AND FIRE SERVICES AND PUBLIC SAFETY .....	85
3.15.1	EXISTING CONDITIONS .....	85
3.15.2	ALTERNATIVE ANALYSIS .....	85
3.16	HEALTH CARE FACILITIES .....	86
3.16.1	EXISTING CONDITIONS .....	86
3.16.2	ALTERNATIVE ANALYSIS .....	86
3.17	SCHOOLS .....	86
3.17.1	EXISTING CONDITIONS .....	86
3.17.2	ALTERNATIVE ANALYSIS .....	86
3.18	VISUAL RESOURCES AND LIGHT EMISSIONS .....	87
3.18.1	EXISTING CONDITIONS .....	87
3.18.2	ALTERNATIVE ANALYSIS .....	87
3.19	RECREATIONAL FACILITIES .....	88
3.19.1	EXISTING CONDITIONS .....	88
3.19.2	ALTERNATIVE ANALYSIS .....	88
3.20	GROWTH-INDUCING AND CUMULATIVE IMPACTS .....	89
3.20.1	GROWTH-INDUCING IMPACTS .....	89
3.20.2	CUMULATIVE IMPACTS .....	89
3.21	RELATIONSHIP TO GOVERNMENTAL PLANS, POLICIES, AND CONTROLS .....	97
3.21.1	HAWAI'I STATE PLAN .....	97
3.21.2	COASTAL ZONE MANAGEMENT PROGRAM .....	119
3.21.3	MAUI GENERAL PLAN .....	128
3.21.4	WAILUKU-KAHULUI COMMUNITY PLAN .....	129

4.0 DETERMINATION, FINDINGS, AND REASONS SUPPORTING  
DETERMINATION ..... 133

5.0 REFERENCES ..... 137

6.0 LIST OF AGENCIES, ORGANIZATIONS, AND INDIVIDUALS  
CONSULTED ..... 139

7.0 LIST OF AGENCIES, ORGANIZATIONS, AND INDIVIDUALS  
SENT NOTICE OF AVAILABILITY OF THE  
DRAFT ENVIRONMENTAL ASSESSMENT ..... 142

## LIST OF FIGURES

FIGURE NO.	DESCRIPTION	PAGE NO.
1	Proposed Property Acquisition	3
2	Property Map of Proposed Property Acquisition	4
3	Vicinity Map	11
4	Surrounding Businesses and Uses	12
5	Kahului Harbor East Side Facilities	14
6	<i>Development Plan</i> - Parcel Alternatives	24
7	State of Hawai'i - Land Use	35
8	County of Maui - Wailuku-Kahului Community Plan	36
9	Limited Phase II – Revised Sample Locations And Groundwater Monitoring Wells	43
10	Historic Buildings	50
11	Archaeological Impact Survey - Project Area	53
12	Flood Zones	63
13	Environmental Hazard Map (Figure 6 – Phase II ESA)	69
14	Census Tract	76
15	Truck Circulation Patterns - Kahului Harbor	80
16	Fuel Pipeline Alignment (Approximate)	84

## LIST OF TABLES

TABLE NO.	DESCRIPTION	PAGE NO.
1	Project Summary	1
2	Historical Cargo Volumes	9
3	Pre-consultation Comments Received	19
4	Summary of Comments Received on Draft Environmental Assessment	21
5	Summary of State of Hawai'i and Federal Ambient Air Quality Standards	30
6	Groundwater Sample Results 2014	42
7	Groundwater Samples – Organochlorine Pesticides	45
8	Eligible Historic Structures in the Project Area	49
9	Limited Phase II Sample Results for Multi-Incremental Soil Samples	68
10	Distribution of Population by Race	75
11	Past, Present, and Future Actions	90
12	Cumulative Impacts Summary	92
13	Hawai'i State Plan	98

## APPENDICES

### VOLUME I

APPENDIX A Pre-Assessment Consultation Comment Letters and Responses

APPENDIX B Draft Environmental Assessment Comment and Response Letters

### VOLUME II

APPENDIX C Limited Phase II Environmental Site Assessment

### VOLUME III

APPENDIX D Kahului Harbor, Historic Resources Evaluation

APPENDIX E Archaeological Assessment for the Maui Electric Power Plant Subdivision

APPENDIX F Cultural Impact Assessment

APPENDIX G Flora and Fauna Inventory

### VOLUME IV

APPENDIX H Phase I Environmental Site Assessment

APPENDIX I Environmental Hazard Management Plan – Kahului Harbor, Parcel B

APPENDIX J Interim Final Area-Wide EHE/EHMP Document, Kahului Harbor Area

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APPENDIX H  
Phase I – Environmental Site Assessment

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**Kevin S. Kennedy Consulting, LLC**

January 13, 2012  
KSK-2008-029

Mr. Jared Chang  
SSFM International, Inc.  
501 Sumner St., Suite 620  
Honolulu, HI 96817

**Subject: Phase I Environmental Assessment Report  
A&B Acquisition Parcel B at Kahului Harbor  
180 Hobron Ave., Kahului, Maui, Hawaii  
TMK: (2) 3-7-011: 017**

Dear Mr. Chang:

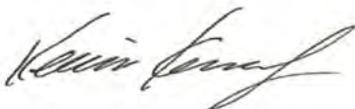
Kevin S. Kennedy Consulting, LLC is pleased to present the attached Phase I Environmental Site Assessment Report to SSFM International for the A&B Acquisition Parcel B at Kahului Harbor, 180 Hobron Avenue, Kahului, Maui, Hawaii. The attached report documents our site reconnaissance, review of federal and state environmental records; county tax and permit files; historical maps, reports and aerial photographs and interviews with knowledgeable persons.

I greatly appreciate the opportunity to provide this report to SSFM and look forward to continuing to assist you with your environmental due diligence efforts.

Please call me at 286-5786 if you have any questions.

Sincerely

**Kevin S. Kennedy Consulting, LLC**



Kevin Kennedy



**Phase I Environmental Assessment Report**  
**A&B Acquisition Parcel B at Kahului Harbor**  
180 Hobron Ave., Kahului, Maui, Hawaii 96732  
TMK: (2) 3-7-011: 017

Latitude: 20° 53' 44.03" N  
Longitude: 156° 27' 43.71" W



KSK-2008-029

Prepared For:



Prepared By:

***Kevin S. Kennedy Consulting, LLC***  
808-286-5786

January 13, 2012

**Phase I Environmental Assessment Report  
A&B Acquisition Parcel B at Kahului Harbor  
180 Hobron Ave., Kahului, Maui, Hawaii 96732  
TMK: (2) 3-7-011: 017**

**Latitude: 20° 53' 44.03" N  
Longitude: 156° 27' 43.71" W**

KSK-2008-029

Prepared for:



Prepared By:

A handwritten signature in black ink that reads "Kevin Kennedy". The signature is fluid and cursive.

Kevin Kennedy

***Kevin S. Kennedy Consulting, LLC***

25 Kaneohe Bay Dr., Suite 208  
Kailua, Hawaii 96734  
[www.kevinskennedyconsultingllc.com](http://www.kevinskennedyconsultingllc.com)

January 13, 2012



[www.kevinskennedyconsultingllc.com](http://www.kevinskennedyconsultingllc.com)

## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Title Page .....	i
Signature Page .....	ii
Executive Summary .....	vi
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
<b>2.0 SITE DESCRIPTION.....</b>	<b>3</b>
2.1 General Site and Vicinity Characteristics and Zoning.....	3
2.2 Physical Setting.....	5
2.2.1 Topographic Review.....	5
2.2.2 Geologic Review.....	5
2.2.3 Wells and Drinking Water Sources.....	7
2.3 Past Land Use of Site and Surrounding Properties.....	8
2.3.1 Property Title Report .....	8
2.3.2 Building Permits .....	8
2.3.3 Aerial Photographs and Maps.....	10
2.3.4 Environmental Liens.....	13
2.3.5 Tax Records.....	13
2.4 Previous Environmental Reports .....	13
2.4.1 Letter Report HLA to A&B Properties, 10/13/1999.....	15
2.4.2 Site Assessment Work Plan, WCL, 8/2000 .....	16
2.4.3 Internal A&B Memo, 8/18/2000.....	16
2.4.4 Site Assessment Report, WCL, 10/2000.....	16
2.4.5 Site Assessment & Remedial Action Work Plan, WCL, 12/2000.....	17
2.4.6 Supplemental Site Assessment Report, WCL, 4/2001.....	17
2.4.7 Letter from WCL to HDOH HEER, 9/1/2001 .....	17
2.4.8 Hazardous Substance Release Report – 1/24/2006.....	17
2.4.9 Letter from KTS to Olekoi Corp., 7/14/2009 .....	18
2.4.10 Letter from A&B to HDOH SHW, 10/23/2009.....	18
2.4.11 HDOH SHW to A&B, RCRA ID, 10/29/2009 .....	18
2.4.12 A&B to HDOH HEER, Release Report, 12/2009 .....	18
2.4.13 Letter report from A&B to HDOH SHW, 5/4/2010 .....	18
2.4.14 Letter report from A&B’s HDOH SHW, 7/8/2010 .....	19
2.4.15 NOI from HDOH SHW to A&B 2/9/ 2011 .....	19
2.4.16 Letter from A&B to HDOH SHW, removal action, 7/7/2011 .....	19
2.4.17 NFA ruling from HDOH SHW to A&B, 7/22/2011.....	19

**TABLE OF CONTENTS (Continued)**

<u>Section</u>	<u>Page</u>
2.4.18 Limited Site Assessment Report, A&B Parcels A, B & C, Kahului Harbor. KSK, 6/5/2009 .....	19
2.4.19 Report Review Summary.....	22
<b>3.0 USER PROVIDED INFORMATION .....</b>	<b>24</b>
<b>4.0 RECORDS REVIEW.....</b>	<b>26</b>
4.1 EPA NPL .....	27
4.2 EPA RCRA CORRACTS Facilities List .....	28
4.3 DOD/FUDS Sites.....	28
4.4 Federal Consent/ROD Sites .....	28
4.5 HDOH SHWS List.....	28
4.6 HDOH HEER Release List.....	31
4.7 EPA CERCLIS/NFRAP Sites.....	33
4.8 EPA RCRA TSD Facilities List.....	33
4.9 HDOH Landfill and/or Solid Waste Disposal Site Lists .....	33
4.10 HDOH Leaking UST List .....	33
4.11 HDOH UST Section Database Listing .....	35
4.12 EPA RCRA Generators List .....	36
4.13 EPA ERNS List.....	37
4.14 Federal Lien Information .....	37
4.15 EPA Institutional Controls and Engineering Controls Lists .....	37
4.16 HDOH Voluntary Response Program List .....	37
4.17 HDOH Brownfields List.....	37
4.18 HDOH Waste Water .....	37
<b>5.0 INTERVIEWS.....</b>	<b>38</b>
5.1 Interviews with Persons Currently Familiar with the Site .....	38
5.1.1 Current Site Owner – A&B Properties, Inc. – Sean O’Keefe.....	38
5.1.2 Parcel B Tenant - Kahului Trucking & Storage (KTS) – Mr. Glen Wilbourn .....	40
5.1.3 Parcel B Tenant - Fed Ex Ground – Mr. Steven Okada.....	41
5.1.4 Parcel B Tenant - BEI Tank Farm – Ms. Shirley Zhai. ....	42
5.1.5 Parcel B Tenant - DeCoite Trucking – Mr. Richard DeCoite.....	43
5.1.6 Parceo B Tenant - Maui Crane – Paul Kirby .....	43
5.1.7 Parcel B Tenant - Hale Nanea, Royal Order of Kamehameha I – Clifford Alakai’i ...	44
5.1.8 Parcel B Tenant - Lengo Construction – Len Gomes .....	45

**TABLE OF CONTENTS (Continued)**

<u>Section</u>	<u>Page</u>
5.1.9 Parcel B Tenant - Reynolds Recycling, Inc. – Georgie Juan.....	46
5.2 Interviews with Regulatory and Other Agencies.....	46
5.2.1 Hazardous Waste Section, SHWB, HDOH – Ms. Grace Simmons.....	46
5.2.2 HEER Branch, HDOH – John Peard.....	46
5.2.3 Maui Fire Department – Capt. Paul Haake.....	47
<b>6.0 SITE RECONNAISSANCE.....</b>	<b>48</b>
6.1 Kahului Trucking and Storage (KTS).....	49
6.1.1 KTS Penske Rental Truck Parking.....	49
6.1.2 KTS Main Office and Service Shop Building.....	49
6.1.3 KTS Offices.....	49
6.1.4 KTS Truck Maintenance & Repair Shop.....	50
6.1.5 KTS Truck Wash Area.....	51
6.1.6 KTS Touch-Up Paint Work Shed.....	51
6.1.7 KTS Storage Sheds.....	51
6.1.8 KTS Truck Parts Department and Parts Storeroom.....	51
6.2 FedEx Ground Parcel Loading/Sorting Area.....	52
6.3 Open Storage Area.....	52
6.4 Former Olekoi & Hawaiian Bitumuls Area.....	53
6.5 KTS Molasses Plant and Storage Tank Area.....	53
6.6 DeCoite Trucking.....	54
6.7 Maui Crane.....	54
6.8 LenGo Construction and Sub-Tenant Area.....	54
6.8.1 LenGo Construction.....	55
6.8.2 Cruiser Phil’s Volcanoe Riders.....	55
6.8.3 Aloha Limousine.....	55
6.8.4 BioBeetle/Maui Recycling.....	55
6.8.5 Maui Skimmers.....	55
6.9 Hale Nanea Community Center.....	55
6.10 BEI Hawaii Liquid Fertilizer Tank Farm.....	56
6.11 Reynolds Recycling Center.....	56
6.12 Amala Place KTS/Open Storage Area.....	56
6.13 General Site Observations.....	57
6.14 Adjacent Properties.....	59
<b>7.0 DATA GAPS.....</b>	<b>61</b>

### TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Page</u>
<b>8.0 VAPOR ENCROACHMENT SCREENING.....</b>	<b>62</b>
<b>9.0 CONCLUSIONS AND OPINIONS .....</b>	<b>63</b>
9.1 Recognized Environmental Conditions .....	63
9.1.1 Parcel B RECs.....	63
9.1.2 On-Site Historic RECs.....	65
9.1.3 Off-Site RECs .....	65
9.2 Other Items of Environmental Concern.....	66
<b>10.0 LIMITATIONS .....</b>	<b>68</b>
<b>11.0 REFERENCES .....</b>	<b>69</b>

### LIST OF FIGURES

Figure 1	Site Location Satellite Photo
Figure 2	Site Area Satellite Photo
Figure 3	Topographic Map
Figure 4	Site Satellite Photo
Figure 5	TMK Map
Figure 6	Mink & Lau Aquifer Map
Figure 7	Underground Injection Control (UIC) Map
Figure 8	Surrounding Parcel Ownership
Figure 9	Site & Surrounding Area
Figure 10	Parcel B Details
Figure 11	Parcel B RECs

### LIST OF APPENDICES

<u>Appendix</u>	<u>Title</u>
A	Photographs
B	EDR Radius Map, Historic Topo Maps, Sanborn Map Report
C	Interview Questionnaires
D	Qualifications of Kevin S. Kennedy Consulting, LLC

## EXECUTIVE SUMMARY

This report documents Kevin S. Kennedy Consulting, LLC's (KSK's) Phase I Environmental Site Assessment (ESA) of the 9.9-acre parcel known as the Alexander & Baldwin (A&B) Parcel B (Site) located near Kahului Harbor, Kahului, Maui, Hawaii. The A&B Parcel B Site is located at 180 Hobron Avenue in Kahului, Maui, Hawaii and is denoted by TMK: (2) 3-7-011 Parcel 17. This report was prepared in conformance with the scope and limitations of ASTM E 1527-05 and consists of a review of historical and regulatory records, site geology and hydrogeology, interviews with persons knowledgeable of the Site and a physical reconnaissance of the Site.

Parcel B comprises 9.9 acres and is a roughly "W"-shaped parcel bounded by the Maui Electric power generation facility and Kahului Bay to the North, Mauoni Ponds (ancient fish ponds) and associated drainage channel to the east, Amala Place and the Chevron bulk fuel storage terminal (across Amala Place) to the south, Hobron Avenue and Kahului Trucking and Storage (KTS) bulk sugar storage facility to the west (Figure 4).

Parcel B contains Kahului Trucking and Storage (KTS), a trucking and shipping company associated with the storage and transport of molasses manufactured at the HC&S Puunene mill. KTS occupies about two thirds of the parcels and leases the remaining portion to various other businesses. The KTS facility is comprised of the main KTS building which houses KTS business and accounting offices, the KTS truck maintenance and repair shop and KTS parts, a Molasses Plant and associated four bulk molasses above ground storage tanks (only two in use). The remainder of Parcel B is occupied by several tenant businesses. Parcel B contains the following:

- KTS main office and shop building. This building contains the following:
  - KTS offices;
  - KTS Truck Maintenance & Repair Shop;
  - KTS truck parts department;
  - KTS bulk sugar operations supervisor officer;
  - Fed Ex Ground parcel loading/sorting area; and
- KTS Penske Truck Rental.

- KTS truck wash area.
- KTS truck wash sludge drum storage area.
- KTS Paint Shed with small item touch-up paint work area.
- Two KTS active 10,000 ton bulk molasses above ground storage tanks.
- Two KTS inactive (empty) bulk molasses above ground storage tank.
- KTS molasses plant and associated pump works station for pumping liquid molasses.
- One KTS active partially buried molasses bulk storage tank.
- KTS molasses truck off-loading pad.
- One KTS inactive (empty) and partially open former bulk molasses storage tank – containing four sail boats.
- One KTS inactive, open topped, partially demolished above ground asphalt storage tank with residual asphalt.
- Various tenant businesses and associated buildings/structures including:
  - DeCoite Trucking – open parking of several front-end loaders, shipping containers, mobile office and a cement works area;
  - BEI Hawaii bulk liquid fertilizer storage tank farm;
  - Hale Nanea Community Center;
  - LenGo Construction (construction business) with the following sub-tenants:
    - Cruiser Phil’s volcano bike ride tourism business;
    - Aloha Limousine;
    - BioBeetle Eco Rental (eco car rental service);
    - A&D Transportation (transportation and taxi service);
    - Aloha Maui Limousine (limousine service) and associated car wash and parking area;
  - Maui Crane Service (Industrial mobile crane service & rental);
  - BEI Hawaii tank farm (seven above ground storage tanks with agrichemicals and fertilizers); and
  - Reynolds Aluminum Recycling

KSK's review of State and Federal environmental records, previous environmental reports, State and County property records, historical maps and aerial photographs, personnel interviews and Site reconnaissance conducted December 20, 2011 have revealed evidence of the following RECs at and near Parcel B:

### **Parcel B RECS**

KSK identified the following RECs at Parcel B:

- Current and historic truck repair activities and bulk oil, lube oil, paint and solvent (parts cleaning) use and storage inside the KTS Service Shop.
- The storage and use of bulk fuel/petroleum products at Parcel B for several decades at the former Standard Oil AST.
- Oil storage and truck maintenance and repair activities at both Maui Crane and DeCoite Trucking areas of Parcel B.
- 500-gallon used oil AST inside KTS Truck Maintenance & Repair Shop.
- 55-gallon drums of lube oil, oil, spent filters and other inside KTS Truck Maintenance & Repair Shop.
- Truck wash and associated oil/water separator located at the KTS Truck Wash Area.
- Former bulk fuel storage and pipeline operations at the fuel loading rack/station the Molasses Tank area of Parcel B associated with the off-Parcel Tosco Black Oil AST, which are likely still present and may contain residual fuel are current and historic RECs.
- Stockpiled petroleum-impacted soil in the KTS Open Storage Area just southeast of the Molasses Tank Area.
- Miscellaneous buckets and containers of unknown liquids/petroleum throughout the KTS Open Storage and Maui Crane areas.
- Oil-impacted soil stored in two 55-gallon drums stored in the Olekoi area.
- The three 288-gallon and approximately 350-gallon oil/fuel ASTs in the KTS Open Storage Area behind (north of) the KTS Storage Sheds.

- Former asphalt plant operations, spilled asphalt tar still present in soil and the remnant asphalt tar within the remains of the smaller, partially demolished AST within the former Hawaiian Bitumuls Area.
- 55-gallon drums of sludge collected from KTS Truck Wash Area.
- Bulk liquid fertilizer ASTs at the BEI Hawaii fertilizer tank farm.
- Buried fuel pipelines running beneath the western wing of Parcel B associated with the former off-site Tosco Black Oil Tank.
- Oil-impacted soil at the former fuel loading rack associated with the off-Parcel Tosco Black Oil AST located on Parcel B near the molasses ASTs.
- Buried Chevron fuel line running along the western boundary, parallel to Hobron Avenue.
- Former junk car disposal at the LenGo construction area may have resulted in petroleum-impacted soil.
- Possible heavy metal in soil at former sandblasting in Olekoi area.
- Possible impacted soil from petroleum products from solid/hazardous waste, leaking drums and junk vehicle storage at the Olekoi area.
- Unlabeled poly drums of unknown liquid at Maui Crane.
- RECs identified in 2009 by KSK (KSK, 2009) including:
  - The storage of 55-gallon drums of used oil at the KTS used oil storage area.
  - Former auto engine repair tenant business.
  - The above ground fuel storage tank at the tenant business Rainbow Hauling and Excavation.
  - The parking of the Action Fuel petroleum tanker trucks near the BEI Hawaii tank farm.
- The possible existence of “comingled [petroleum product] plumes” believed to exist, by HDOH, in the Kahului Harbor area.

#### **Historic RECs**

- Former use of the site for truck repair for over 60 years which probably used and stored bulk petroleum products and solvents.

- Former Hawaiian Bitumuls asphalt plant operations and tar storage/spill.
- Former bulk fuel storage at the Parcel in multiple ASTs. Large former oil AST at the northern central portion of the Parcel shown on 1927, 1945, 1975, 1980 and 1990 historic Sanbourn maps.
- Former oil spill/leak at former fuel loading rack (on-Parcel) associated with off-parcel Tosco Black Oil AST.

### **Off-Site RECs**

KSK has identified Off-Site RECs adjacent to or near Parcel B. Off-Site RECs identified are:

- Off-site DHOH SHW site listed in Section 4.5.
- Off-site HDOH HEER release site listed in Section 4.6.
- Tosco Black Oil Storage tank area and associated buried fuel pipelines near the molasses tanks.
- Tosco Maui Bulk Plant and associated pipelines 0323, 76 Hobron Avenue, Kahului, Maui.
- Tesoro Hawaii Corporation bulk fuel storage, fuel loading rack and associated pipelines, 140 Hobron Avenue Unit A, Kahului, Maui.
- MECO Kahului Generating Station bulk fuel storage, past releases and pipelines, 200 Hobron Avenue, Kahului, Maui.
- Shell Oil Products US Kahului Terminal bulk fuel storage and associated pipelines, 60 Hobron Avenue, Kahului, Maui.
- Chevron Products Company bulk fuel storage, releases, loading rack and associated pipelines, Kahului Terminal, 100 Hobron Avenue, Kahului, Maui.
- Buried pipelines running north-south along the western side of the Site along Hobron Avenue and extends beyond the northern and southern boundaries of Parcel B is therefore both an on- and off-site REC.
- HDOH SHWS listed site: VIP Warehouse, 74 Hobron Avenue, Kahului, Maui.
- HDOH SHWS and Release List listed site: Hobron Avenue Area (Kahului), 60 Hobron Avenue, Kahului, Maui.

- HDOH SHWS and Release List listed site: Young Brothers Kahului, 65 Wharf Street, Kahului, Maui.

#### **Other Items of Environmental Concern**

A few items/areas were observed at or near Parcel B that do not necessarily constitute a REC and pose no real environmental risk or threat to the Site but are worth noting. These additional items are as follows:

- The site is located within the County of Maui's Special Management Area (SMA) due to its proximity to Kanaha ponds and other shoreline areas. Special Management Areas are subject to a Special Management Area Use permit from Maui County is required for development within the SMA.
- Kanaha Pond Waterbird Sanctuary is located just 500 feet to the southeast of the Site. The pond is home to two endangered species, the Hawaiian Stilt and the Hawaiian Coot, and provides sanctuary to several migrant shorebirds and waterfowl. Kanaha Pond was designated a registered natural landmark in late 1971 by the Department of the Interior.
- The Site is adjacent to National Wetland designated sites (Maui Ponds).
- The Site is located within the 100-year flood zone.
- Several septic/cesspool systems are present on Parcel B.
- Numerous older trucks, heavy equipment and miscellaneous equipment stored and/or abandoned throughout the A&B Parcel B may contain fuel. KSK was not able to discern if these items were in use or if they were abandoned.
- Several shipping containers used at various tenant businesses throughout Parcel B. KSK was not able to gain access to the interior of most of these containers and therefore has no knowledge of the contents.
- Several of the tenant businesses on Parcels B are industrial in nature and therefore may employ, and possibly store, even if not observed by KSK, various chemicals, paints and petroleum products in such quantities that if spilled or leak could result in an environmental release.
- Given the age of the buildings on the parcel there is a possibility they may contain asbestos and lead-based paint.

Phase I Environmental Assessment Report  
A&B Acquisition Parcel B at Kahului Harbor  
180 Hoborn Ave., Kahului, Maui, Hawaii

- Possible buried construction debris at the Hale Nanea area of Parcel B.

## 1.0 INTRODUCTION

This report documents Kevin S. Kennedy Consulting, LLC's (KSK's) Phase I Environmental Site Assessment (ESA) of the 9.9-acre parcel known as the Alexander & Baldwin (A&B) Parcel B ("Parcel" or "Site") located near Kahului Harbor, Kahului, Maui, Hawaii. The A&B Parcel B Site is located at 180 Hobron Avenue in Kahului, Maui, Hawaii (Figures 1 - 3) and is denoted by TMK: (2) 3-7-011 Parcel 17. Photographs 1 through 52 (Appendix A) show the site and surrounding area as it appeared during KSK's Site reconnaissance on December 20, 2011.

KSK's assessment of the Site has been performed by a qualified environmental professional as defined by, and in general accordance with, the EPA's "All Appropriate Inquiry" (40 CFR Part 312), as well as ASTM E 1527-05 (ASTM, 2005). The purpose of this assessment was to evaluate, on the basis of readily available information, the presence of recognized environmental conditions (RECs) at and surrounding the Site. ASTM E 1527-05 defines a REC as *the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property* (ASTM, 2005). This ESA report includes the following:

- A review of pertinent, available documents and maps regarding local geology and hydrogeology.
- A review of publicly available federal, state, and local databases of known or potential hazardous waste sites, landfills, and sites currently under investigation for environmental violations within the ASTM recommended search distance of the Site.
- A review of relevant environmental reports and documents provided by A&B Properties (the current owner of Parcel B).
- A review and interpretation of available historical sources, such as Sanborn Fire Insurance map library, archival topographic maps, and aerial photographs and Google Earth® images. Maps and photographs of the area surrounding the Site were examined to obtain information regarding historical land use that may or could have involved the manufacture, generation, use, storage and/or disposal of hazardous substances. This review also includes the gathering of information regarding past and/or current Site

development and/or land use provided by the County of Maui's web site.

- Discussion of the Parcel and adjoining property boundary areas as observed during KSK's reconnaissance conducted on December 20, 2011 to make visual observations of existing Parcel conditions, improvements, and/or operations; types of land use; and nature of site activities
- A discussion of interviews held with current and historical property representatives, current owner, and persons knowledgeable of the property, who are familiar with the Parcel, and who are likely to have material information regarding the potential for contamination in order to obtain specialized site knowledge and evaluate site land use, site history, site operations, and Site maintenance procedures.
- A compilation of all the information gathered, identification of RECs and summary of findings. This report describes the research performed, KSK's findings, professional opinions and conclusions.

## 2.0 SITE DESCRIPTION

This section describes Parcel B's location and general environmental characteristics based on review of available published records and state and county agency web site information. Detailed descriptions of Site conditions observed during the Site reconnaissance are provided in Section 6.

### 2.1 General Site and Vicinity Characteristics and Zoning

Parcel B comprises 9.9 acres and is a roughly "W"-shaped parcel bounded by the Maui Electric power generation facility and Kahului Bay to the North, Mauoni Ponds (ancient fish ponds) and associated drainage channel to the east, Amala Place and the Chevron bulk fuel storage terminal (across Amala Place) to the south, Hobron Avenue and Kahului Trucking and Storage (KTS) Bulk Sugar Storage facility to the west (Figure 4). The Tax Map Key (TMK) designation for the Parcel is (2) 3-7-011: 17 (Figure 5).

Parcel B contains Kahului Trucking and Storage (KTS), a trucking company associated with the storage and transport of molasses manufactured at the HC&S Puunene sugar mill. Molasses storage operations have been present at Parcel B since at least 1914. KTS occupies about two thirds of the parcel and leases the remaining portion to various other tenant businesses. The KTS portion of Parcel B is comprised of the main KTS building which houses KTS business and accounting offices, the KTS Truck Maintenance and Repair shop and KTS parts warehouse, a Molasses Plant and associated four bulk molasses above ground storage tanks (ASTs) (only two in use). The remainder of Parcel B is occupied by several tenant businesses. Parcel B contains the following businesses/activities, each of which is discussed in detail in Section 6 below:

- KTS main office and shop building. This building contains the following:
  - KTS offices;
  - KTS Truck Maintenance & Repair Shop;
  - KTS truck parts department/warehouse;
  - KTS bulk sugar operations supervisor officer;
  - Fed Ex Ground parcel loading/sorting area (tenant); and
- KTS Penske Truck Rental.

- KTS truck wash area and associated oil/water separator.
- KTS Paint Shed with small item touch-up paint work area.
- Two KTS active 10,000 ton bulk molasses above ground storage tanks.
- Two KTS inactive (empty) bulk molasses above ground storage tank.
- KTS molasses plant and associated pump works station for pumping liquid molasses.
- One KTS active partially buried molasses bulk storage tank.
- KTS molasses truck off-loading pad.
- One inactive (empty) and partially open former bulk molasses storage tank – containing four sail boats (former Standard Oil AST, Olekoi Area).
- One inactive, open top, partially demolished above ground asphalt storage tank with residual asphalt (former Hawaiian Bitumuls Asphalt Area).
- Various tenant businesses and associated buildings/structures including:
  - DeCoite Trucking – open parking of several front-end loaders, shipping containers, mobile office and a cement works area;
  - BEI Hawaii bulk liquid fertilizer storage tank farm with several ASTs;
  - Hale Nanea Community Center;
  - LenGo Construction (construction business) with the following sub-tenants:
    - Cruiser Phil's Volcano Ride (volcano bike ride tourism business);
    - Aloha Limousine (limousine service);
    - BioBeetle/Maui Recycling (eco car rental and recycling service);
    - Maui Skimmers (a surf and skim board manufacturer);
  - Maui Crane Service (Industrial mobile crane service & rental);
  - BEI Hawaii tank farm (seven above ground storage tanks with agrichemicals and fertilizers); and

- Reynolds Aluminum Recycling.

The various items and business operations/facilities comprising Parcel B are discussed in detail in Section 6 below.

According to the Maui County Real Property Assessment Division (Maui County), the Site is currently owned by A&B Properties, Inc.

## **2.2 Physical Setting**

This section presents a summary of the Parcel's physical environment based on published information and site observations.

### 2.2.1 Topographic Review

The 1997 United States Geological Survey (USGS) Topographic Map of the area (see Figure 3) and the Google Earth® images (see Figures 2 & 4) show the Site as developed with several buildings and above ground storage tanks.

The Site sits at an average elevation of just three feet above mean sea level (msl) and is essentially flat. The Pacific Ocean (Kahului Bay, outside the breakwater) is immediately north of the eastern side of the site and the Mauoni Pond is adjacent to the Parcel to the east. Kahului Harbor is located about 500 feet immediately to the northwest of the Parcel and Kanaha Pond (a state wildlife sanctuary for endangered and migratory birds) is located approximately 500 feet southeast of the Site.

### 2.2.2 Geologic Review

KSK reviewed published geologic and hydrogeological reports and maps to obtain available information regarding subsurface conditions in the general area of the Site.

#### *Geology*

The island of Maui consists of two main shield volcanoes. The older one is West Maui and the younger one is Haleakala, or East Maui.

West Maui volcano is the older of these two volcanoes and has eroded considerably to form the peaks of the West Maui Mountains. Puu Kukui is the highest of these peaks at an elevation of 5,788 feet. The larger, younger volcano to the east, Haleakala, rises to more than 10,000 feet above sea level and measures five miles high from seafloor to summit (Stearns, 1985).

Haleakala volcano is composed of *pahoehoe* and *a`a* flows of tholeite and tholeitic olivine basalt known as the Honomanu Volcanic Series. The Honomanu Series is overlain by the younger Kula Volcanic Series, composed primarily of hawaiite with lesser amounts of alkalic olivine basalt, basalt and ankaramite. West Maui volcano may be extinct and Haleakala is considered dormant, having last erupted in 1790.

The broad gently sloping plain connecting the two volcanoes, the Maui Isthmus, was formed when lavas of the younger Haleakala volcano banked against the already existing West Maui volcano. The isthmus is comprised of thinly to thickly bedded *a`a* and *pahoehoe* lava flows of late Pliocene and early Pleistocene age as well as overlying alluvium washed from the slopes of West Maui and Haleakala to the east. Parcel B is located on the northern portion of the gently sloping coastal alluvial plain.

### *Soil*

Soil in the Site area is primarily designated as "Fill Land", comprised of silty clay loam. The soil is "well drained" with "slow infiltration rates with layers impeding downward movement of water, or soils with moderately fine or fine textures" (EDR, 2011c). Soil layers at the Site and surrounding area are generally segregated as follows:

- 0 – 11 inches - silty clay loam.
- 11 – 29 inches – silty clay loam.
- 29 – 59 inches – sand.
- 59 – 63 inches – bedrock.

Other soil types, found in the immediate shoreline area Site include "Beachs", comprised of coarse sand with high infiltration rates that are "excessively drained" (EDR, 2011c).

### *Hydrogeology*

The Site falls within the Central Aquifer Sector of Maui, which encompasses the central portion of Maui and extends from the isthmus on the western end to the summit of Haleakala and to the North and Southwest Rift Zones of the volcano. The Central Aquifer Sector is comprised of four aquifer systems: Kahului, Paia, Makawao and Kamaole. According to Mink and Lau (Mink and Lau, 1990), the A&B Parcel B is underlain by the Kahului Aquifer System which extends as a narrow corridor along the Maui isthmus between West Maui and Haleakala (Figure 6).

Two aquifers underlie the Site, an upper and lower aquifer. Mink and Lau assigned aquifer code 60301116 (12211) to the upper aquifer. The first part of the upper aquifer code number, 60301116, indicates that the aquifer is basal (fresh water in contact with seawater), unconfined, i.e. the water table is the upper surface of the saturated aquifer and is present in sedimentary i.e. non-volcanic, rock. The second part of the aquifer code number, 12211, is the aquifer Status Code which in this case indicates that the aquifer is currently used and is ecologically important. The aquifer is comprised of low salinity water (chloride concentration 250 – 1,000 mg/l), is irreplaceable and has a high vulnerability to contamination (Mink and Lau, 1990). The lower aquifer, aquifer code 60301111 (12212) is an unconfined basal aquifer present in horizontally extensive flank lavas of the Haleakala volcano. The aquifer status code for this lower aquifer (12212) indicates that the aquifer is currently used, is ecologically important, contains moderately saline water (chloride content is 1,000 – 5,000 mg/l), is irreplaceable and has a moderate vulnerability to contamination. The Mink and Lau aquifer map for the Site area is shown in Figure 6.

### 2.2.3 Wells and Drinking Water Sources

The Hawaii State Department of Health (HDOH) underground injection control (UIC) line runs north-south in the area of Parcel B and is located about 2.5 miles to the west. The UIC line was established by the HDOH to protect groundwater resources. Groundwater landward (*mauka*) of the UIC line is generally considered a potential drinking water source and groundwater seaward (*makai*) of the UIC line is generally considered as non-potable and saline. Injection wells are prohibited above (*mauka*) of the UIC line. Figure 7 is a reproduction of the HDOH UIC map and shows the site relative to the UIC line.

There are no drinking water wells located within one mile of the Site, based on HDOH UIC information up to July 6, 1984. The Physical Setting Source Summary within the EDR report (see Appendix B) shows 38 water wells within one mile of the Parcel. The following seven water wells are located within 1/8 mile of Parcel B and are all used for cooling by the Maui Electric Company power plant.

- Well ID HI6000000001467 (date drilled 1949).
- Well ID HI6000000001468 (date drilled 1949).
- Well ID HI6000000001465 (date drilled 1946).
- Well ID HI6000000001466 (date drilled 1947).
- Well ID HI6000000001471 (date drilled 1953).

- Well ID HI6000000001470 (date drilled 1953).
- Well ID HI6000000001469 (date drilled 1953).

### **2.3 Past Land Use of Site and Surrounding Properties**

The following sections discuss KSK's findings regarding the Parcel and surrounding area history from review of historic building permits, aerial photographs, maps, tax records, and tax assessment records.

#### **2.3.1 Property Title Report**

The Site is listed on the Maui County website as having the address 180 Hobron Avenue, Kahului, Maui. The Site is located on Hobron Point at Kahului Harbor. Kahului Harbor is a deep draft harbor that has historically served as the island's major commercial, industrial, and transportation center. Kahului Harbor is located on the north shore of the isthmus connecting East and West Maui and is centrally positioned in Kahului Bay. The northeastern portion of the Parcel meets the sea, but the majority of the Parcel is just inland of the harbor.

The "W"-shaped Parcel is identified as Tax Map Key (TMK) (2) 3-7-11: 017. The Parcel has historically housed a molasses bulk storage and pumping plant since at least 1917. Standard Oil of California had a large oil tank and associated appurtenances on the Parcel as well. The property is currently occupied by Kahului Trucking & Storage (KTS), a trucking and molasses storage company, a liquid fertilizer above ground storage tank farm and other tenant business discussed in Section 6 below. The Maui county website lists the entire parcel as fee owned by A & B Properties, Inc.

Parcel B and the immediate vicinity are classed as Industrial. No other zoning information is listed on Maui County website.

#### **2.3.2 Building Permits**

Building permits for the Parcel and adjacent properties were examined on the Maui County website. The permit records were examined in order to identify RECs associated with the Site and adjacent properties. There was only one building permit issued for the Site (Permit no. B910791, for \$300,000). No reason was given for this permit.

### *Adjacent Properties*

Information available on the Maui County web site for adjacent properties is summarized below. Adjacent properties and their currently-listed owners are shown in Figure 8.

- TMK (2) 3-7-11, Parcel 13 (A&B Parcel C) – Mouoni Ponds and several small business operations, 63 Amala Place, adjacent the Site to the east.
  - This 8.6 acre parcel is listed by the Maui County website as fee-owned by A & B Properties., Inc., 11 South Puunene Avenue, Kahului, Hawaii;
  - The property is classed industrial;
  - The site contains a variety of small businesses.
- TMK (2) 3-7-11, Parcel 19 – Cash n’Carry Warehouse and associated parking area. Amala Place, adjacent the Site to the south.
  - This 3.8 acre parcel is listed by the Maui County website as fee-owned by A&B Hawaii, Inc. and Alexander and Baldwin, Inc, 11 South Puunene Avenue, Kahului, Hawaii. The property is classed as Industrial.
- TMK (2) 3-7-11, Parcel 20 – Maui Electric Company, 200 Hobron Avenue, adjacent to the Site to the north.
  - This 4-acre parcel is listed by the Maui County website as fee-owned by Maui Electric Company, LTD, P.O. Box 398, Kahului, Hawaii;
  - The property is classed industrial;
  - There is one permit for a truss/roof, permit no. 1804, on file for this property in 2001.
- TMK (2) 3-7-11, Parcel 23 – Former Tosco Black Oil AST area - Hobron Avenue, the Site surrounds this property on three sides;
  - This 22,330 square foot parcel is listed as fee-owned by A & B Properties, Inc., 11 South Puunene, Kahului, Hawaii, and also reads “Tosco Corporation”.
  - The property is classed industrial.
- TMK (2) 3-7-11, Parcel 12 – Chevron Tank Farm, 100 Hobron Avenue;
  - This 3.4 acre parcel is listed as fee-owned by Chevron USA, Inc, P.O. Box 285, Houston, Texas.

- The property is classed industrial;
- There are two building permits for this property.
  - Permit number B893024, no reason given. Issued 1989;
  - Permit number B892148, no reason given. Issued 1989;
- TMK (2) 3-7-10, Parcel 9 - KTS Bulk Sugar Storage - 101 E Kaahumanu Ave;
  - This 10.5 acre parcel is listed as fee-owned by A&B Properties, Inc, 11 South Puunene Avenue, Kahului, Hawaii 96790.
  - The property is classed industrial;
  - There are four building permits for this property.
    - Permit number B20091327, no reason given. Issued 2009;
    - Permit number B20020128, no reason given. Issued 2002;
    - Permit number B990437, new commercial building. Issued 1999;
    - Permit number B940774, no reason given. Issued 1994.
- TMK (2) 3-7-10, Parcel 13 – Unimproved parcel. No address listed.
  - This 8.7 acre parcel is listed as fee-owned by the State of Hawaii
  - The property is classed as industrial
- TMK (2) 3-7-10, Parcel 16 - Tesoro Fuel Tank Farm & Loading Rack - Hobron Avenue;
  - This 1.7 acre parcel is listed as fee-owned by The Harry and Jeanette Weinberg Foundation, 3660 Waiālae Avenue # 400, Honolulu, Hawaii.
  - The property is classed as industrial
  - There is one permit (no reason given), permit no. B930134, on file for this property in 1993.

### 2.3.3 Aerial Photographs and Maps

Past land use was evaluated by reviewing historical topographic maps (dates 1922, 1955, 1961, 1983, and 1997), aerial photographs (dates 1950, 1975 and 1992) and Google Earth historical images (March 13, 2000,

April 12, 2000, and, 2011– no month listed) (EDR, 2011a and b; Appendix B). These maps, photos and images are discussed below.

#### *Historical Topographic Maps*

A 1922 historical topographic map shows large ASTs at the Parcel and no other structures. The area surrounding the harbor is largely rural. Numerous narrow gauge rail ways (Kahului Rail Road Company) leading from the harbor to the south, west and east are shown. Several pipelines are marked, however the pipeline closest to Parcel B is approximately one mile away at the Central Power Plant to the southeast. An alfalfa mill is shown approximately one mile away to the south. The area to approximately  $\frac{3}{4}$  mile to the south and south west of the Site is fairly congested with rails and railway appurtenances, as well as large buildings and large tanks. The Hana Highway which leads away from the Site to the southeast, is identified as Kula Road. Kanaha Pond is also shown.

A 1955 historical topographic map shows the Y-shaped KTS building, railroad tracks and several ASTs labeled “Oil Tanks” at Parcel B. The Kahului Airport boundary abuts the Site to the east and includes the Kanaha Pond Waterfowl Refuge to the southeast. Kula Road (currently Hana Highway) is labeled as Haleakala Highway. Puunene Road is labeled and other roads have been constructed along Puunene Road. Maui Vocational School is shown approximately one mile to the southwest. The Site appears to look must as it did in 1922 although Hobron Point (where the Site is located) appears to have been enlarged. Some railways tracks still remain at the point and on the coast.

A 1961 historical topographic map shows “Oil” tanks and railroad tracks on the Parcel. Kahului town is shown as larger than on the 1955 map. Several major roads appear to the east. Main Street runs north along the coast to the west and Kaahumanu Avenue leads away from the Site to the west. The airport boundary is no longer shown. Formerly Haleakala Highway, Hana Highway leads away from the Site to the east.

A 1983 historical topographic map shows the Parcel as relatively unchanged with oil tanks and the KTS building but railroad tracks are no longer shown. The Kahului Airport boundary is labeled and a sewage disposal plant is shown adjoining the Parcel to the east. Maui Vocational school is now called Maui Community College and the Maui Zoological and Botanical Gardens is shown adjoining the Community College to the northwest. All of the railroad tracks in the area and beyond have been removed and replaced with roadways.

A 1997 historical topographic map shows several more ASTs and other large structures on the Parcel and surrounding the Site. Maui Zoological and Botanical Gardens is now Keopulani Park. Hoaloha Park is shown approximately ½ mile to the southwest in the harbor.

#### *Aerial & Satellite Photographs*

Aerial photography for the years 1950, 1975, and 1992 reveal very little other than what was previously described in the topographic map analysis above and the Sanborn analysis below with one exception: an additional AST is shown just to the south of the molasses pumping station. This tank does not show up in any of the Sanborn maps, and may have been built after 1990.

Only one good Google Earth® image is available for Parcel B from April 2000. This image shows the entire Parcel with the KTS building, molasses ASTs, Hale Nanea Community Center and the BEI Hawaii liquid fertilizer tank farm discernible. The former Standard Oil AST (Tosco Black Oil Tank) and the MECO power plant are clearly visible. This is the image used in Figures 4 and 9.

#### *Sanborn Fire Insurance Maps*

Six Sanborn Fire Insurance Maps were available in the Sanborn Library for the property and adjacent properties and include maps from the years 1914, 1927, 1945, 1975, 1980 and 1990 (EDR, 2011d; Appendix B).

A 1914 Sanborn map shows three molasses ASTs and the associated pump house at a Molasses Pumping Station, with four narrow gauge rail road tracks running to the pump house and around and to the tanks. Off site to the south the “Kahului Rail Road Club House” is shown.

A 1927 Sanborn map shows only approximately 2/3 of the Parcel (west side). Three steel molasses tanks are shown as well as a steam powered pump house. To the east of the molasses pumping station a large 55,364-gallon crude oil tank is shown belonging to Standard Oil Company of California. A “sand dyke” is shown surrounding the tank, but there is no scale or volume of sand is noted. Several railroad tracks run to and around the Molasses Pumping Station and between the oil tank and the pumping station. An oil pump house is shown on the west side of the tracks south of the tanks. A “territorial right of way” borders the Site to the west. Off Site, on the west side of the Right of Way, a “round house”, “machine shop” and “car building” is shown as well as numerous rail road tracks. Adjacent the Site at the southern border, Standard Oil Company of

California has an area of gasoline and oil tanks, an oil warehouse, two 40-gallon chemical carts.

A 1945 Sanborn map shows the Parcel much as it was shown in the 1927, Sanborn map; however, several buildings associated with trucks and automobiles have been added to the southern portion of Parcel B, and these buildings remain today. Two 40,000-gallon steel oil ASTs with a five feet high "sand embankment" are shown on the property adjoining the Parcel to the west across the territorial right of way (currently named Hobron Avenue).

A 1975 Sanborn map, shows Parcel B and surrounding properties much as they were in 1945; however, a small AST appears to the west of the large Standard Oil crude oil tank on property owned by Maui Light and Power Company that adjoins and is surrounded on two sides (west and east) by Parcel B. A concrete wall separates the two properties (and ASTs), and a "dirt dike" surrounds the smaller AST. Maui Light and Power Company's steam-driven turbine generators, several steel tanks, boiler room and machine shop are shown and a switch yard building is shown to the north of the molasses pumping station adjoining the Site.

The 1980 and 1990 Sanborn maps are essentially identical and show no discernible changes from the 1975 map with the exception of the name change to the adjoining Standard Oil tank farm to the south, which is now called Chevron U.S.A, Inc.

The large bulk "oil" ASTs located on and adjacent to Parcel B indicated on the historic maps and photos since at least 1927 are RECs.

#### 2.3.4 Environmental Liens

Searching for environmental liens is a user responsibility (Section 3.0). KSK did not conduct an environmental lien search (ELS). The User (State of Hawaii, Department of Transportation) was not aware of any environmental liens on the property.

#### 2.3.5 Tax Records

The Site is currently fee-owned by A&B Properties, Inc.

### **2.4 Previous Environmental Reports**

Several reports/documents have been prepared regarding environmental issues associated with, and adjacent to, the A&B Parcel B Site. The

following reports/documents were provided to KSK by A&B Properties, Inc. (other documents/files on record with HDOH are discussed below in Section 4):

- Letter Report from Harding Lawson Associates (HLA) to A&B Properties, dated October 13, 1999 - Discusses the release of "asphalt bitumen" in the Hale Nanea area
- *Site Assessment Work Plan*, Walker Consultants (WCL), dated August, 2000 – Lays out approach for soil and groundwater sampling at Tosco Black Oil AST area.
- Internal A&B Memo, dated August 18, 2000. Status report on Tosco Black Oil Tank soil and groundwater sampling.
- *Site Assessment Report*, WCL, dated October 2000 - Documents soil and groundwater sampling at Tosco Black Oil AST area and associated fuel loading rack at Parcel B boundary.
- *Site Assessment and Remedial Action Work Plan*, WCL, dated December 2000. Work plan for additional soil sampling at Tosco Black Oil Tank.
- *Supplemental Site Assessment Report*, WCL, dated April 2001 - Documents additional soil sampling at Tosco Black Oil Tank.
- Letter from WCL to HDOH HEER, dated September 1, 2001 - Proposes on-site reuse of petroleum-impacted soil at Tosco Black Oil AST.
- Hazardous Substance Release Report – Hale Nanea Asphalt Spill, January 24, 2006 (report included HDOH Notice of Interest (NOI) dated October 17, 1998, A&B response to NOI (November 5, 1998) and 10/13/1999 HLA report.
- Letter from KTS to Olekoi Corp (Parcel B tenant) dated July 14, 2009 - Identifies environmental "issues of concern" abandoned by Olekoi at former Olekoi Area of Parcel B.
- Letter from A&B to Solid & Hazardous Waste Branch's (SHW) dated October 23, 2009 - Notifies HDOH SHW of planned waste cleanup activity at the Olekoi area.
- HDOH SHW to A&B, October 29, 2009 – Issuance of provisional RCRA ID number for "Olekoi Area" solid waste cleanup.
- A&B to HDOH HEER, December 17, 2009 - Reports release of unknown petroleum to soil at former Olekoi area of Parcel B.
- Letter report from A&B's Sean O'Keefe to HDOH Solid & Hazardous Waste Branch's (SHW) Steven Chang dated May 4, 2010 - Documents removal of solid waste from Olekoi area of Parcel B.

- Letter report from A&B's Sean O'Keefe to HDOH SHW's Steven Chang dated July 8, 2010 – Updates on removal of solid waste from Olekoi area of Parcel B.
- NOI from HDOH SHW to A&B dated February 9, 2011 - Notice of interest and non-compliance due to solid waste accumulation at Parcel B.
- Letter from A&B to HDOH SHW, dated July 7, 2011 - Documents completion of removal and disposal of solid waste from Olekoi Area of Parcel B.
- Letter of No Further Action (NFA) ruling from HDOH SHW to A&B dated July 22, 2011.

The following additional report was prepared by KSK in 2009:

- *Limited Site Assessment Report, Alexander & Baldwin Acquisition Parcels A, B & C at Kahului Harbor. A: 101 E. Kaahumanu Ave., B: 180 Hobron Ave., C: 63 Amala Place, Kahului, Maui, Hawaii.* Kevin S. Kennedy Consulting, LLC, June 5, 2009.

These Parcel B and adjacent site reports are discussed below.

#### 2.4.1 Letter Report HLA to A&B Properties, 10/13/1999.

This letter report discusses the release of “asphalt bitumen” in the “Hale Nanea area”, located in the northern end of the center of Parcel B. HLA reported asphalt material was released to the soil from older ASTs operated by Hawaiian Bitumuls and Paving. Hawaiian Bitumuls, which formerly operated two 12-foot diameter asphalt ASTs in this area of Parcel B, one five feet tall and one 20 feet tall<sup>1</sup>. The release occurred from a tank licensed to Rainbow Sand Blasting & Hauling. “Pits and berms were dug to control the spill”. HLA also reported that “in the past, there have been previous spills of the bitumen or similar materials from the tanks at the Hale Nanea Site”<sup>2</sup>

On October 19, 1998 HLA collected samples of the spilled asphalt tar for laboratory analysis and reported that total petroleum hydrocarbons (TPH) as diesel (TPH-D) and as oil (TPH-O) were detected at 45,000 mg/kg and 2230,000 mg/k, respectively but that none of the four HDOH-regulated

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<sup>1</sup> The remains of one of these tanks is still present at Parcel B and still contains remnant bulk asphalt/tar. The other tank has been demolished and is no longer present at Parcel B.

<sup>2</sup> HLA refers to the Hale Nanea area. This area of Parcel B is the former location of Hawaiian Bitumuls and Paving asphalt plant and bulk asphalt tar storage located to the west of the current Hale Nanea Area, in the center of the northern end of Parcel B.

polynuclear aromatic hydrocarbons (PAHs) were detected. HLA therefore concluded that the asphalt material spilled “was generally non-hazardous according to EPA classifications”.

From November 4 - 11, 1998 Hawaiian Bitumuls “excavated and removed the spilled bitumen, the bitumen remaining in the leaking tank, removed the tank and re-graded and surfaced the area with crushed rock.” The excavated spilled bitumen and affected soil were mixed with 250 tons of imported soil and transported, along with the demolished tank, to the Ameron International Corporation Quarry where it was recycled in Hawaiian Bitumuls asphalt batch plant. HLA concluded that the spill and impacted soil “had been satisfactorily cleaned up”.

#### 2.4.2 Site Assessment Work Plan, WCL, 8/2000

This work plan was prepared by Walker Consultants for the Tosco Refining Company and lays out the approach for the collection of 18 soil and one groundwater grab samples at Tosco Black Oil AST area, located immediately north of Parcel B at the Parcel boundary, between the western and central “wings” of the W-shaped Parcel B apparently in response to a tank or associated pipeline release.

#### 2.4.3 Internal A&B Memo, 8/18/2000

This internal A&B memo provided a status report on WCL’s Tosco Black Oil Tank soil and groundwater sampling. The memo reported that the Tosco Black Oil tank than been “emptied, cleaned and inspected”. This memo also noted that additional surface and subsurface oil contamination was found at the loading rack associated with the Tosco Black Oil tank that is located on Parcel B, near the molasses tanks.

#### 2.4.4 Site Assessment Report, WCL, 10/2000

This Site Assessment Report, prepared by WCL for Tosco Refining Co., documented the collection of 53 soil samples from 28 locations (10 within and 17 outside of the AST) and two groundwater samples from areas of visibly stained soil at the off-Parcel Tosco Black Oil AST and at the associated fuel loading rack, located on Parcel B. The samples were analyzed for TPH as fuel oil. Fifteen of the soil samples “with the highest TPH results” were further analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) and PAHs.

WCL did not encounter free-phase oil and concluded that “impacted surface soil areas are apparently related to minor leak/spills associated

with the AST” and suspected that an associated buried pipeline may be responsible for the subsurface oil-impacted soil.

#### 2.4.5 Site Assessment & Remedial Action Work Plan, WCL, 12/2000

The work plan proposed the collection of an additional three soil and one additional groundwater samples at the Tosco Black Oil AST. This work plan also called for the excavation and off-site disposal and on-site stockpiling of oil-impacted soil.

#### 2.4.6 Supplemental Site Assessment Report, WCL, 4/2001

This supplemental site assessment report documents the collection and laboratory analysis of five additional soil samples at the Tosco Black Oil Tank. WCL concluded that TPH as fuel oil exceeded the HDOH Soil Action Level (SAL) in five samples and the PAHs benzo(a)pyrene and fluoranthene exceeded their respective HDOH SALs in one of the soil samples. WCL attributed the shallow oil-impacted soil to minor surface and near surface leakage/spillage associated with previous black oil AST operation and that “deeper impacts are attributed to a source unrelated to the Black Oil AST”

#### 2.4.7 Letter from WCL to HDOH HEER, 9/1/2001

This letter from WCL proposed the on-site reuse, as an earthen berm at the “tank farm” of petroleum-impacted soil at excavated at the Tosco Black Oil AST.

#### 2.4.8 Hazardous Substance Release Report – 1/24/2006

This report included an HDOH Notice of Interest (NOI) dated October 17, 1988, A&B response to the NOI (November 5, 1998) and the 10/13/1999 HLA report. This release report discusses the “release of asphalt bitumen in the Hale Nanea Area<sup>3</sup> of Kahului in October 1998” from the 17,000 barrel Tosco Black Oil AST located just north of Parcel B boundary between the Parcel B molasses tanks and former Olekoi AST.

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<sup>3</sup> See foot note No. 2, Page 15.

2.4.9 Letter from KTS to Olekoi Corp., 7/14/2009

This KTS letter identifies environmental “issues of concern” abandoned by Olekoi Corporation at the former Olekoi Area of Parcel B. Issues of concern cited included:

- 18 55-gallon drums, unlabeled, some leaking/leaked.
- Improperly stored cans of paints, solvents, resins, hardeners.
- Improperly stored “corrosive materials”.
- Various hazardous waste materials boat batteries, fluorescent light ballast potentially containing PCBs, TV/computer monitors and over 100 fluorescent light bulbs.
- 400 - 500 used appliances (refrigerators, freezers, A/C units).
- Various solid waste items including derelict vehicles and tires.

KTS demanded that Olekoi clean up these items within 60 days.

2.4.10 Letter from A&B to HDOH SHW, 10/23/2009

This letter from A&B notified HDOH SHW of A&B’s planned solid waste cleanup activity at the Olekoi area of Parcel B.

2.4.11 HDOH SHW to A&B, RCRA ID, 10/29/2009

This letter from HDOH SHW, in response to A&B’s October 23, 2009 notification of planned solid waste cleanup activity of the Olekoi area of Parcel B. HDOH SHW issued a provisional RCRA ID number HIP 000139451 for the planned cleanup activity.

2.4.12 A&B to HDOH HEER, Release Report, 12/2009

This Hazardous Substance Release Report submitted to HDOH HEER by Sean O’Keefe of A&B. The Release Notice documents the release of more than 25 gallons of “unknown petroleum” drum and reports that “soil visibly impacted by petroleum excavated and placed in two 55-gallon drums for storage pending disposal”.

2.4.13 Letter report from A&B to HDOH SHW, 5/4/2010

This letter report documents “corrective action”, consisting of the removal and offsite disposal/recycling of 400 – 500 used appliances, 86 used tires and a large industrial battery from the Olekoi area of Parcel B.

2.4.14 Letter report from A&B's HDOH SHW, 7/8/2010

This report provides an update to HDOH on the solid waste removal activities at the Olekoi area of Parcel B. The update indicated the additional removal of a boat and trailer.

2.4.15 NOI from HDOH SHW to A&B 2/9/ 2011

This NOI (Notice of Interest) was issued by HDOH SHW to A&B due to solid waste accumulation at Parcel B. The NOI indicated the illegal accumulation/storage/disposal of four vehicles, 10 refrigerators and approximately 100 cubic yards of scrap metal/lumber and miscellaneous debris

2.4.16 Letter from A&B to HDOH SHW, removal action, 7/7/2011

This letter documents that "Kahului Trucking & Storage has completed the removal and proper disposal of all solid waste from 59 Amala Place (Parcel B). The letter included recycling receipts from Schnitzer Steel and Maui Tire Recycling and disposal receipts from Central Maui Landfill and Maui Demolition and Construction Landfill.

2.4.17 NFA ruling from HDOH SHW to A&B, 7/22/2011

This NFA was issued by HDOH SHW to A&B for the solid waste cleanup activities at the Olekoi area of Parcel B.

2.4.18 Limited Site Assessment Report, A&B Parcels A, B & C, Kahului Harbor. KSK, 6/5/2009

This report, prepared by Kevin S. Kennedy Consulting, LLC (KSK) in 2009 for SSFM International, was conducted on three adjacent parcels, Parcels A, B and C at Kahului Harbor. The report presents the results (KSK's limited site assessment of three parcels of land in the Kahului Harbor area of Kahului, Maui, owned by Alexander and Baldwin (A&B). The three adjacent parcels were located in Kahului, Hawaii on the Island of Maui and were referred to as Parcels A, B and C and are all located in Kahului, Hawaii at the following addresses:

- Parcel A - 101 E. Kaahumanu Avenue; TMK (2) 3-7-010 Parcel 9.
- Parcel B - 180 Hobron Avenue; TMK (2) 3-7-011 Parcel 17, the same Parcel B that is the subject of this ESA.
- Parcel C, located at 63 Amala Place; TMK (2) 3-7-11 Parcel 13.

KSK's limited site assessment, conducted on May 13, 2009, consisted of "a visual site reconnaissance of the property only and was not a Phase I Environmental Site Assessment (ESA) and was not performed in general accordance with the United States Environmental Protection Agency (EPA) 'All Appropriate Inquiry Final Rule' (40 Code of Federal Regulations (CFR) Part 312), or the American Society for Testing and Materials (ASTM) 'Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process'" (ASTM E1527-05). KSK reported that they did not have access to the interior of many of the site's structures and tenant businesses and no personnel interviews were conducted and no historic records were researched regarding current or past operations or activities at any of the three parcels.

KSK's limited site assessment revealed evidence of recognized environmental conditions (RECs) on all three parcels. The RECs identified by KSK on Parcel B included:

- Bulk petroleum product storage and use inside the KTS Service Shop
- The storage of 55-gallon drums of used oil at the KTS used oil storage area.
- Former auto engine repair tenant business.
- The above ground fuel storage tank at the tenant business Rainbow Hauling and Excavation.
- The BEI Hawaii agrichemical above ground storage tank farm.
- The parking of the Action Fuel petroleum tanker trucks near the BEI Hawaii tank farm.
- The north-south buried petroleum pipelines running along the eastern side of Hobron Avenue.

The following RECs were identified by KSK on adjacent parcels A (to the West of Parcel B, across Hobron Avenue) & C (to the east of Parcel B) and would therefore constitute off-site RECs relative to Parcel B:

*Parcel A*

- A pad-mounted electrical transformer adjacent to the Center Bulk Sugar Storage Warehouse.

- The Tesoro bulk fuel loading rack located in the northeast corner of Parcel A.
- A pad-mounted electrical transformer located at the base of the sugar conveyor trestles at the extreme northwest corner of Parcel A.

*Parcel C*

- An above ground (possibly fuel) storage tank at the Maui Crane Service storage area.
- Sandblasting and spent sandblast grit at the Maui Sandblasting tenant business.
- Petroleum fuel tanker parked at the Maui Sandblasting tenant business.
- The 500-gallon above ground fuel storage tank at the Aloha Recycling tenant business.
- Engine tooling machine shop at Pat's Cylinder Head Repair and Tire tenant business.
- Stored generators.

KSK identified RECs on properties immediately adjacent to the three Parcels. These identified off-site RECs included:

- The Tesoro bulk petroleum product storage tank farm north of Parcel A.
- The buried pipelines running north-south along the eastern side of Hobron Avenue extend beyond the northern and southern boundaries of Parcel B and are therefore an off-site REC.
- The Maui Electric Kahului Power Plant located to the north of Parcel B contains large above ground bulk fuel storage tanks and associated above ground fuel pipelines. These fuel tanks and associated pipelines are an off-site REC.

KSK identified a few other items/areas at the three parcels that did "not necessarily constitute a REC and pose no real environmental risk or threat to the Site but are worth noting". These additional items identified by KSK were:

- Numerous older trucks, heavy equipment and miscellaneous equipment stored and/or abandoned throughout Parcel B. KSK was not able to discern if these items were in use or abandoned.

- Several shipping containers used at various tenant businesses throughout Parcel B and C. KSK was not able to gain access to the interior of most of these containers and therefore has no knowledge of the contents.
- Several of the tenant businesses on Parcels B and C are industrial in nature and therefore may employ, and possibly store, even if not observed by KSK, various chemicals, paints and petroleum products in such quantities that if spilled or leak could result in an environmental release.

These on- and off-site RECs reported by KSK constitute current on- and off-site RECs.

#### 2.4.19 Report Review Summary

The previous environmental documents and reports for Parcel B discussed above indicated the presence of following current and historic RECs at and near Parcel B:

- Bulk fuel storage and fuel oil pipelines at the off-Parcel Tosco Black Oil tank that run to a former fuel loading rack on Parcel B.
- Former operation of, past oil releases and oil-impacted soil at the former fuel loading rack on Parcel B associated with the adjacent, off-parcel, Tosco Black Oil AST.
- Former asphalt plant operations and current asphalt bitumols/tar-impacted soil and the tar-containing remnant partial AST in the former Hawaii Bitumols area.
- Possible soil contaminants from appliance waste piles, junked vehicles, “leaking drums, improperly stored cans of paints and solvents and various hazardous media” in the Olekoi area of Parcel B (KTS, 2009).
- Possible heavy metal contaminants due to sand blasting at a former Rainbow Hauling and Sand Blasting business located in the Olekoi area.
- Those RECs listed by KSK in 2009 (KSK, 2009) identified in Section 2.4.18 above including:
  - Bulk petroleum product storage and use inside the KTS Service Shop;
  - The storage of 55-gallon drums of used oil at the KTS used oil storage area;

- Former auto engine repair tenant business;
- The above ground fuel storage tank at the tenant business Rainbow Hauling and Excavation;
- The BEI Hawaii agrichemical above ground storage tank farm;
- The parking of the Action Fuel petroleum tanker trucks near the BEI Hawaii tank farm;
- The north-south buried petroleum pipelines running along the eastern side of Hobron Avenue.

### 3.0 USER PROVIDED INFORMATION

ASTM E1527-05 outlines the responsibilities of the user (*i.e.* the user of this Phase I ESA report, in context of completing a Phase I ESA. A user is defined as *the party seeking to use the Phase I ESA to complete an environmental site assessment of a property. A user may include a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager* (ASTM E 1527-05). In line with this definition, KSK regards the user as the person/organization hiring KSK to conduct this Phase I ESA. In the case of this Phase I ESA, The State of Hawaii, Department of Transportation, Harbors Division, represented by DOT Harbors Project Manager Ms. Sharilyn Ikeda, is the User. As part of completing a Phase I ESA, the User has the following duties:

- Review title and judicial records to identify environmental liens or Activity and Use Limitations (AULs), if any, that are currently recorded against the property.
- Communicate to KSK, in advance of the site reconnaissance, any specialized knowledge or experience of the user that is material to RECs.
- Communicate to KSK, in advance of the site reconnaissance, any actual knowledge or any environmental lien or AULs encumbering the property or in connection with the property.
- Consider the relationship of the purchase price of the property to the fair market value of the property if the property was not affected by hazardous substances or petroleum products.
- Communicate to KSK, in advance of the site reconnaissance, any commonly known or reasonably ascertainable information within the local community about the property that is material to RECs in connection with the property.
- Make known to KSK the reason why the user wants to have the Phase I ESA performed.

The State of Hawaii Department of Transportation, Harbors Division is the ultimate User of the ESA. KSK interviewed DOT Harbors Project Manager Ms. Sharilyn Ikeda as the User and completed a User questionnaire regarding user responsibilities associated with the Phase I ESA. As a Project Manager for DOT Harbors, Ms. Ikeda qualifies as the

“User.” A copy of Ms. Ikeda’s User (client) interview form is included in Appendix C.

Ms. Ikeda reported to KSK that the reason for conducting the Phase I ESA was part of DOT Harbors due diligence prior to potentially purchasing the property from A&B Properties as part of the State of Hawaii’s expansion of the state’s Kahului Harbor facilities.

Ms. Ikeda reported to KSK that she was not aware of any environmental issues or concerns with the property, other than the Parcel’s current and past use for heavy industrial activities.

Ms. Ikeda was not aware of any environmental Cleanup Liens or Activity and Use Limitations associated with the property and was not aware of any indications of possible contamination at the Site other than what may possibly be associated with heavy industrial activity.

None of Ms. Ikeda’s interview responses, other than her indication of the Site’s former use industrial properties indicated a recognized environmental condition, or REC.

Searching for environmental liens is a user responsibility, and KSK did not order an Environmental Lien Search (ELS) report. Ms. Ikeda’s interview responses indicated that she was not aware of any environmental liens associated with the property.

It is KSK’s opinion that the user (client), State of Hawaii, Department of Transportation, Harbors Division., represented by Ms. Sharilyn Ikeda, met all user responsibilities for this Phase I ESA, as described in ASTM E 1527-05.

## 4.0 RECORDS REVIEW

KSK reviewed state and federal regulatory agency records for information on known or potential sources of hazardous waste, petroleum products, or other RECs at or near the Site. The following records and lists were reviewed for sites within the ASTM specified minimum search distance from the A&B Parcel B Site located at 180 Hobron Avenue, Kahului, Maui, Hawaii at the coordinates Latitude: 20° 53' 44.03" N, Longitude: 156° 27' 43.71" W. A detailed discussion of each of the types of records/lists shown below is provided in the EDR federal and state environmental database report included as Appendix B.

### Sites Within One Mile of Parcel B

- Environmental Protection Agency (EPA) National Priority List (NPL).
- Proposed NPL sites.
- Delisted NPL Sites.
- Resource Conservation and Recovery Act (RCRA) Corrective Action Site (CORRACTS) List.
- DOD (Department of Defense) facilities.
- FUDS (Formerly Used Defense Sites).
- Sites with Superfund Consent Decrees.
- Sites with EPA Records of Decisions.
- Hawaii State Department of Health (HDOH) State Hazardous Waste Sites (SHWS).
- HDOH Release List.

### Sites Within 0.5 Mile of Parcel B

- Federal Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List.
- CERCLIS No Further Remedial Action Planned (NFRAP) List.
- EPA Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and/or Disposal (TSD) Facilities List.
- Land Use Control Information System.

- Open Dump Inventory.
- HDOH Landfill and/or Solid Waste Disposal Site Lists.
- HDOH leaking underground storage tank (LUST) List.

#### **Sites within 0.25 Mile of Parcel B**

- RCRA Large Quantity Generators List.
- RCRA Small Quantity Generators List.
- Mines Master Index File.
- RCRA Conditionally Exempt Small Quantity Generators.
- RCRA Non-generators.
- HDOH Underground Storage Tank (UST) list.

#### **On Parcel B and Adjoining Properties**

- CERCLA Lien Information.
- HDOH Registered UST List.
- RCRA Generators List.

#### **On Parcel B**

- Federal Emergency Response Notification System (ERNS) List.
- Federal Superfund Liens Sites.
- EPA Institutional Controls and Engineering Controls Lists.
- HDOH Institutional Control and Engineering Control Lists.
- HDOH Voluntary Response Program List.
- HDOH Brownfields List.

#### **4.1 EPA NPL**

There are no NPL, proposed NPL or delisted NPL sites listed on or within one mile of Parcel B (EDR, 2011c; Appendix B).

#### **4.2 EPA RCRA CORRACTS Facilities List**

There are no RCRA CORRACTS facilities listed on the EDR as being within one mile of Parcel B (EDR, 2011c; Appendix B).

#### **4.3 DOD/FUDS Sites**

There are no listed DOD or FUD sites on or within one mile of the Site (EDR, 2011c; Appendix B).

#### **4.4 Federal Consent/ROD Sites**

There are no Superfund Consent Decrees or EPA Record of Decision sites on or within one mile of Parcel B (EDR, 2011c; Appendix B).

#### **4.5 HDOH SHWS List**

The state HDOH SHWS list indicated that there are two SHWS sites listed within one mile of the Parcel B. The attached EDR report (Appendix B) lists 17 SHWS sites listed in the attached EDR report. The following are sites listed within ½ mile of Parcel B (EDR, 2011c, Appendix B):

- Aloha Glass Recycling, Inc, 75 Amala Place, Kahului, Maui:
  - Permit for solid waste on file.
- Reynolds Recycling, Inc, 140 Hobron, Kahului, Maui:
  - Permit for solid waste on file.
- Chevron Products Company Kahului Terminal, 100 Hobron Avenue, Kahului, Maui:
  - Case number: 19880111-2;
  - Transmix (petroleum) spill (250-gallons);
  - No cleanup. No Further Action determination (NFA) not on file;
  - Case number: 19950413;
  - Underground diesel leak found during excavation (50-gallons);
  - No NFA on file;
  - Case number 19941104;
  - Diesel fuel spill from pipe flange onto soil (500-gallons);
  - Cleanup initiated. No NFA on file;
  - Case number: 19960105-1339;

- Gasoline spill (80-gallons);
- No NFA on file;
- Case number: 19960105-1340;
- Gasoline spill (SHWB reports 294-gallons, EDR reports 400-gallons);
- No NFA on file.
- Bird Builders, Amala Place, Kahului, Maui:
  - Site status is 'on-going', but no other information was available for this site.
- Kanaha Pond East, Amala Place, Kahului, Maui:
  - Aka, King's Towing, F&M Contractors, E & E Black Contractors, Smile's Junkyard;
  - NFA – Unrestricted Residential Use 7/2/2001.
- Tosco Bulk Plant Number 0323, 76 Hobron Avenue, Kahului, Maui:
  - NFA (type undetermined) 3/10/2004;
  - No other information was available for this site.
- VIP Warehouse, 74 Hobron Avenue, Kahului, Maui:
  - Release number: 900004, date 10/9/89;
  - Crude oil spill (amount unknown);
  - Status 'on-going' (no NFA on file);
  - Case number: 19920426;
  - Diesel fuel spill (unknown amount);
  - No other information on file for this site (no NFA on file).
- Hobron Avenue Area (Kahului), 60 Hobron Avenue, Kahului, Maui:
  - Case number: 19941103-2;
  - Aka Shell Terminal Kahului;
  - Diesel fuel spill (500-gallons);
  - No NFA on file.
- IMF (Intermediate Maintenance Facility), 261 Amala Place, Kahului, Maui:
  - Site status is 'on-going' -no other information was available for this site.

- Honey Bee Infestation, 281 Amala Place, Kahului, Maui.
  - Release number: 990117, case number: 19980721-1400;
  - The environmental interest is listed by EDR as Kahului Wastewater Reclamation facility 30-gallon diesel release;
  - SHWB records indicate that the release was discovered during UST removal operations and it believed to be due to tank overfills;
  - There may be two incidents, but this cannot be definitively be determined;
  - NFA 8/29/2000 (SHWB) and 2/28/2001 (EDR).
- Young Brothers Kahului, 65 Wharf Street, Kahului, Maui:
  - Case number: 19990923-1741;
  - Solvent spill (780-gallons);
  - No NFA on file;
  - Case number: 19981014-1725;
  - Diesel release (50-gallons);
  - Assignment end date 10/16/1998;
  - Case number: 20020826-1000;
  - Used oil release (350-gallons);
  - Assignment end date 3/24/2003;
  - Case number: 20090123-0921;
  - Diesel fuel release (ten gallons);
  - No NFA on file;
  - Release number 000089;
  - Gasoline release discovered during UST removal operations;
  - NFA 5/16/2003;
  - May 2003, a tar-like substance was found during closure of ground water monitoring well, but not believe to be related to prior UST release;
  - NFA (type undetermined) 8/6/2004.

Given the location of these SHWS sites relative to Parcel B, the lack of information in the HDHO files and the lack of NFA rulings KSK considers the following SHWS sites as off-site RECs that could potentially pose an environmental risk to Parcel B via groundwater transport:

- Chevron Products Company Kahului Terminal, 100 Hobron Avenue, Kahului, Maui.
- Tosco Bulk Plant Number 0323, 76 Hobron Avenue, Kahului, Maui.
- VIP Warehouse, 74 Hobron Avenue, Kahului, Maui.
- Hobron Avenue Area (Kahului), 60 Hobron Avenue, Kahului, Maui.
- Young Brothers Kahului, 65 Wharf Street, Kahului, Maui.

#### 4.6 HDOH HEER Release List

There are six sites with releases listed on the HDOH Release List within 1/2 mile of the Site (HEER, 2011).

- Chevron Products Company Kahului Terminal, 100 Hobron Avebnue, Kahului, Maui:
  - Case number: 19880111-2;
  - Transmix (petroleum) spill (250-gallons);
  - No cleanup. No Further Action determination (NFA) not on file;
  - Case number: 19950413;
  - Underground diesel leak found during excavation (50-gallons);
  - No NFA on file;
  - Case number: 19941104;
  - Diesel fuel spill from pipe flange onto soil (500-gallons);
  - Cleanup initiated. No NFA on file;
  - Case number: 19960105-1339;
  - Gasoline spill (80-gallons);
  - No NFA on file;
  - Case number: 19960105-1340;
  - Gasoline spill (SHWB reports 294-gallons, EDR reports 400-gallons);
  - No NFA on file.
- Hobron Avenue Area (Kahului), 60 Hobron Avenue, Kahului, Maui:
  - Case number: 19941103-2;

- Aka Shell Terminal Kahului;
- Diesel fuel spill (500-gallons);
- No NFA on file.
- Kahului Wastewater Reclamation Facility, 281 Amala Place, Kahului, Maui:
  - Release number: 990117, case number: 19980721-1400;
  - 30-gallon diesel release;
  - SHWB records indicate that the release was discovered during UST removal operations and it believed to be due to tank overfills;
  - There may be two incidents, but this cannot be definitively be determined;
  - NFA 8/29/2000 (SHWB) and 2/28/2001 (EDR).
- Young Brothers Kahului, 65 Wharf Street, Kahului, Maui:
  - Case number 19990923-1741;
  - Solvent spill (780-gallons);
  - No NFA on file;
  - Case number: 19981014-1725;
  - Diesel release (50-gallons);
  - Assignment end date 10/16/1998;
  - Case number 20020826-1000;
  - Used oil release (350-gallons);
  - Assignment end date 3/24/2003;
  - Case number: 20090123-0921;
  - Diesel fuel release (ten gallons);
  - No NFA on file.
- Maui Electric Company, 200 Hobron Lane, Kahului, Hawaii:
  - Case number: 19960608-2302;
  - Oil leaked into containment structure due to tank corrosion (100-gallons);
  - No NFA on file.

Although all of the listed releases occurred more than 12 years ago, most have no NFA ruling on file indicating possible on-going cleanup activities. KSK considers the following off site releases as off-site RECs that could potentially impact Parcel B via groundwater transport:

- Chevron Products Company Kahului Terminal, 100 Hobron Avenue, Kahului, Maui.
- Hobron Avenue Area (Kahului), 60 Hobron Avenue, Kahului, Maui.
- Young Brothers Kahului, 65 Wharf Street, Kahului, Maui.
- Maui Electric Company, 200 Hobron Lane, Kahului, Hawaii.

#### **4.7 EPA CERCLIS/NFRAP Sites**

There are seven listed CERCLIS or NFRAP sites on or within one half a mile of Parcel B (EDR, 2011c; Appendix B):

- King's Towing, Amala Place, Kahului, Maui.
- Smile's Junk Yard, Amala Place, Kahului, Maui.
- Kanaha Pond East, Amala Place, Kahului, Maui.
- Rainbow Hauling, Amala Place, Kahului, Maui.
- E & E Black Contractors, Amala Place, Kahului, Maui.
- Kanaha Pond West, 261 Amala Place, Kahului, Maui.
- Bird Builders, 261 Amala Place, Kahului, Maui.

Given the NFRAP status and relative location to Parcel B KSK does not consider these listings as posing environmental threats to Parcel B.

#### **4.8 EPA RCRA TSD Facilities List**

There are no listed RCRA TSD facilities located on or within half a mile of Parcel B (EDR, 2011c; Appendix B).

#### **4.9 HDOH Landfill and/or Solid Waste Disposal Site Lists**

There are no permitted landfills or solid waste disposal sites located on or within half a mile of Parcel B (EDR, 2011c; Appendix B).

#### **4.10 HDOH Leaking UST List**

The state HDOH LUST list indicated that there are nine LUST sites located within ½ mile of the subject Site (EDR, 2011c; Appendix B).

- Tropical Rent A Car, 41 Hana Highway, Kahului, Maui:
  - Release number: 940046;

- Two gasoline USTs (1000-gallon and 3000-gallon) and two diesel USTs (4000-gallon and 6000-gallon);
- Permanently out of use 12/14/1993;
- NFA 10/7/1994.
- VIP Food Service, (address unknown):
  - Release number: 900004; date 10/9/89;
  - Cude oil release (unknown amount);
  - No other records or documentation available for this site.
- Alamo Rent a Car Incorporated, 40 South Hana Highway, Kahului, Maui:
  - Release number: 920021;
  - Two used oil USTs (1000-gallon and 550-gallon) and one 2000-gallon gasoline UST;
  - Permanently out of use 10/21/1991;
  - NFA 2/11/1994.
- Kahului Wastewater Reclamation Facility, 281 Amala Place, Kahului, Maui:
  - Release number: 990117;
  - One 12,000-gallon diesel UST and one 700-gallon used oil UST;
  - Permanently out of use in 1998;
  - NFA 8/29/2000.
- Kahului Sewer Pump Station, Hana Highway and Hobron Avenue, Kahului, Maui:
  - Release number: 990039;
  - One 1500-gallon diesel UST;
  - Permanently out of use 10/9/1998;
  - NFA 4/19/2001.
- Island Dodge Honda, 110 South Hana Highway, Kahului, Maui:
  - Release number: 930067;
  - Two gasoline USTs (1000-gallon and 2000-gallon), one 2000-gallon used oil UST and one 500-gallon UST containing a 'hazardous substance.';
  - All permanently out of use by 1997;
  - NFA 9/25/1998.

- AMFAC Distribution Hawaii, Inc, 150 Hana Highway, Kahului, Maui:
  - Release number: 900073;
  - One diesel UST and one Gasoline UST of unknown capacity;
  - Permanently out of use 5/8/1990;
  - NFA 10/19/2001.
- Goodyear Auto Service Center, 121 Alamaha Street, Kahului, Maui:
  - Release Number: 950128;
  - One 250-gallon used oil UST;
  - Permanently out of use 8/20/1995;
  - NFA 7/5/1996.
- Island Movers, Inc, 172 Alamaha Street, Kahului, Maui:
  - Release number: 960047;
  - Two 1000-gallon gasoline USTs and one 1000-gallon diesel USTs;
  - Permanently out of use 6/25/1996;
  - NFA 5/9/2000.
- Young Brothers, LTD, Pier 2, Kahului Maui:
  - Release number: 000089;
  - One 1000-gallon gasoline UST;
  - Permanently out of use 9/30/1989;
  - NFA 5/16/2003.

Due to the location of the listed LUST site and/or a NFA ruling from HDOH for all but one of the sites, KSK does not consider any of the listed LUST sites as posing an environmental threat to Parcel B.

#### **4.11 HDOH UST Section Database Listing**

There are no known USTs on Parcel B nor were any listed with HDOH. The following two listed USTs are located within one-quarter mile Parcel B (EDR, 2011c; Appendix B):

- Maui Oil Company, Inc, 16 Hobron Avenue, Kahului, Maui:

- Two 6000-gallon gasoline USTs, one 8000-gallon diesel UST, two 4000-gallon USTs of unknown contents, and one 280-gallon UST of unknown contents;
- The 280-gallon UST and one 4000-gallon UST of unknown contents is permanently out of use. The remaining tanks are currently in use.
- Tropical Rent A Car, 41 Hana Highway, Kahului, Maui:
  - Release number: 940046;
  - Two gasoline USTs (1000-gallon and 3000-gallon) and two diesel USTs (4000-gallon and 6000-gallon);
  - Permanently out of use 12/14/1993;
  - NFA 10/7/1994.

Given the location of these UST sites relative to Parcel B and/or closed status or NFA ruling, KSK does not consider either of the two listed UST sites as posing an environmental threat to Parcel B.

#### **4.12 EPA RCRA Generators List**

There are no small or large, conditionally exempt or non-generator RCRA generators on site.

There are four small quantity generators listed within one quarter mile of the Parcel (EDR, 2011c; Appendix B):

- Tosco Maui Bulk Plant 0323, 76 Hobron Avenue, Kahului, Maui.
- Kahului Trucking and Storage, 140 Hobron Avenue, Kahului, Maui.
- Tesoro Hawaii Corporation, 140 Hobron Avenue Unit A, Kahului, Maui.
- Kahului Generating Station, 200 Hobron Avenue, Kahului, Maui.

There is one conditionally exempt small quantity generator listed within one quarter mile of the Site (EDR, 2011c; Appendix B):

- Shell Oil Products US Kahului Terminal, 60 Hobron Avenue, Kahului, Maui.

There is one large quantity generator listed within one quarter mile of the site (EDR, 2011c; Appendix B):

- Chevron Products Company Kahului Terminal, 100 Hobron Avenue, Kahului, Maui.

KSK considers all of these facilities, with the exception of the Kahului Trucking & Storage (this is the bulk sugar storage facility across Hobron Avenue from the Parcel) as off-site RECs, relative to the Parcel.

#### **4.13 EPA ERNS List**

Parcel B was not listed on the ERNS list (EDR, 2011c; Appendix B).

#### **4.14 Federal Lien Information**

There were no Superfund liens listed for Parcel B (EDR, 2011c; Appendix B).

#### **4.15 EPA Institutional Controls and Engineering Controls Lists**

Parcel B was not listed on the EPA Institutional Controls or EPA Engineering Controls List (EDR, 2011c; Appendix B).

#### **4.16 HDOH Voluntary Response Program List**

There are no Voluntary Response Program facilities listed on the EDR as located on or within a half mile of Parcel B (EDR, 2011c; Appendix B).

#### **4.17 HDOH Brownfields List**

There are no Brownfields properties located on or within a half mile of Parcel B (EDR, 2011c; Appendix B).

#### **4.18 HDOH Waste Water**

There is no HDOH-listed waste water facility on Parcel B though there are multiple septic and cesspool systems.

## 5.0 INTERVIEWS

KSK conducted interviews with the User of this ESA, a representative of the Parcel owner, several of the Parcel tenants and representatives from the Hawaii Department of Health regarding the Parcel.

### 5.1 Interviews with Persons Currently Familiar with the Site

#### 5.1.1 Current Site Owner – A&B Properties, Inc. – Sean O’Keefe

Sean O’Keefe is the Director of Environmental Affairs for A&B Properties. He has been with A&B for 18 years. KSK interviewed Mr. O’Keefe during the Parcel reconnaissance on December 20, 2011 and followed up with additional questions by phone on January 5, 2012. All of Mr. O’Keefe’s comments and answers to interview questions were recorded on an Environmental Site Assessment Questionnaire (copy included in Appendix B). Mr. O’Keefe also provided several environmental documents and reports relative to Parcel B for KSK to review on December 20, 2011 (discussed in Section 2.4, above).

Mr. O’Keefe reported that he was unsure of the exact age of the facilities at Parcel B but he believed the KTS building and facilities were built after 1941<sup>4</sup>. He noted that there is no hook-up to the county sewer system at the Parcel and the septic and cesspool systems are in place.

Mr. O’Keefe reported that there are no USTs on the parcel but that there are the following current and former ASTs:

- Four molasses ASTs (two out of use).
- The currently empty former oil/molasses AST in the Olekoi Area (former Standard Oil AST).
- Two asphalt tar ASTs, one now gone and one currently partially demolished, SE of the Olekoi Area of Parcel B (former Hawaiian Bitumuls and Paving ASTs).
- Tosco Black Oil AST (this AST is immediately adjacent to, but not on, Parcel B). The former fuel loading rack and pipelines associated with this AST are located on Parcel B.
- BEI Hawaii liquid fertilizer ASTs in the SE corner of the Parcel.

<sup>4</sup> The earliest Sanborn map (Appendix B) showing the KTS building is 1945.

- 500-gallon used oil AST within KTS Truck Maintenance & Repair Shop.

Mr. O'Keefe also reported that the following items are currently, or formerly, if noted, present on Parcel B:

- One oil/water separator currently adjacent to the KTS Truck Wash Area.
- Former junk yard (mostly refrigerators, appliances and some car bodies at the Olekoi AST area, since cleaned up by A&B.
- Paints, solvents, used oil and lubricants currently in use at the KTS Truck Maintenance and Repair Shop.
- Oil and fuel formerly stored in the Olekoi Area.
- Tar/asphalt formerly stored and remnant tar currently at the former Hawaiian Bitumuls asphalt plant area.
- Loose free tar still in the soil at the former Hawaiian Bitumuls asphalt plant.
- Oil-impacted soil currently stockpiled near the molasses tanks.
- Two 55-gallon drums of oil-impacted soil currently stored near the Olekoi AST.
- Fuel pipelines at the Tosco Black Oil Tank and associated fuel loading rack and along Hobron Avenue.

Mr. O'Keefe reported that there are no electrical transformers or hydraulic lifts at Parcel B. He also reported that in addition to the truck maintenance and repair work at the KTS Truck Maintenance and Repair Shop, repair work is probably conducted on cranes at the Maui Crane area of Parcel B and possibly also at the DeCoite Trucking area. He reported that there were no environmental law suits or active or on-going investigations at the Parcel. He reported that he was aware of past off-site releases of petroleum product at both the Chevron and Tesoro fuel tank farms/loading racks.

The current and former oil and asphalt ASTs, pipelines, the KTS Truck Maintenance and Repair Shop activities and usage petroleum product, paint and solvents there, the asphalt spill at the former Hawaiian Bitumuls area, stockpiled/stored oil-impacted soil, former junk yard, Maui Crane and DeCoite Trucking vehicle repair/maintenance operations and the offsite releases of petroleum reported by Mr. O'Keefe are all RECs on and relative to Parcel B.

5.1.2 Parcel B Tenant - Kahului Trucking & Storage (KTS) – Mr. Glen Wilbourn

Mr. Wilbourn is the Executive Vice President and General Manager of KTS and has worked at KTS for six years. KSK interviewed Mr. Wilbourn by telephone on December 16, 2011 and recorded all comments and answers to interview questions on an Environmental Site Assessment Questionnaire (copy included in Appendix B).

Mr. Wilbourn reported that KTS occupies the entire western half of Parcel B (see Figure 4). KTS is a trucking and storage company whose primary business is the trucking and transportation of molasses. The KTS maintenance/repair shop located at the Parcel also performs commercial truck maintenance and repair for paying customers in addition on its own trucks. Mr. Wilbourn reported that the KTS site at Parcel B has been in operation for over 100 years and provided railroad car maintenance and repair services for the Kahului railroad back in the 1930s<sup>5</sup>.

KTS has the following operations/facilities at Parcel B:

- Business operation and accounting offices.
- Truck Maintenance and Repair shop:
  - Bulk engine and lube oil storage;
  - Two solvent parts washing stations;
  - Hydraulic lifts (above grade, electric; no sub-grade lift cylinders).
- Truck wash area.
- Used oil storage.
- Two 10,000-ton molasses above ground storage tanks (ASTs)
- Two empty ASTs.
- Molasses pump and transfer station.
- Open areas for parking/storing truck and transport container chassis.

Mr. Wilbourn reported that there are no environmental reports for KTS but that they maintain environmental permits, a Spill Prevention and Countermeasures and Control Plan (SPCC) and material safety data sheets (MSDS) on site for the use and storage of used oil and petroleum products. He reported that KTS is connected to the Maui county water and uses a cess pool at the molasses tank area and a septic system at the service shop

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<sup>5</sup> Sanborn maps (Appendix B) indicate that railroad operations (roundhouse) were conducted to the west of Parcel B across Hobron Avenue on A&B's Parcel A.

area. Mr. Wilbourn reported that there was no storm water or other discharge from KTS. He reported that KTS has no grease traps, floor drains, sub-grade hydraulic lifts (above grade electric lifts only). Mr. Wilbourn reported that KTS has an oil-water separator in the truck wash area to catch any oil washed off trucks. He reported that KTS also has electrical transformers on site but he was unaware of the PCB status of the transformer oil.

Mr. Wilbourn reported that the KTS area of Parcel B was currently used for, and had been for the past 100 years, mechanical maintenance and auto repair. He was not aware of any spills of the engine oil, lube oil or solvents used at KTS and was not aware of any ponds or lagoons, soil stockpiles, waste debris or environmental cleanup or remedial actions or any environmental law suits associated with the Parcel. He reported that there is a 12-inch buried molasses pipeline in the molasses storage tank area and that he was aware of a buried Chevron fuel line that ran along Hobron Avenue.

Mr. Wilbourn's comments indicate RECs at the site in the form of current use and storage of bulk petroleum products, current and past truck maintenance and repair practices and the Chevron fuel pipeline running along Hobron Avenue.

#### 5.1.3 Parcel B Tenant - Fed Ex Ground – Mr. Steven Okada

Mr. Okada is the Station Manager for a small Federal Express Ground (FedEx) delivery/package warehouse. The FedEx facility at Parcel B is located within a small, roughly 10,000 square feet area, within the eastern wing of the KTS main building. KSK did not speak to Mr. Okada but was provided with his completed Questionnaire on December 21, 2011 by KTS personnel. Mr. Okada listed that he has been Station Manager for year and that he is only familiar with the warehouse space FedEx rents from KTS. Mr. Okada completed his questionnaire on December 16, 2011 (copy included in Appendix B).

Ms. Okada answered "not known", "not to my knowledge" or "not that I've seen" to almost every question on the KSK environmental questionnaire. Mr. Okada did report; however, that there are no floor drains in the FedEx leased space and wrote that "floor drain filled with concrete" and that there was an SPCC plan for the property ("yes, for FedEx protocol"). None of Mr. Okada's comments indicate a REC at the FedEx Ground area of Parcel B.

#### 5.1.4 Parcel B Tenant - BEI Tank Farm – Ms. Shirley Zhai.

Ms. Zhai is Regulatory Compliance Officer for BEI Hawaii and has responsibility for environmental affairs/issues for the company. Ms. Zhai has been in this role for the last 10 years. KSK interviewed Ms. Zhai by telephone on December 14, 2011 and recorded all comments and answers to interview questions on an Environmental Site Assessment Questionnaire (copy included in Appendix B).

Ms. Zhai reported that BEI tank farm, located in the extreme southeast corner of Parcel B is a bermed, AST farm used for storing liquid fertilizer, only. The tank farm contains three 15,000-gallon, one 17,000-gallon and three 110,000-gallon ASTs; however, only two tanks are in use. One of the 15,000-gallon tanks holds 10,000 gallons of “10-34-0” (ammonium phosphate fertilizer) and one of the 110,000-gallon tanks holds 25,000 gallons of “UAN 32” (ammonium nitrate and urea mix fertilizer).

Ms. Zhai reported that no environmental reports or permits are prepared for the regarding the tank farm other than the annual EPCRA (Emergency Preparedness and Community Right to Know Act) reporting to HDOH on what fertilizers and volume are stored there. Ms. Zhai reported that the BEI Tank Farm is connected to Maui county water but there is no sewer system connection there. All Tank Farm storm water runoff is contained because the Tank Farm is enclosed within a 4-foot high cinder block berm. Ms. Zhai reported that the Tank Farm has no grease traps, floor drains, hydraulic lifts, sumps, oil-water separators, electrical transformers. She was not aware of past use of the Site for mechanical maintenance, repair or construction shops or auto repair, junk yard or any other commercial operation.

Ms. Zhai was not aware of any pits, ponds, lagoons, soil or waste piles or wetlands at the Site. She reported that the only chemicals stored at the Site were the liquid fertilizers discussed above.

Ms. Zhai stated that runoff from other properties onto the BEI Hawaii area of Parcel B and was not likely because of the berm surrounding the Tank Farm. Also, Ms. Zhai was not aware of any past environmental violations, lawsuits or cleanup or removal actions related to the Site.

KSK considers the 35,000 gallons of liquid fertilizer stored at the BEI Hawaii area a REC due to its location relative the adjacent Mauoni Ponds.

#### 5.1.5 Parcel B Tenant - DeCoite Trucking – Mr. Richard DeCoite

Mr. DeCoite is the owner of DeCoite Trucking, a small trucking and construction company that uses a portion of Parcel B to park trucks, loaders and associated parts and construction equipment. KSK interviewed Mr. DeCoite by telephone on December 14, 2011 and recorded all comments and answers to interview questions on an Environmental Site Assessment Questionnaire (copy included in Appendix B).

Mr. DeCoite reported that DeCoite uses their area of Parcel B, located at the southeastern portion of Parcel B, to store and service trucks, loaders and other construction equipment. DeCoit has a few shipping containers at their area of Parcel B to store parts and equipment. DeCoite stores 200- to 300-gallons of oil and an additional 200- to 300-gallons of used oil in small above ground storage tanks for/from their equipment.

Mr. DeCoite reported that there are no environmental reports or permits related to their area of Parcel B. Mr. DeCoite reported that there is a connection to the Maui county water but there is no county sewer system connection in this area of Parcel B (DeCoite uses porta-potties). There is storm water runoff from the DeCoite area after heavy rain fall. Mr. DeCoite reported that DeCoite Trucking area has no grease traps, floor drains, hydraulic lifts, sumps, oil-water separators, electrical transformers. He was not aware of past use of the Site for mechanical maintenance, repair or construction shops or auto repair, junk yard or any other commercial operation, but reported that Kahului Trucking has been at the Parcel B area for years.

Mr. DeCoite was not aware of any pits, ponds, lagoons, soil or waste piles or wetlands at the Site and that no chemicals were stored at DeCoite Trucking other than oil and used oil.

Mr. DeCoite was not aware of storm water or spill runoff from other properties or of any past environmental violations, lawsuits or cleanup or removal actions related to the parcel.

DeCoite's oil storage and truck maintenance and repair activities at Parcel B are considered RECs.

#### 5.1.6 Parceo B Tenant - Maui Crane – Paul Kirby

Paul Kirby is the name provided to KSK by A&B as the contact for Maui Crane. KSK contacted Mr. Kirby by phone on multiple occasions but was

unable to schedule an interview with him or any other representative of Maui Crane.

5.1.7 Parcel B Tenant - Hale Nanea, Royal Order of Kamehameha I – Clifford Alakai'i

Clifford Alakai'i is the President of the Royal Order of Kamehameha I, a community/cultural organization that operates the Hale Nanea Community Center, a single story building and surrounding grounds, located at the water's edge at the extreme northeast corner of Parcel B. KSK interviewed Mr. Alakai'i by telephone on December 14, 2011 and recorded all comments and answers to interview questions on an Environmental Site Assessment Questionnaire (copy included in Appendix B).

Mr. Alakai'i reported that the Hale Nanea Community Center is a meeting place for community and cultural activities, hula classes, mens groups, Hawaiian culture classes and community group meetings. He reported that the building was used by the U.S. military as an officer's club during WWII.

Mr. Alakai'i reported that there are no environmental reports or permits related to the Hale Nanea area of Parcel B. He reported that there is a connection to the Maui county water and that the community center is connected to an on-site septic system. He reported that there is occasional minor flooding at portions of the area after heavy rain fall.

Mr. Alakai'i reported that the Hale Nanea area has no grease traps, fuel storage tanks, pipelines, floor drains, hydraulic lifts, sumps, oil-water separators, electrical transformers. He was not aware of past use of the area for mechanical maintenance, repair or construction shops or auto repair, junk yard or any other commercial operation, other than as an officer's club during WWII. He was not aware of any pits, ponds, lagoons or wetlands at the site but mentioned that there was drainage ditch/ponds adjacent to Hale Nanea to the east. He reported that there were no soil or waste piles at the Site and that no chemicals were stored at the site but believed that the site may have, at least partially, old construction debris buried as fill material.

Mr. Alakai'i was not aware of storm water or spill runoff from other properties or of any past environmental violations, lawsuits or cleanup or removal actions related to the parcel but thought it was possible that the community center building may contain lead based paint and asbestos-containing material since it is more than 60 years old.

None of Mr. Alakai'I's comments indicate a REC at the Hale Nanea area of Parcel B.

#### 5.1.8 Parcel B Tenant - Lengo Construction – Len Gomes

Mr. Gomes is the president/owner of Lengo Construction, located just south of the Hale Nanea Community Center at the eastern side of Parcel B. Mr. Gomes operates an office at the site where he manages his construction business. He also maintains a single shipping container for storage of construction material. Mr. Gomes subleases part of this area of Parcel B to the following four additional businesses:

- Cruiser Phil – a downhill bicycle rental business with associated bicycle repair shop.
- Maui Skimmer – a custom surf- and skim board manufacturer.
- Aloha Limousine – A limousine and taxi service (no auto repair or maintenance activities).
- BioBeetle/Maui Recycling – BioBeetle rents biofuel-powered Volkswagons (no repair or servicing activity). Maui Recycling accepts and stores recycled cans, bottles, paper for preparation for off-site recycling.

Mr. Gomes reported that there are no environmental reports or permits associated with this area of Parcel B. He reported that there is a connection to the Maui county water and that there is an on-site cesspool.

Mr. Gomes reported that there no grease traps, floor drains, hydraulic lifts, sumps, oil-water separators, electrical transformers or pipelines at his or sub-tenant businesses. He was not aware of past use of the area for mechanical maintenance, repair or construction shops or auto repair, junk yard, above- or below-ground fuel tank or any other commercial operation, other than those conducted by his sub-tenants. He was not aware of any pits, ponds, lagoons or wetlands. He reported that there were no soil or waste piles at the Site and that no chemicals were stored at the site but reported that junk cars were formerly dumped in the area and that he personally has hauled off and removed over 200 junk vehicles.

Mr. Gomes was not aware of storm water or spill runoff from other properties or of any past environmental violations, lawsuits or cleanup or removal actions related to his area of the Parcel.

None of Mr. Gomes comments indicate a REC at the LenGo Construction area of Parcel B, other than the former junk car disposal.

#### 5.1.9 Parcel B Tenant - Reynolds Recycling, Inc. – Georgie Juan

Georgie Juan is a Buyer for Reynolds Recycling. Reynolds Recycling occupies a small area in the southeast corner of Parcel B between the eastern end of the KTS main building and the BEI tank farm. KSK did not speak to Ms. Juan but was provide with her completed Questionnaire on December 21, 2011 by KTS personnel. Ms. Juan did not list what a Buyer position is or how long she has been associated with Reynolds Recycling. Ms. Juan completed her questionnaire on December 16, 2011 (copy included in Appendix B).

Ms. Juan answered “I don’t know” or “not to my knowledge” to every question so no new information was provided in her completed questionnaire.

None of Ms. Juan’s comments indicate a REC at the Reynold’s Recycling area of Parcel B.

## **5.2 Interviews with Regulatory and Other Agencies**

KSK called persons at various departments within the Hawaii Department of Health and other agencies to inquire about current agency involvement and/or concerns at or near the Site.

### 5.2.1 Hazardous Waste Section, SHWB, HDOH – Ms. Grace Simmons.

Ms. Simmons, Supervisor of the Hazardous Waste Section of the Solid and Hazardous Waste Branch of the Hawaii Department of Health was not aware of any ongoing investigations or current interest in Parcel B or Parcel B area by the Hazardous Waste Section of the Solid and Hazardous Waste Branch of HDOH.

### 5.2.2 HEER Branch, HDOH – John Peard

John Peard, is a Remediation Project Manager with the Hazard Evaluation and Emergency Response Branch (HEER) of the Hawaii Department of Health. Mr. Peard reported that HDOH is aware of bulk fuel storage and numerous fuel pipelines in and around Parcel B, and the entire harbor area, and reported that HEER is in the early stages of gathering information on properties around Kahului Harbor and believes there is a strong possibility that “co-mingled [fuel/oil] plumes” may be present on the shallow

groundwater in the area. Mr. Peard reported that HDOH has no immediate plans to investigate properties in the harbor area but that they are beginning to get organized to that end.

HDOH's belief and interest in the possible existence of "comingled [petroleum product] plumes" in the Kahului Harbor area is a REC relative to Parcel B.

### 5.2.3 Maui Fire Department – Capt. Paul Haake

KSK submitted a written request to the Maui Fire Department (MFD) requesting any records they may have on file for Parcel B regarding USTs, ASTs or other environmental issues or incidents. Captain Paul Haake provided KSK, via USPS Mail, copies of three Incident Reports relating to Parcel B. None of the three incidents cited in the MFD Incident Reports were on Parcel B. All were located across Hobron Ave on or near A&B Parcel A. The three incidents were:

- Incident 2001-0002527-000 – This incident, which occurred on August 7, 2001, at the Tesoro fuel storage facility (140A Hobron Avenue) and was a MFD response "for a smoke detector activation in rear lab area. No property damage. This incident was not on Parcel B and located at the "Tesoro fuel storage facility".
- Incident 2002-0001137-000 – This incident, which occurred on April 11, 2002, was a "fuel burner/boiler malfunction, fire confined" at 140B Hobron Avenue which was reported as the "warehouse area for HSI Electric". The incident was a small fire due caused when curing epoxy in an oven. No property damage. This incident was not on Parcel B. The Incident Report indicated that the incident was at HIS Electric at Tesoro at 140B Hobron Avenue.
- Incident 2007-0009358-000 - This incident, which occurred on December 11, 2007, was an "incinerator overload or malfunction, fire contained" at 140 Hobron Avenue. MFD dispatched fire engines to a "smoke alarm activation at Tesoro, upstairs". MFD found smoke coming out of a furnace at American Electric due to a "smoldering motor". Damage was estimated at \$30,000. This incident was not on Parcel B. The Incident Report indicated that the incident was at American Electric at Tesoro at 140 Hobron Avenue (which Google maps shows as being the location of the Matson shipped car parking lot.

None of the MFD off-site incidents constitute a REC at Parcel B.

## 6.0 SITE RECONNAISSANCE

KSK conducted a physical reconnaissance of Parcel B on December 20, 2011. Permission to access the Site, via a Right-Of-Entry agreement, was given by Mr. Glenn Wilbourn of KTS and Mr. Charles Loomis of A&B Properties, Inc. KSK was escorted by A&B's Director of Environmental Affairs Mr. Sean O'Keefe, A&B Properties representative Mr. Jason Koga and KTS's Mr. Mike Mendoza. All observations reported here are based on the Site's condition at the time of KSK's reconnaissance on December 20, 2011. All areas of the Site were accessible to KSK except the interiors of a few storage sheds and several shipping containers parked on Site used by KTS and the various other tenants for storage. The Site layout and surrounding area are shown in Figure 9. Specific items observed by KSK during the December 20, 2011 reconnaissance are shown in Figure 10. Photographs of the Site, taken during KSK's reconnaissance are included in Appendix A.

On December 20, 2011 KSK observed Parcel B to be an active industrial property that included KTS facilities and various subtenants. The primary KTS facilities and tenant operations included the following:

- KTS main building and operations which includes:
  - KTS business offices;
  - KTS Penske truck rental operations.
  - KTS Truck Maintenance and Repair Shop, truck wash and paint shop;
  - KTS truck parts storage;
  - Tenant business warehouse Federal Express Ground.
- KTS bulk molasses above ground storage tanks and associated pump station (with sub tenant Kaiwaa, a fiberglass ocean canoe manufacturer).
- Tenant businesses/operations which included:
  - DeCoite Trucking – a construction and trucking operation;
  - Maui Crane – a mobile crane service;

- Reynolds Recycling – a drop off and loading area for paper, plastic and cans recycling;
- BEI Hawaii liquid fertilizer AST tank farm;
- LenGo construction with the following sub-tenants:
  - Cruiser Phils – a down-hill bicycle tour business;
  - Aloha Limosine – a limousine service;
  - Maui Skimmers – a surf and skim board manufacture;
  - BioBeetle/Maui Recycling – a Volkswagen car rental and recycling business.
- Hale Nanea – a community center.

These business and tenant operations are discussed in detail below.

## **6.1 Kahului Trucking and Storage (KTS)**

KTS operations occupy the entire western half of Parcel B. The various KTS operations and activities are discussed separately below.

### **6.1.1 KTS Penske Rental Truck Parking**

Three Penske rental trucks were parked on a paved area at the extreme southwest corner of Parcel B, located near the corner of Hobron Avenue and Amala Place. These trucks are rented to paying customers and serviced in the KTS Truck Maintenance and Repair Shop (see below).

### **6.1.2 KTS Main Office and Service Shop Building**

This KTS office and Truck Maintenance and Repair Shop are located in the V-shaped steel-framed building in the extreme southwest corner of Parcel B, fronting both Hobron Avenue and Amala Place (Photos 1 & 2). The building contains administrative offices, the KTS truck Maintenance & Repair shop, parts warehouse, storage and tenant business Federal Express Ground.

### **6.1.3 KTS Offices**

The KTS offices are located in the center part of main KTS building and include administrative offices for KTS, the service shop, adjacent parcel bulk sugar operations and other administrative functions. The offices

contained typical office set ups of work space desks, chairs, computer systems, and conference and break rooms.

#### 6.1.4 KTS Truck Maintenance & Repair Shop

The KTS Truck Maintenance and Repair Shop is located at the northern end of the KTS building and occupies about one third of the building (Photos 3 - 9). The Shop is where KTS and paying customer's trucks are serviced and both light and heavy maintenance and repair work is done. The Shop is a large, open garage area with a concrete floor and seven service bays (Photos 3 & 4) on the eastern side of the building and three service bays on the northern end. A long work bench runs along the western interior wall of the shop (Photo 5). The shop has five electric truck hoists/lifts (without subgrade hydraulics) and a compressed air system to power pneumatic tools. The shop had all the equipment, tools and appurtenances of a typical heavy equipment and truck maintenance shop. KSK observed the following items within the KTS Truck Repair & Maintenance Shop:

- Several trucks, a front-end loader and a heavy tractor, within service bays undergoing maintenance or repair work (see Photo 4).
- Heavy-duty forklift (Photo 6).
- Welding equipment and associated acetylene tanks (Photo 7).
- Large air compressor.
- Portable truck battery jumper station.
- Several portable truck jacks.
- Used oil drain rack (Photo 8).
- Parts washing/cleaning rack with solvent collection tray (Photo 8).
- A 55-gallon steel drum labeled "KT&S Crushed Used Oil Filters" (Photo 8).
- One 55-gallon drum of lube grease (Photo 8).
- One approximately 500-gallon steel double-walled used oil tank (Photo 9).
- Fenced-in storage area with boxes of motor oil and antifreeze and 5-gallon poly containers of gasoline/diesel fuel.
- An elevated mezzanine with a single office space and parts storage cage.

KSK considers the current and historic use and storage of bulk petroleum products and solvent washers in the Service Shop a REC.

#### 6.1.5 KTS Truck Wash Area

The KTS Truck Wash Area is adjacent to the open covered work/truck parking area (Photo 10), located just to the east of the Truck Maintenance & Repair Shop. It is an open, uncovered concrete area surrounded on two sides by a concrete berm to direct wash water to an oil-water separator (Photo 11). A heated water pressure water is located in a shed just off to the side of the Wash Area and is used for washing trucks. Dirt and sludge washed from trucks is shoveled from the wash area and stored in drums kept within a caged area at the Truck Wash (Photo 12). KSK considers the Truck Wash Area and associated oil/water separator a REC.

#### 6.1.6 KTS Touch-Up Paint Work Shed

The KTS Paint Work Shed is a partially open corrugated aluminum shed across from the Truck Wash Area where small touch up work and truck wheels are painted after repair work.

#### 6.1.7 KTS Storage Sheds

The KTS Storage Sheds are a series of long, narrow interconnected corrugated aluminum storage shed building with several separate storage bays located directly behind the eastern arm of the KTS Main Office Building (Photo 13). Wooden pallets were stacked in this area. The southeastern end of the storage sheds are in disrepair and collapsing (Photo 14). KSK did not have access to the interior of the storage sheds.

#### 6.1.8 KTS Truck Parts Department and Parts Storeroom

The KTS Truck Parts Department is located in center of main KTS building adjacent to the Parts Store Room at the eastern arm of the building (Figure 5). The Parts Storeroom is a large open high-roof storage warehouse with rows of shelving and open storage areas for hundreds of truck parts. The Parts Store Room contained the following:

- Several shelves of neatly stored and organized truck parts such as air hoses, clamps, seals, oil filters, springs, valves, air filters and hundreds of miscellaneous small parts (Photo 15).
- Shelves of new truck wheel rims, headlights and brake pads (Photo 16).

- Truck batteries (within a controlled access fenced/cage area) (Photo 17).
- Pallet with 30+ 50-pound bags of oil absorbent.
- Pallet with cases of antifreeze (within a controlled access fenced/cage area).
- Engine/transmission parts.
- Miscellaneous truck equipment, parts and mechanic health & safety gear.

## **6.2 FedEx Ground Parcel Loading/Sorting Area**

The Fed Ex Ground Parcel Loading/Sorting Area is located in the center of the southern wing of the main KTS building between the Parts Storage Warehouse (Photo 18, Appendix A). It is an open warehouse space where Fed Ex parcels are temporarily stored, sorted and loaded on trucks for distribution on Maui.

## **6.3 Open Storage Area**

The KTS Open Storage Area exists behind (north of) both wings of the KTS building. This area is used for parking trucks, storing parts and equipment and has the long row of interconnected storage sheds. This area also provides the access route to the FedEx Ground warehouse portion of the KTS building (Photo 18). The KTS Open Storage Area extends to north beyond the northern end of the western wing of the KTS building towards the Molasses Tanks/Plants. Dozens of Matson container chassis are parked/stored in this northern open storage area (Photo 19). A stockpile of reportedly (A&B's Sean O'Keefe) petroleum-impacted soil, covered with plastic sheeting, is present in this area pending future off-site disposal (Photo 20).

The Open Storage Area also extends to the area just north of the western end of the KTS Storage Sheds (Photo 21) and includes miscellaneous equipment, parts, a work bench (Photo 22), storage container, junk piles, a trailered sail boat, fuel/oil storage including two 288-gallon oil ASTs and an approximately 350-gallon AST, (oil or fuel), contained inside a roll-off bin that is functioning as secondary containment and another fuel tank labeled "empty" (Photo 23).

KSK considers the stockpiled petroleum-impacted soil in the KTS Open Storage Area just southeast of the Molasses Tank Area is a REC as well as the fuel/oil ASTs.

#### **6.4 Former Olekoi & Hawaiian Bitumuls Area**

The former Olekoi and Hawaiian Bitumuls Area is located at the northern end of the center of Parcel B and includes a large (100 feet diameter and 30 to 40 feet high) open and empty former oil/molasses AST (former Standard Oil AST) (Photo 24) and the remains of smaller (50 feet diameter, 20 feet high) AST with no top about one fourth of the AST wall missing (Photo 25). The large AST was empty but had four large sail boats stored in side. The smaller partially demolished AST (former asphalt tar AST used by Hawaiian Bitumuls) was an apparent former asphalt tank as three to four feet of asphalt was still present in the bottom. A spill of asphalt apparently occurred in the past as asphalt is present in a low-lying portion of this area near the asphalt AST.

The shed and several smaller objects nearby shown in this area of Parcel B in the Google Earth image (Figure 4 & 9) were not present at the time of KSK's site reconnaissance. The area between the two ASTs appeared recently cleared with open, exposed sandy soil.

The former Standard Oil (Olekoi) AST, the spilled asphalt in soil and the remnant asphalt within the remains of the smaller, partially demolished AST are RECs in this area of Parcel B.

#### **6.5 KTS Molasses Plant and Storage Tank Area**

The Molasses Plant and Storage Tank Area is located at the extreme northwestern corner of Parcel B. This area contains four large (cylindrical above ground storage tanks (ASTs) (two 10,000-ton molasses ASTs<sup>6</sup> approximately 100 feet in diameter, 30-40 feet high), in use (Photo 26 & 27), two smaller empty ASTs that were not in use and one cubical, partially buried molasses transfer tank where the molasses-carrying trucks off-load molasses transported from the sugar mill (Photo 28). The ASTs are located adjacent to the Molasses Plant. A fiberglass canoe manufacture (Kaiwaa) leases a portion of the Molasses Plant (Photo 29).

Surface fuel piping from a former fuel loading rack associated with the adjacent, off-Parcel, former Tosco Black Oil AST is located adjacent to the southern-most molasses AST (Photo 30), at the Parcel boundary. A&B reports/documents (see Section 2.4.) show buried fuel lines running

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<sup>6</sup> Sean O'Keefe reported to KSK during the December 20, 2011 site reconnaissance that one of the large molasses ASTs had ruptured several years ago and molasses flowed onto the ground and covered a large portion of the molasses tank area.

from the Tosco Black Oil AST to the on-Site former loading rack and beyond beneath the northwestern wing of Parcel B (Figure 10).

This former fuel loading rack/station and associated pipelines which are likely still present and may contain residual fuel are current and historic RECs at the Parcel.

### **6.6 DeCoite Trucking**

DeCoite Trucking – DeCoite Trucking uses a large open area in the center of Parcel B, just north of the KTS Storage Shed, for parking various trucks and pieces of heavy equipment, shipping containers used for equipment/materials storage and a cement works area. On December 20, 2011 the area contained four heavy-duty front-end loaders (Photo 31), seven shipping containers used for equipment and material storage (Photo 32) (see DeCoite interview discussion, section 5.1.6), a portable office building, a large boat hull and scattered miscellaneous junk, trash, buckets, engine blocks, engine parts, truck tires/wheels, wooden pallets etc. The DeCoite cement works area contained a storage shed, stockpiled pallets and lumber/forms, portable cement mixer, fork lift, stockpiled sand and gravel and freshly formed concrete piers and other concrete building structures (Photo 33)

### **6.7 Maui Crane**

Maui Crane leases a small portion of the eastern corner of Parcel B, just north of the BEI Hawaii Liquid Fertilizer Tank Farm (Figure 10). At the time of KSK's site reconnaissance there were three large mobile cranes, a flat-bed truck and miscellaneous junk piles in the area (Photo 34). The area had an open covered work/equipment storage area and portable office building (Photo 35). The area also had eight 55-gallon unlabeled poly drums stored on pallets, three large portable generators stacks of wooden pallets, miscellaneous equipment and a large (approximately 1,000-gallon) apparently empty AST (Photo ). Miscellaneous equipment and parts such as crane tires/wheels, lumber, cables, scrap metal, trash cans/drums and trash were scattered randomly throughout the area. KSK considers the unlabeled 55-gallon poly drums and crane maintenance activities as RECs.

### **6.8 LenGo Construction and Sub-Tenant Area**

LenGo Construction is located along the eastern boundary of Parcel B, just north of Maui Crane. The LenGo Construction area includes LenGo Construction offices and LenGo sub-tenants Maui Skimmers, Cruiser Phils', Aloha Limousine and BioBeetle/Maui Recycling.

#### 6.8.1 LenGo Construction

LenGo Construction operates a small office used in the operation of the business and a single small storage shed and a portion of the gravel-covered parking lot (Photo 36).

#### 6.8.2 Cruiser Phil's Volcanoe Riders

Cruiser Phil's is a bicycle touring business that takes tourists to the top of Haleakala for downhill bicycle rides and operates a small office, logo sales shop (Photo 37), bicycle storage and repair shop. The company also parks tourist transport buses and several trailers used for hauling bicycles at the parking lot outside the office/shop area (Photo 38).

#### 6.8.3 Aloha Limousine

Aloha Limousine area maintains an office, storage shed and laundry room and parks several taxis and limousines in the area (Photo 39). Aloha Limousine personnel on site at the time of KSK's site reconnaissance reported that no auto maintenance or repair work is conducted at the site and that taxis are only parked and dispatched from the area.

#### 6.8.4 BioBeetle/Maui Recycling

This area, located immediately south of Aloha Limousine along the eastern portion of Parcel B, contained an office building and parking area for rental cars (BioBeetle rents out bio-diesel-powered Volkswagens) (Photo 40). This area also had dozens of recycling bins stored in the back of the area (Photo 41).

#### 6.8.5 Maui Skimmers

Maui Skimmers is located in a small shop at the back of the Aloha Limousine area. Maui Skimmers manufactures custom surf and skim boards. The shop has two shaping rooms and a glassing room (Photo 42). The facility had cans and containers of resin and paint stored and in use within the shop.

### **6.9 Hale Nanea Community Center**

The Hale Nanea Community Center is located at the northern end of the eastern-most arm of Parcel B. It is operated by the Royal Order of Kamehameha I and consists of a single low-roofed wooden building used for community meetings, hula classes and organized events (Photo 43). It

contains a large meeting hall, kitchen and various other associated rooms and has a large gravel parking lot on the south side and a well-maintained grassy area to the north of the building for outdoor events that extends to beach. An imu (Hawaiian barbeque pit) is located in the open grassy area.

#### **6.10 BEI Hawaii Liquid Fertilizer Tank Farm**

This BEI Hawaii area has seven large above ground storage tanks in the extreme southeast corner of Parcel B, three 15,000-gallon, one 17,000-gallon and three 110,000-gallon ASTs. The seven ASTs are located within a four-foot high concrete-bermed secondary containment fence (Photo 44). According to BEI personnel (see Interviews, Section 5.1.5) only one of the 15,000-gallon ASTs is in use and contains 10,000 gallons of 10-34-0 ammonium phosphate fertilizer, and only one of the 110,000-gallon ASTs is in use and contains 25,000 gallons of UAN 32, an ammonium nitrate and urea fertilizer. All other ASTs are reportedly empty and not in use. KSK considers the liquid fertilizer tank farm a REC.

#### **6.11 Reynolds Recycling Center**

The Reynolds Recycling Center is located at the southern boundary of Parcel B along Amala Place, just to the west of the BEI Hawaii Fertilizer Tank Farm. The recycling redemption center contained a tented office space, three shipping containers and a trash compactor (Photo 45). The recycling center reportedly redeems plastic bottles and aluminum cans for cash.

#### **6.12 Amala Place KTS/Open Storage Area**

This open storage/parking area is located along southern boundary of Parcel B, just off Amala Place, immediately adjacent to the eastern end of the KTS Building and west of the Reynolds Recycling Area. A boat, two cars and three large dump trucks were parked in this area and piles of aluminum siding and framework were stockpiled (Photo 46).

KSK was not able to inspect the interior of any of the containers or the KTS Storage Shed on the Parcel to assess the presence of RECs. KSK could also not discern if some of the older vehicles parked in the open areas of Parcel B were abandoned or in use.

Buried petroleum pipeline(s), running north-south is/are present along western boundary of Parcel B along Hobron Avenue. KSK was not able to discern if the pipeline is located on Parcel B property or is within an easement immediately adjacent to the Parcel boundary. If the pipeline is

located off-site in a public utility easement, it is only a few feet off site. A sign posted at the side of Hobron Avenue, at about the center of the western arm of the main KTS Service Shop building read: "Warning Petroleum Pipelines, Chevron USA". KSK considers these buried pipelines both an on- and off-site REC.

### **6.13 General Site Observations**

#### *Utilities and Services*

Site water is provided by Maui County Department of Water multiple septic and cesspool systems are present throughout the Parcel.

#### *Hazardous Chemical Containing Materials and Used Oil*

There a few miscellaneous small quantity potentially hazardous items at the Site, generally in the various locations within the Parcel as discussed above. Miscellaneous chemical/waste items observed by KSK included the following:

- Paints and resins at the Maui Skimmers and Kaiwaa surfboard shops
- Truck batteries in the KTS Truck Repair & Maintenance Shop and parts warehouse
- Cases of new oil and antifreeze stored within the KTS Truck Repair & Maintenance Shop and parts warehouse.
- Used oil/sludge storage in KTS Truck Maintenance and Repair Shop Truck Wash Area, Open Storage Area
- Fuel at the KTS open storage area in buckets, fuel cans.
- Miscellaneous cans, containers, buckets of fuel and/or oil throughout the KTS open storage and Maui Crane areas.

#### *USTs, ASTs, Oil/Water Separators, Pipelines*

KSK observed several areas with ASTs, fuel tanks and other petroleum product storage areas:

- 500-gallon used oil AST inside KTS Truck Maintenance & Repair Shop.
- 55-gallon drums of lube oil, oil, spent filters and other inside KTS Truck Maintenance & Repair Shop.

- 55-gallon drums of used oil and sludge collected from KTS Truck Wash Area.
- Oil/water separator located behind the KTS Truck Wash Area.
- 288-gallon used oil/fuel ASTs in the KTS open area.
- Partially demolished asphalt tar AST in the center of the parcel with asphalt still present.
- Bulk molasses storage tanks at the Molasses Plant/Tank Area.
- Bulk liquid fertilizer ASTs at the BEI Hawaii fertilizer tank farm.
- Buried fuel pipelines running beneath the western wing of Parcel B associated with the former off-site Tosco Black Oil Tank.
- Buried Chevron fuel line running along the western boundary, parallel to Hobron Avenue.

All of these items were discussed above and with the exception of the molasses tanks, are RECs

#### *Drains*

No drains were observed at Parcel B.

#### *Indication of PCB Containing Materials*

KSK did not observe any transformers at the Parcel.

#### *Chlorofluorocarbons (CFCs)*

KSK observed no signs of any equipment or structures on Site that would contain chlorofluorocarbons although there are possible CFC-containing air conditioners within the KTS office building.

#### *Stains and Chemical Odors*

No stains were observed and there were no noticeable odors during KSK's site reconnaissance.

#### *Stressed Vegetation*

There were no signs of stressed vegetation at or adjacent to the Site, other than dead ironwood trees (next to live ones) growing within the partially demolished former asphalt AST.

#### **6.14 Adjacent Properties**

KSK was able to walk the public areas of the adjacent properties, the Site's entire boundary and was able to perform an offsite visual inspection of the properties located immediately adjacent to the Parcel to observe visible environmental conditions. The boundary and surrounding areas of the Site are shown in Figure 9 and in Photos 47 - 52, Appendix A.

The ocean shoreline borders Parcel B at the extreme northeast corner. The eastern side of the Parcel is bordered by Mauoni Ponds and associated drainage canal (A&B Parcel C) (Photo 47). Maui Crane has cranes and other equipment stored along the western banks of the drainage canal close to Amala Place.

The Cash n' Carry Warehouse (a Valley Isle Produce retail outlet) is located kitty-corner to Parcel B, across Amala Place, to the southeast (Photo 48). Directly south of Parcel B, across Amala Place, is a parking lot for the Cash n' Carry Warehouse, directly behind which is a large bulk fuel storage facility, with a fuel truck loading rack and associated fuel piping, operated by Chevron with at least 14 large ASTs (Photo 49).

A Matson-owned parking lot, where vehicles shipped on Matson ocean transport ships were parked, was located kitty-corner to Parcel B, across Amala Place.

KTS large Bulk Sugar Storage warehouses and associated facilities occupy the large lot located west of Parcel B, across Hobron Avenue (A&B Parcel A) (Photo 50). Just north of the Bulk Sugar Storage facility, immediately west of the Molasses Plant/ASTs portion Parcel B, across Hobron Avenue, is the Tesoro fuel tank farm and associated fuel truck loading rack (Photo 51). This tank farm has eight large bulk fuel ASTs and associated fuel piping.

The Port of Kahului is located kitty-corner to Parcel B to the northwest and the Maui Electric Company (MECO), with electrical generators, bulk fuel storage tanks and associated fuel pipelines is located immediately north of the Site, between the Parcel and the ocean shoreline (Photo 52).

KSK's Site reconnaissance conducted on December 20, 2011 indicated the following RECs at Parcel B:

- KTS Truck Maintenance and Repair Shop.
- 500-gallon used oil AST inside KTS Truck Maintenance & Repair Shop.

- 55-gallon drums of lube oil, oil, spent filters and other inside KTS Truck Maintenance & Repair Shop.
- 55-gallon drums of used oil and sludge collected from KTS Truck Wash Area.
- KTS Truck Wash area and associated oil/water separator located behind the KTS Truck Wash Area.
- Three 288-gallon used oil/fuel ASTs in the KTS open area.
- Stockpiled petroleum-impacted soil at KTS open area.
- Former Hawaiian Bitumuls partially demolished asphalt tar AST in the center of the parcel with asphalt still present and asphalt tar-impacted soil.
- Former bulk fuel storage at the former Standard Oil AST (Olekoi Area) that may have released oil to the soil/groundwater.
- Bulk liquid fertilizer ASTs at the BEI Hawaii fertilizer tank farm.
- Buried fuel pipelines running beneath the western wing of Parcel B and former fuel loading rack associated with the former off-site Tosco Black Oil Tank.
- Buried Chevron fuel line running along the western boundary, parallel to Hobron Avenue.
- 55-gallon poly drums of unknown liquid contents at Maui Crane area.
- Truck repair activities at Maui Crane and DeCoite Trucking areas.
- Miscellaneous buckets, containers of unknown liquids and petroleum products throughout the KTS Open Storage and Maui Crane areas.

KSK's Site reconnaissance conducted on December 20, 2011 indicated the following RECs at adjacent off-site properties:

- Bulk fuel ASTs and pipelines at the Chevron Tank Farm and loading rack south of Parcel B.
- Bulk fuel ASTs and pipelines at the Tesoro Tank Farm and loading rack west of the northwest end of Parcel B.
- Bulk fuel ASTs, pipelines and industrial electrical generators at the MECO power generation facility immediately north of Parcel B.

## 7.0 DATA GAPS

In performing this Phase I ESA, KSK identified certain data gaps. A data gap is a lack or inability to obtain information required by ASTM E 1527-05 despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice (ASTM E 1527-05). KSK identified the following data gaps relating to this Phase I ESA:

- KSK, after multiple attempts, was not able to interview a representative of Parcel B tenant Maui Crane and therefore could not obtain information on their operations at Parcel B; however, KSK had access to the Maui Crane portion of Parcel B and was able to inspect the area. KSK does not consider this data gap as significant.
- KSK did not have access to the interior of several shipping containers parked throughout the Parcel and reportedly used by various tenants for storage. KSK does not consider this data gap as significant.

## 8.0 VAPOR ENCROACHMENT SCREENING

As part of the ESA for the Parcel B property KSK conducted a Tier 1 Vapor Encroachment Screening (VES) to identify the likelihood that current or past activities at or near the Site may have resulted in the presence or likely presence of contaminant vapors in the subsurface at the Site that could potentially create a Vapor Encroachment Condition (VEC). To that end, KSK considered the following factors during the ESA review of environmental records and files and their influence on the possibility and/or likelihood of volatile contaminant soil vapors originating on, or migrating to, the Site:

- The future planned use of the Site – industrial.
- Possible contaminant sources (numerous active bulk fuel storage facilities with past releases, ASTs, pipelines on and adjacent to the Parcel).
- Location of suspect contaminated properties.
- On-Site soil properties and conditions –sandy loam.
- Depth to groundwater – two to three feet.
- Preferential vapor pathways – the presence of pipelines, utility corridors, septic/cesspool systems.
- Cleanup status of known contaminated properties.

KSK believes that a VEC likely exists at and near the Parcel and cannot be ruled out, given the presence of the numerous on- and offsite current and former bulk fuel storage tanks, associated buried pipelines on and up-gradient of, and adjacent to/near, the Parcel and past releases of petroleum product as discussed in Sections 6.0 and 7.0 above. Although there are no active contaminant releases on file with HDOH at the various Parcel ASTs, off-site bulk fuel storage facilities and pipelines, RECs on, or are located close enough to the Parcel that if unreported release(s) occurred resulting in contaminants reaching the groundwater, contaminants could migrate via the shallow water table to the Parcel and create a VEC.

## 9.0 CONCLUSIONS AND OPINIONS

KSK has performed this Phase I ESA in conformance with the scope and limitations of ASTM E 1527-05 of the A&B Parcel B Site in Kahului, Maui, Hawaii (TMK: (2) 3-7-011: 017). There were no exceptions to, or deletions from, this practice. KSK's qualifications as an Environmental Professional are included in Appendix D.

Our research consisted of a review of historical and regulatory records, archival maps and aerial photographs, site geology and hydrogeology, interviews with persons knowledgeable of the Site and a physical Site reconnaissance.

The Site is an active industrial site that includes a trucking company and associated maintenance garage with decades of operations with bulk fuel and chemical storage and other industrial tenant businesses adjacent to water's edge of Kahului Bay in Kahului, Maui.

### 9.1 Recognized Environmental Conditions

KSK's review of State and Federal environmental records, previous environmental reports, State and County property records, historical maps and aerial photographs, personnel interviews and Site reconnaissance conducted December 20, 2011 have revealed evidence of the RECs at and near the Site. These RECs are listed below. Locations of the RECs are shown in Figure 11.

#### 9.1.1 Parcel B RECs

KSK identified the following RECs at the Site:

- Current and historic truck repair activities and bulk oil, lube oil, paint and solvent (parts cleaning) use and storage inside the KTS Service Shop ([1] in Figure 11).
- The storage and use of bulk fuel/petroleum products at Parcel B for several decades at the former Standard Oil AST ([2] in Figure 11).
- Oil storage and truck maintenance and repair activities at both Maui Crane and DeCoite Trucking areas of Parcel B ([3] in Figure 11).
- 500-gallon used oil AST inside KTS Truck Maintenance & Repair Shop ([4] in Figure 11).

- 55-gallon drums of lube oil, oil, spent filters and other inside KTS Truck Maintenance & Repair Shop ([4] in Figure 11).
- Truck wash and associated oil/water separator located at the KTS Truck Wash Area ([5] in Figure 11).
- Former bulk fuel storage and pipeline operations at the fuel loading rack/station the Molasses Tank area of Parcel B associated with the off-Parcel Tosco Black Oil AST, which are likely still present and may contain residual fuel are current and historic RECs ([6] in Figure 11).
- Stockpiled petroleum-impacted soil in the KTS Open Storage Area just southeast of the Molasses Tank Area ([7] in Figure 11).
- Miscellaneous buckets and containers of unknown liquids/petroleum throughout the KTS Open Storage and Maui Crane areas ([8] in Figure 11).
- Oil-impacted soil stored in two 55-gallon drums stored in the Olekoi area ([9] in Figure 11).
- The three 288-gallon and approximately 350-gallon oil/fuel ASTs in the KTS Open Storage Area behind (north of) the KTS Storage Sheds ([10] in Figure 11).
- Former asphalt plant operations, spilled asphalt tar still present in soil and the remnant asphalt tar within the remains of the smaller, partially demolished AST within the former Hawaiian Bitumuls Area ([11] in Figure 11).
- 55-gallon drums of sludge collected from KTS Truck Wash Area ([12] in Figure 11).
- Bulk liquid fertilizer ASTs at the BEI Hawaii fertilizer tank farm ([13] in Figure 11).
- Buried fuel pipelines running beneath the western wing of Parcel B associated with the former off-site Tosco Black Oil Tank ([6] in Figure 11).
- Oil-impacted soil at the former fuel loading rack associated with the off-Parcel Tosco Black Oil AST located on Parcel B near the molasses ASTs ([6] in Figure 11).
- Buried Chevron fuel line running along the western boundary, parallel to Hobron Avenue ([14] in Figure 11).

- Former junk car disposal at the LenGo construction area may have resulted in petroleum-impacted soil.
- Possible heavy metal in soil at former sandblasting in Olekoi area ([15] in Figure 11).
- Possible impacted soil, soil vapor and groundwater from petroleum products from solid/hazardous waste, leaking drums and junk vehicle storage at the Olekoi area ([15] in Figure 11).
- Unlabeled poly drums of unknown liquid at Maui Crane ([16 in Figure 11).
- RECs identified in 2009 by KSK (KSK, 2009) including:
  - The storage of 55-gallon drums of used oil at the KTS used oil storage area.
  - Former auto engine repair tenant business.
  - The above ground fuel storage tank at the tenant business Rainbow Hauling and Excavation.
  - The parking of the Action Fuel petroleum tanker trucks near the BEI Hawaii tank farm.
- The possible existence of “comingled [petroleum product] plumes” believed to exist, by HDOH, in the Kahului Harbor area.

#### 9.1.2 On-Site Historic RECs

- Former use of the site for truck repair for over 60 years which probably used and stored bulk petroleum products and solvents.
- Former Hawaiian Bitumuls asphalt plant operations and tar storage/spill.
- Former bulk fuel storage at the Parcel in multiple ASTs. Large former oil AST at the northern central portion of the Parcel shown on 1927, 1945, 1975, 1980 and 1990 historic Sanbourn maps.
- Former oil spill/leak at former fuel loading rack (on-Parcel) associated with off-parcel Tosco Black Oil AST.

#### 9.1.3 Off-Site RECs

KSK has identified Off-Site RECs near the A&B Parcel B Site. Off-Site RECs identified are:

- Off-site DHOH SHW site listed in Section 4.5.

- Off-site HDOH HEER release site listed in Section 4.6.
- Tosco Black Oil Storage tank area and associated buried fuel pipelines near the molasses tanks.
- Tosco Maui Bulk Plant and associated pipelines 0323, 76 Hobron Avenue, Kahului, Maui.
- Tesoro Hawaii Corporation bulk fuel storage, fuel loading rack and associated pipelines, 140 Hobron Avenue Unit A, Kahului, Maui.
- MECO Kahului Generating Station bulk fuel storage, past releases and pipelines, 200 Hobron Avenue, Kahului, Maui.
- Shell Oil Products US Kahului Terminal bulk fuel storage and associated pipelines, 60 Hobron Avenue, Kahului, Maui.
- Chevron Products Company bulk fuel storage, releases, loading rack and associated pipelines, Kahului Terminal, 100 Hobron Avenue, Kahului, Maui.
- Buried pipelines running north-south along the western side of the Site along Hobron Avenue and extends beyond the northern and southern boundaries of Parcel B is therefore both an on- and off-site REC.
- HDOH SHWS listed site: VIP Warehouse, 74 Hobron Avenue, Kahului, Maui.
- HDOH SHWS and Release List listed site: Hobron Avenue Area (Kahului), 60 Hobron Avenue, Kahului, Maui.
- HDOH SHWS and Release List listed site: Young Brothers Kahului, 65 Wharf Street, Kahului, Maui.

## 9.2 Other Items of Environmental Concern

A few items/areas were observed at or near the Site that do not necessarily constitute a REC and pose no real environmental risk or threat to the Site but are worth noting. These additional items are as follows:

- The site is located within the County of Maui's Special Management Area (SMA) due to its proximity to Kanaha ponds and other shoreline areas. Special Management Areas are subject to a Special Management Area Use permit from Maui County is required for development within the SMA.
- Kanaha Pond Water bird Sanctuary is located just 500 feet to the southeast of the Site. The pond is home to two endangered species,

the Hawaiian Stilt and the Hawaiian Coot, and provides sanctuary to several migrant shorebirds and waterfowl. Kanaha Pond was designated a registered natural landmark in late 1971 by the Department of the Interior.

- The Site is adjacent to National Wetland designated sites (Mauoni Ponds).
- The Site is located within the 100-year flood zone.
- Several septic/cesspool systems are present on Parcel B.
- Numerous older trucks, heavy equipment and miscellaneous equipment stored and/or abandoned throughout the A&B Parcel B may contain fuel. KSK was not able to discern if these items were in use or if they were abandoned.
- Several shipping containers used at various tenant businesses throughout Parcel B. KSK was not able to gain access to the interior of most of these containers and therefore has no knowledge of the contents.
- Several of the tenant businesses on Parcels B are industrial in nature and therefore may employ, and possibly store, even if not observed by KSK, various chemicals, paints and petroleum products in such quantities that if spilled or leak could result in an environmental release.
- Given the age of the buildings on the parcel there is a possibility they may contain asbestos and lead-based paint.
- Possible buried construction debris at the Hale Nanea area of Parcel B.

## 10.0 LIMITATIONS

KSK has based its conclusions and recommendations on interpretation of the available historical and regulatory information and documents reviewed, interviewee responses and a visual Site inspection performed on December 20, 2011. KSK cannot guarantee or warrant that the Site is free of contamination. KSK does warrant that our services are performed with the usual competence and thoroughness of the consulting profession, in accordance with the standard operating procedures of this time. KSK does not provide any other guarantee or warranty.

This Phase I ESA is not a comprehensive site characterization and should not be construed as such. It is not exhaustive and uncertainty regarding the Site cannot be entirely eliminated. The opinions presented in this report are based on findings derived from a Site reconnaissance and a review of specified regulatory records and historical sources available for public record. This Phase I ESA did not include any investigation with respect to lead, asbestos, arsenic, radon, methane, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, wetlands, indoor air quality, biological agents, mold or site geotechnical concerns. All information on UST and LUST sites is based on information reported to the HDOH Solid and Hazardous Waste Branch and present in their on-line files at the time of our review. All information on the HEER web site and release web sites is based on information reported to the HDOH HEER Office and contained in their files at the time of our review.

There are no exceptions or deletions to ASTM practice in this Phase I ESA.

## 11.0 REFERENCES

- A&B (A&B Properties, Inc.), 2000. Internal memo. August 18, 2000.
- A&B, 2009a. Letter report from Sean O'Keefe (A&B) to HDOH SHW Steven Chang notifying HDOH of planned waste cleanup clean up activity. October 23, 2009.
- A&B, 2009b. Hazardous substance release report from Sean O'Keefe (A&B) to HDOH HEER (Mike Cripps).
- A&B, 2010a. Letter report from Sean O'Keefe (A&B) to HDOH SHW's Steven Chang documenting removal of solid waste from Olekoi area of Parcel B. May 4, 2010.
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## FIGURES



**Figure 1**

**A&B Acquisition Parcel B Location  
Kahului Harbor Development Plan  
Kahului, Maui, Hawaii**

KSK-2008-029



**Figure  
2**

**A&B Acquisition Parcel B Location  
Kahului Harbor Development Plan  
Kahului, Maui, Hawaii**

KSK-2008-029



Source: USGS Topographic Map Wailuku Quad, 1997. Series 7.5, Scale 1:24000

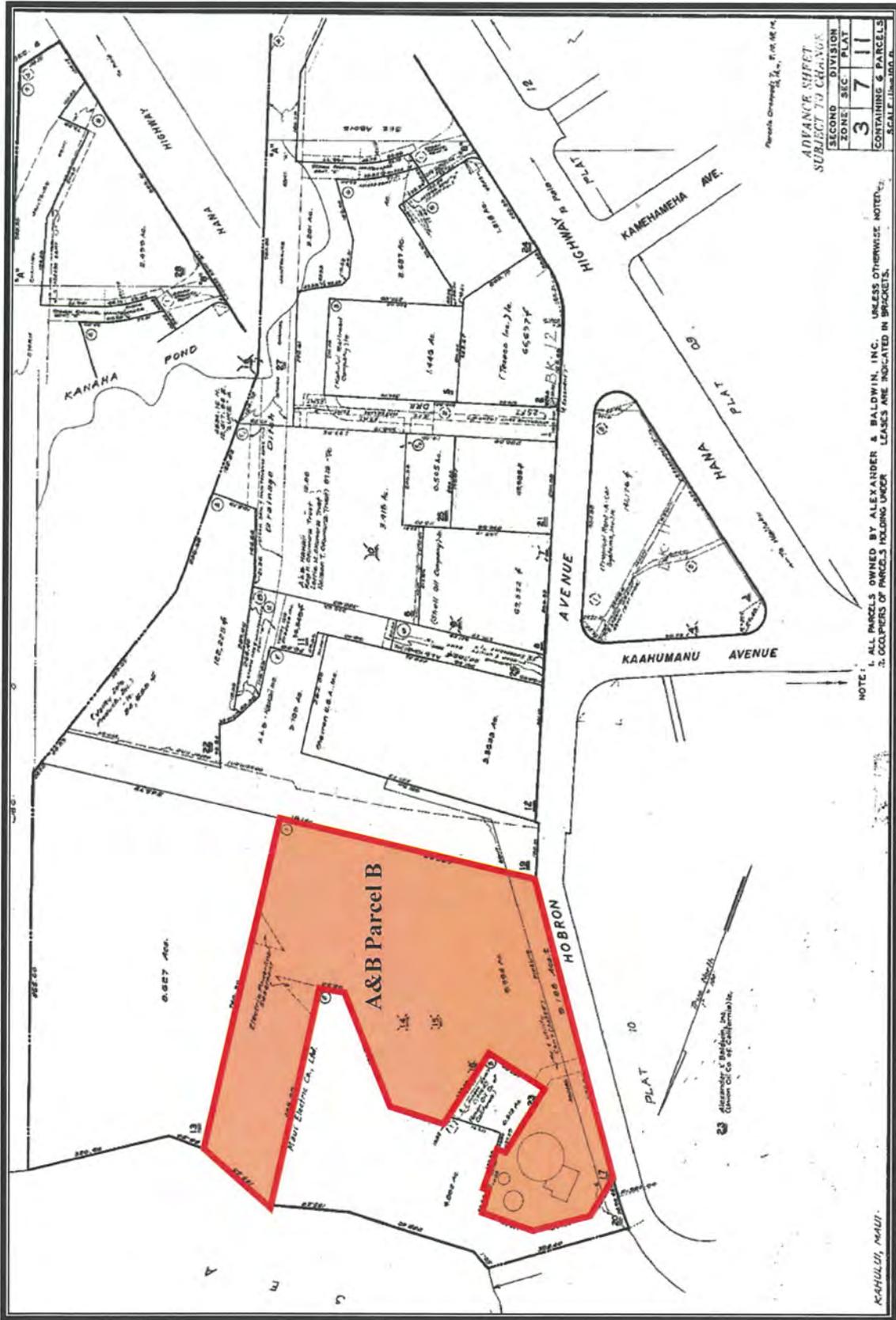
<p><b>Figure</b> <b>3</b></p>	<p><b>Topographic Map A&amp;B Acquisition Parcel B Kahului Harbor Development Plan Kahului, Maui, Hawaii</b></p>	<p><b>KSK-2008-029</b></p>
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**A&B Acquisition Parcel B**  
**Kahului Harbor Development Plan**  
**Kahului, Maui, Hawaii**

KSK-2008-029

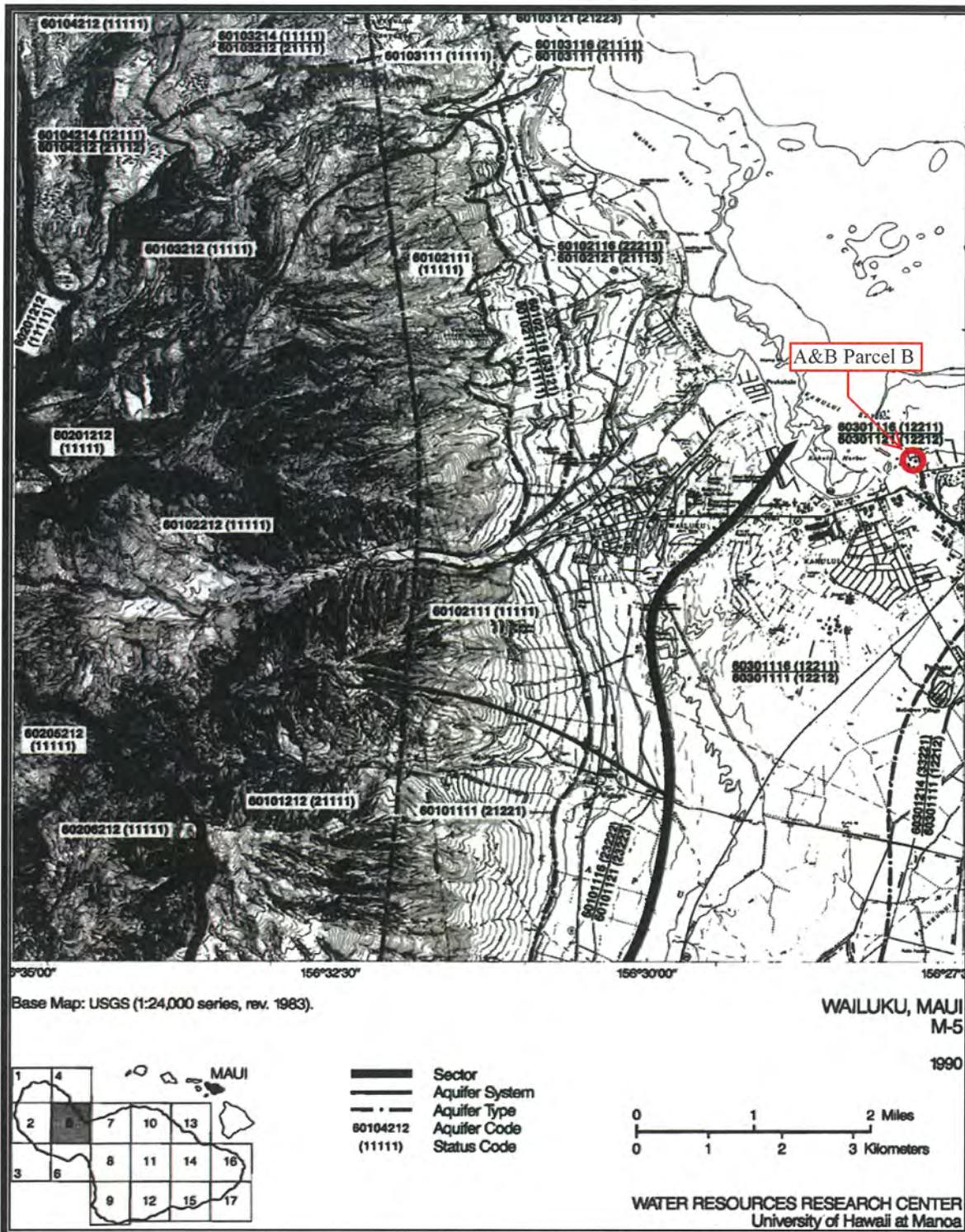
**Figure**  
**4**



**Figure 5**

**TMK Map**  
**A&B Acquisition Parcel B**  
**Kahului Harbor Development Plan**  
**Kahului, Maui, Hawaii - TMK: (2) 3-7-011:017**

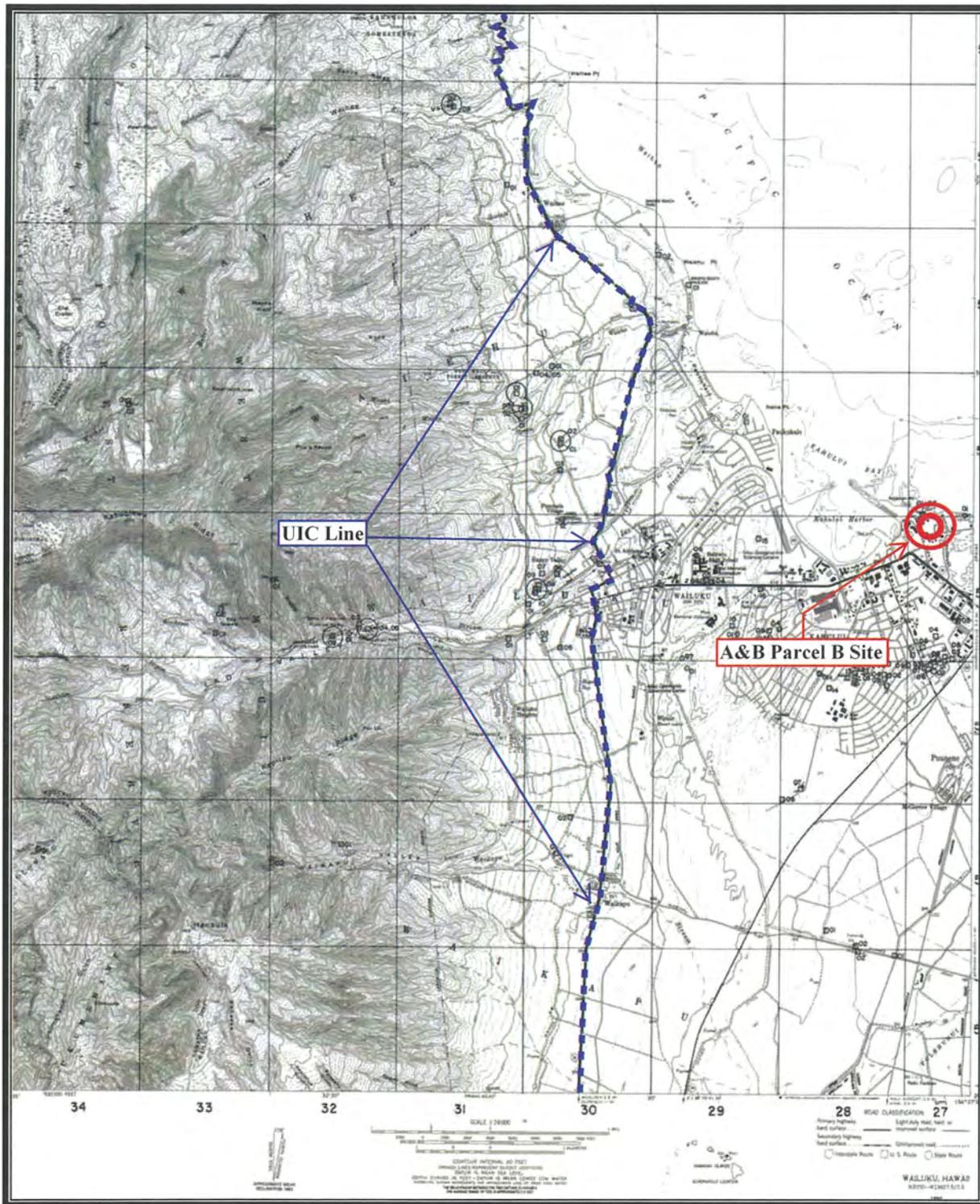
**KSK-2008-029**



**Figure 6**

**Aquifer Map**  
**A&B Acquisition Parcel B**  
**Kahului Harbor Development Plan**  
**Kahului, Maui, Hawaii**

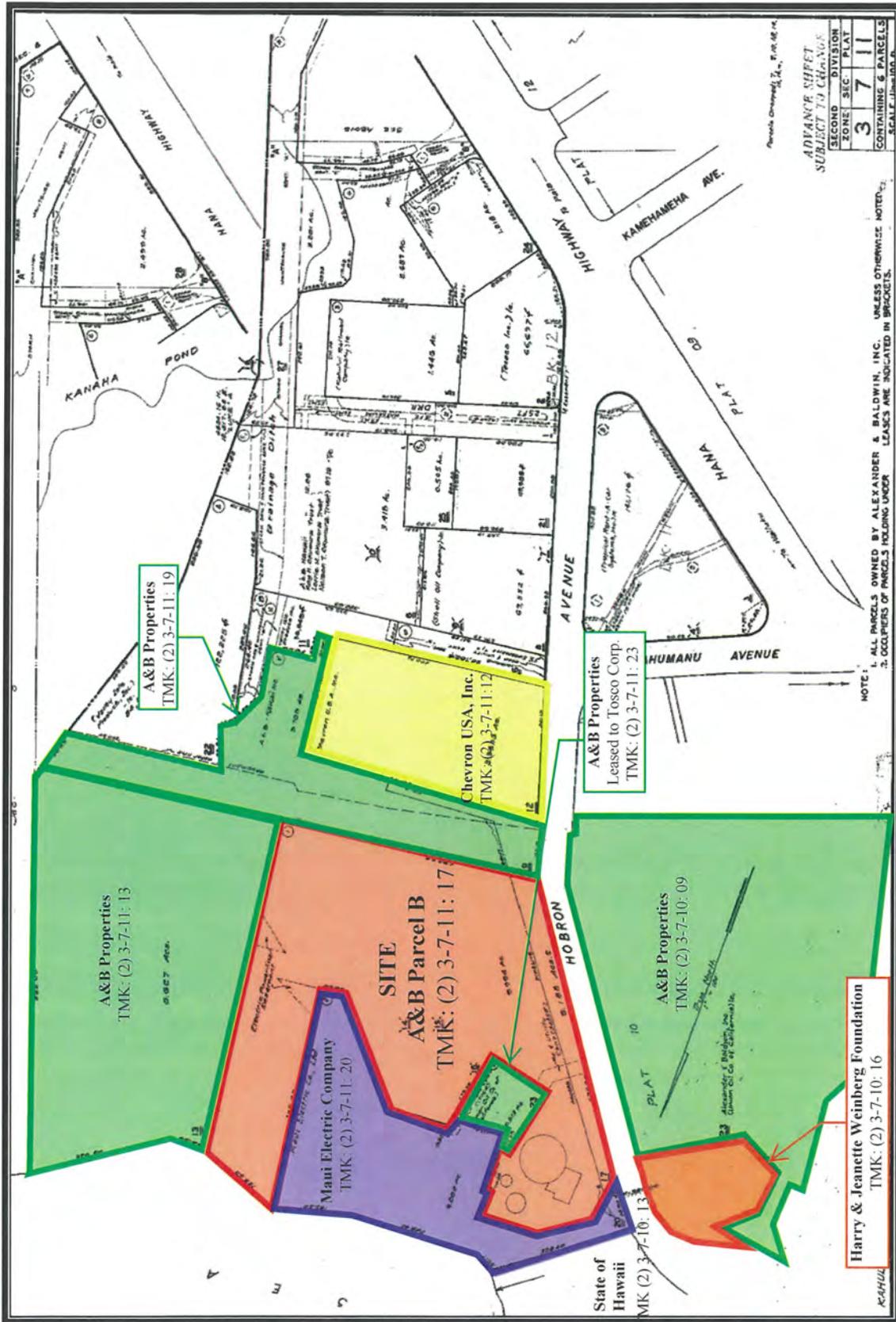
KSK-2008-029



**Figure**  
**7**

**UIC Map**  
**A&B Acquisition Parcel B**  
180 Hobron Avenue., Kahului, Maui, Hawaii  
TMK: (2) 3-7-11: 017

**KSK-2008-029**



**Figure 8**  
 Adjacent Properties TMK Map  
 A&B Acquisition Parcel B  
 Kahului Harbor Development Plan  
 Kahului, Maui, Hawaii  
 KSK-2008-029



**Figure 9**

**Parcel B and Surrounding Properties  
A&B Acquisition Parcel B  
Kahului Harbor Development Plan  
Kahului, Maui, Hawaii**

KSK-2008-029

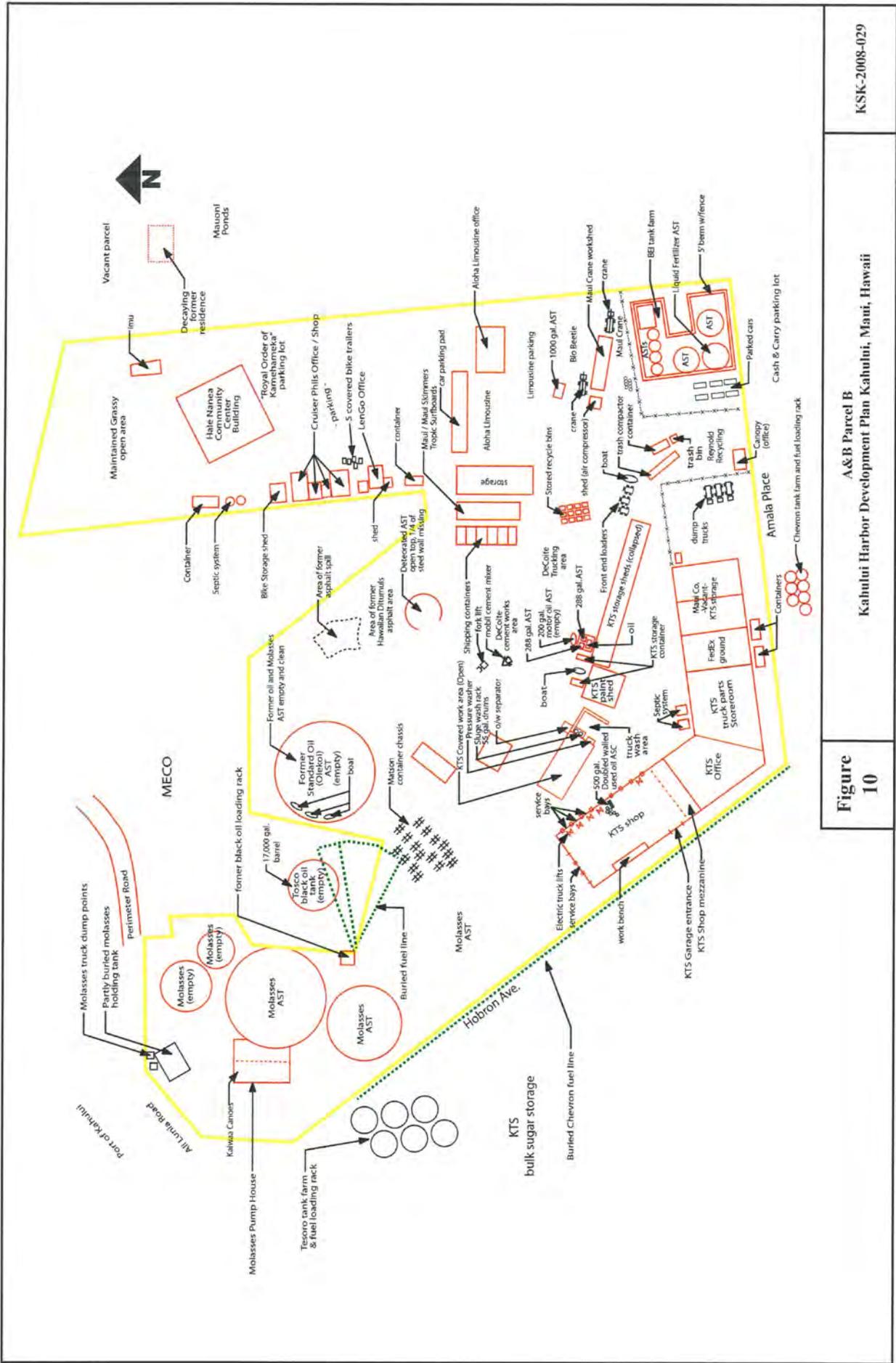
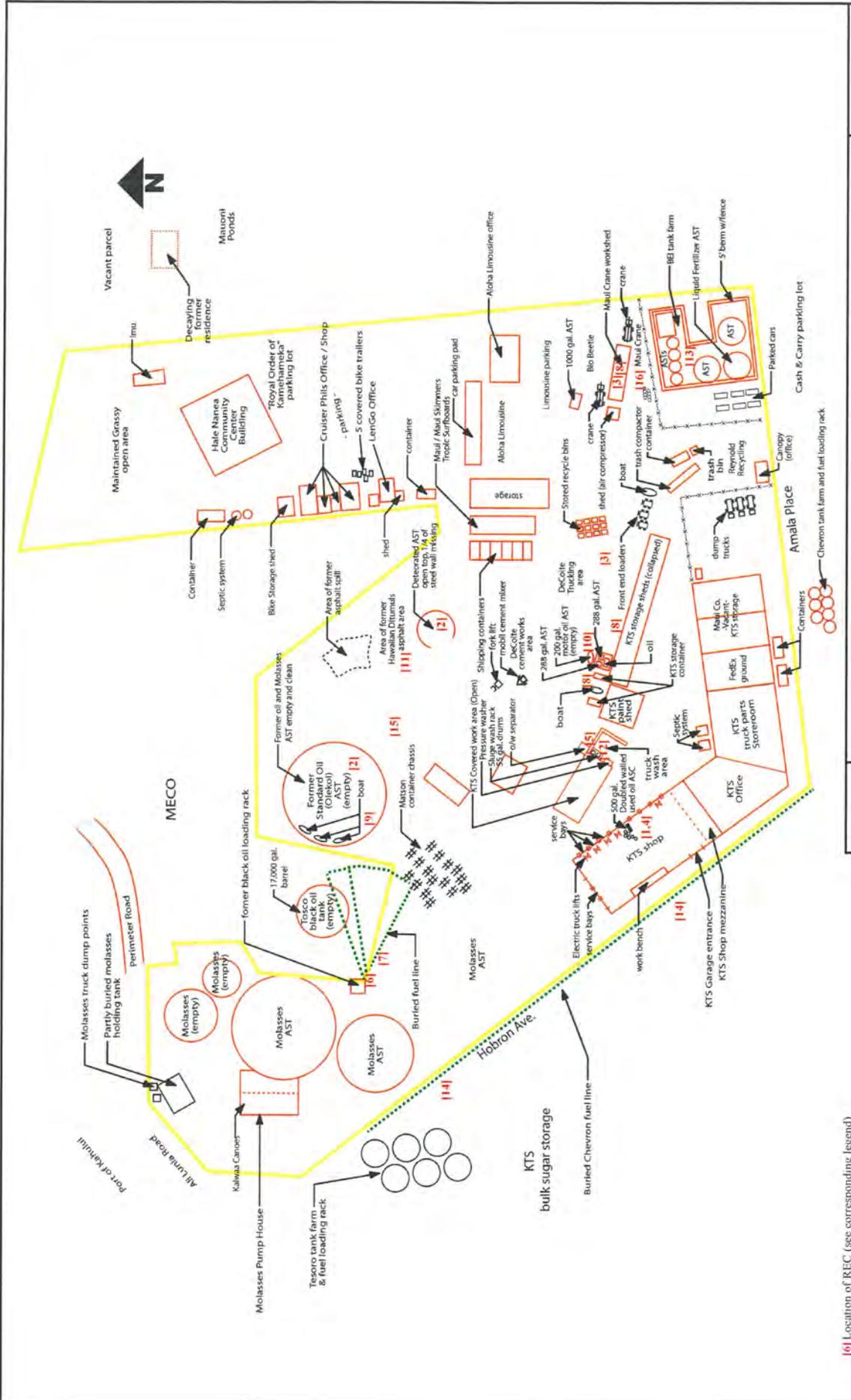


Figure 10

A&B Parcel B  
Kahului Harbor Development Plan Kahului, Maui, Hawaii



161 Location of REC (see corresponding legend)

Figure 11

Recognized Environmental Conditions (RECs), Parcel B  
Kahului Harbor Development Plan Kahului, Maui, Hawaii

## Figure 11 Legend

### RECs

#### A&B Parcel B

180 Hobron Avenue, Kahului, Hawaii

1. Truck repair activities, oil storage, KTS Shop.
2. Former bulk fuel/petroleum/tar storage.
3. Truck repair, DeCoit & Maui Crane.
4. Used oil, lube oil, filters, oil storage at KTS Shop.
5. Oil/water separator, KTS Truck Wash.
6. Former fuel loading rack, pipelines from Tosco AST.
7. Stockpile oil-impacted soil.
8. Buckets, small containers oil, gasoline
9. Oil-impacted soil in Olekoi AST.
10. 288-gallon oil/fuel ASTs
11. Former asphalt plant, tar in soil.
12. 55-gallon drums of truck wash sludge.
13. BEI Hawaii liquid fertilizer ASTs.
14. Buried Chevron fuel line.
15. Sandblasting area, solid waste disposal area.
16. 55-gallon poly drums, unknown liquid.

**APPENDIX A**

**Photographs**

## PHOTO LOG

**Phase I Environmental Site Assessment  
A&B Parcel B  
Kahului, Maui, Hawaii  
TMK: (2) 3-7-011: 017**



**Photo 1** – KTS Maintenance & Repair Shop and main Office Building, Hobron Ave.



**Photo 2** – West side of KTS Maintenance & Repair Shop building, Hobron Ave.



**Photo 3** – Service bay entrances on back (east) side of KTS Shop.



**Photo 4** – Eastern service bay area of KTS Shop interior.

## PHOTO LOG

### Phase I Environmental Site Assessment A&B Parcel B Kahului, Maui, Hawaii TMK: (2) 3-7-011: 017



**Photo 5** – Workbench area along western wall of Truck Maintenance & Repair Shop



**Photo 6** – Service bay in SE corner of Truck Maintenance & Repair Shop.



**Photo 7**– Welding area in NE corner of Truck Maintenance & Repair Shop.



**Photo 8** –Lube oil and waste filter drum storage inside Truck Maintenance & Repair Shop.

## PHOTO LOG

**Phase I Environmental Site Assessment  
A&B Parcel B  
Kahului, Maui, Hawaii  
TMK: (2) 3-7-011: 017**



**Photo 9** – Used oil storage tank inside KTS Truck Maintenance & Repair Shop.



**Photo 10** – Cover work/parking area outside (east of) KTS Truck Maintenance & Repair Shop.



**Photo 11**– Oil/water separator behind KTS Truck Wash Area.



**Photo 12** – Truck wash sludge containment & storage.

## PHOTO LOG

**Phase I Environmental Site Assessment  
A&B Parcel B  
Kahului, Maui, Hawaii  
TMK: (2) 3-7-011: 017**



**Photo 13** – KTS Storage Sheds, south side.



**Photo 14** – Back (north) side of KTS Storage Shed (eastern end), seen from the KTS Open Storage Area near DeCoite.



**Photo 15**– KTS Parts Storeroom.



**Photo 16** – New truck wheels in KTS Parts Storeroom.

## PHOTO LOG

**Phase I Environmental Site Assessment  
A&B Parcel B  
Kahului, Maui, Hawaii  
TMK: (2) 3-7-011: 017**



**Photo 17** – New truck battery storage within the KST Pars Storeroom.



**Photo 18** – FedEx Ground warehouse in eastern wing (north side) of KTS building.



**Photo 19**– KTS Open Storage Area, north of western wing of KTS building.



**Photo 20** – Stockpiled petroleum-impacted soil in KTS Open Storage Area, near molasses tanks.

## PHOTO LOG

**Phase I Environmental Site Assessment  
A&B Parcel B  
Kahului, Maui, Hawaii  
TMK: (2) 3-7-011: 017**



**Photo 21** – KTS Open Storage Area north of KTS Storage Sheds.



**Photo 22** – Work bench & miscellaneous storage in KTS Open Storage Area.



**Photo 23** – Oil/fuel ASTs stored in roll-off container in KTS Open Storage Area.



**Photo 24** – Abandoned (empty) former oil/molasses AST (Standard Oil AST).

## PHOTO LOG

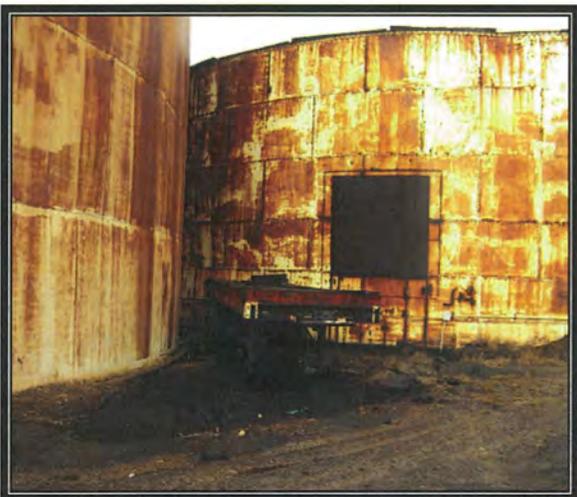
### Phase I Environmental Site Assessment A&B Parcel B Kahului, Maui, Hawaii TMK: (2) 3-7-011: 017



**Photo 25** – Partially demolished asphalt tar AST in former Hawaiian Bitumuls Area.



**Photo 26** – One of the in use molasses ASTs with the Molasses Plant & Storage Tank Area.



**Photo 27** – Molasses ASTs.



**Photo 28** – Partially buried molasses transfer tank at Molasses Plant.

## PHOTO LOG

**Phase I Environmental Site Assessment  
A&B Parcel B  
Kahului, Maui, Hawaii  
TMK: (2) 3-7-011: 017**



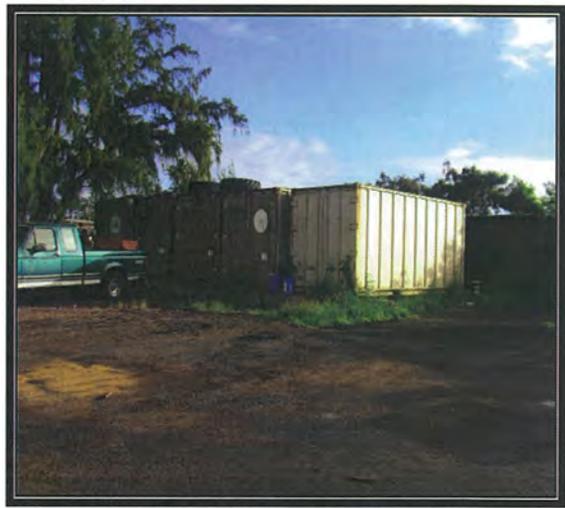
**Photo 29** – Kaiwaa canoe manufacturer within a portion of the Molasses Plant.



**Photo 30** – Former fuel loading rack by Molasses Tanks associated with off-Parcel Tosco Black Oil AST.



**Photo 31** – Frontend loaders at DeCoite Trucking Area, center of Parcel B.



**Photo 32** – Storage containers used for storage in DeCoite Trucking Area.

## PHOTO LOG

### Phase I Environmental Site Assessment A&B Parcel B Kahului, Maui, Hawaii TMK: (2) 3-7-011: 017



Photo 33 – DeCoite Trucking cement works area.



Photo 34 – Crane and junk piles at Maui Crane Area.



Photo 35 – Maui Crane covered work area (left) and portable office (right).



Photo 36 – LenGo construction office. Cruiser Phil's bike trailers to the right.

## PHOTO LOG

### Phase I Environmental Site Assessment A&B Parcel B Kahului, Maui, Hawaii TMK: (2) 3-7-011: 017



Photo 37 – Cruiser Phil's bike tours office.



Photo 38 – Bike trailers in Cruiser Phil's bike tours parking lot area.



Photo 39 – Aloha Limousine taxi parking area.



Photo 40 – Rental Volkswagens at BioBeetle.

## PHOTO LOG

### Phase I Environmental Site Assessment A&B Parcel B Kahului, Maui, Hawaii TMK: (2) 3-7-011: 017



**Photo 41** – Recycling bins at Maui Recycling next to Aloha Limousine.



**Photo 42** – Shop area within Maui Skimmers, in back of Aloha Limousine.



**Photo 43** – Hale Nanea Community Center, NE corner of Parcel B.



**Photo 44** – BEI Hawaii liquid fertilizer tank farm, SE corner of Parcel B.

## PHOTO LOG

### Phase I Environmental Site Assessment A&B Parcel B Kahului, Maui, Hawaii TMK: (2) 3-7-011: 017



**Photo 45** – Reynolds Recycling area at southern end of Parcel B.



**Photo 46** – Amala Place KTS Open Storage Area.



**Photo 47** – Drainage channel and Mauoni Ponds area, adjacent to eastern boundary of Parcel B.



**Photo 48** – Cash n' Carry and associated parking lot across Amala Place to the SE of Parcel B.

## PHOTO LOG

### Phase I Environmental Site Assessment A&B Parcel B Kahului, Maui, Hawaii TMK: (2) 3-7-011: 017



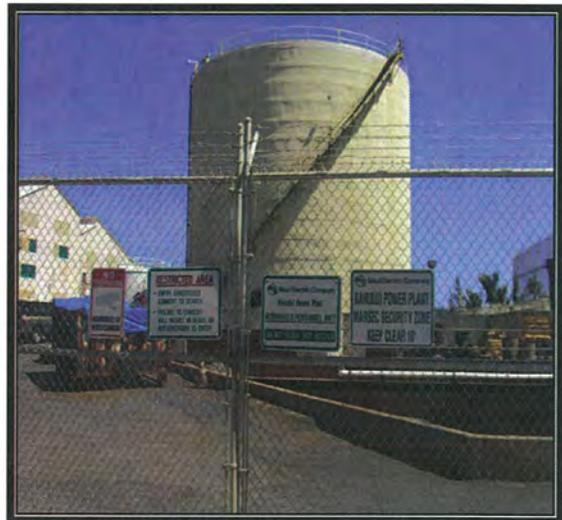
**Photo 49** – Chevron bulk fuel tank farm, south of Parcel B, across Amala Place.



**Photo 50** – KTS bulk sugar storage facility, across Hobron Ave. to the West.



**Photo 51** – Tesoro fuel loading rack and fuel tank farm (background) across Hobron Ave. to the west.



**Photo 52** – MECO power plant immediately north of Parcel B.

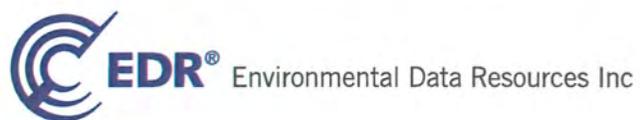
**APPENDIX B**

**State and Federal Environmental Database Records  
EDR**

**A&B Parcel B**  
180 Hobron Ave.  
Kahului, HI 96732

Inquiry Number: 3218291.2s  
December 05, 2011

## The EDR Radius Map™ Report with GeoCheck®



440 Wheelers Farms Road  
Milford, CT 06461  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary .....	ES1
Overview Map .....	2
Detail Map .....	3
Map Findings Summary .....	4
Map Findings .....	7
Orphan Summary .....	70
Government Records Searched/Data Currency Tracking .....	GR-1
 <b><u>GEOCHECK ADDENDUM</u></b>	
Physical Setting Source Addendum .....	A-1
Physical Setting Source Summary .....	A-2
Physical Setting SSURGO Soil Map .....	A-5
Physical Setting Source Map .....	A-10
Physical Setting Source Map Findings .....	A-12
Physical Setting Source Records Searched .....	A-47

*Thank you for your business.*  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

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 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

#### ADDRESS

180 HOBRON AVE.  
KAHULUI, HI 96732

#### COORDINATES

Latitude (North):	20.895600 - 20° 53' 44.2"
Longitude (West):	156.462100 - 156° 27' 43.6"
Universal Transverse Mercator:	Zone 4
UTM X (Meters):	764012.9
UTM Y (Meters):	2312543.5
Elevation:	3 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	20156-H4 KAHAKULOA, HI
Most Recent Revision:	Not reported

### 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 NPL site list*

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

#### *Federal Delisted NPL site list*

Delisted NPL.....	National Priority List Deletions
-------------------	----------------------------------

## EXECUTIVE SUMMARY

### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing

### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

### ***Federal institutional controls / engineering controls registries***

US ENG CONTROLS..... Engineering Controls Sites List

US INST CONTROL..... Sites with Institutional Controls

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***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***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

### ***State and tribal registered storage tank lists***

INDIAN UST..... Underground Storage Tanks on Indian Land

FEMA UST..... Underground Storage Tank Listing

### ***State and tribal institutional control / engineering control registries***

ENG CONTROLS..... Engineering Control Sites

INST CONTROL..... Sites with Institutional Controls

### ***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

## EXECUTIVE SUMMARY

### **Local Lists of Landfill / Solid Waste Disposal Sites**

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
ODI..... Open Dump Inventory  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

### **Local Lists of Hazardous waste / Contaminated Sites**

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

### **Local Land Records**

LIENS 2..... CERCLA Lien Information  
LUCIS..... Land Use Control Information System

### **Records of Emergency Release Reports**

HMIRS..... Hazardous Materials Information Reporting System  
SPILLS..... Release Notifications

### **Other Ascertainable Records**

DOT OPS..... Incident and Accident Data  
DOD..... Department of Defense Sites  
FUDS..... Formerly Used Defense Sites  
CONSENT..... Superfund (CERCLA) Consent Decrees  
ROD..... Records Of Decision  
UMTRA..... Uranium Mill Tailings Sites  
MINES..... Mines Master Index File  
TRIS..... Toxic Chemical Release Inventory System  
TSCA..... Toxic Substances Control Act  
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)  
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing  
SSTS..... Section 7 Tracking Systems  
ICIS..... Integrated Compliance Information System  
PADS..... PCB Activity Database System  
MLTS..... Material Licensing Tracking System  
RADINFO..... Radiation Information Database  
FINDS..... Facility Index System/Facility Registry System  
RAATS..... RCRA Administrative Action Tracking System  
UIC..... Underground Injection Wells Listing  
DRYCLEANERS..... Permitted Drycleaner Facility Listing  
AIRS..... List of Permitted Facilities  
INDIAN RESERV..... Indian Reservations  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List  
FINANCIAL ASSURANCE..... Financial Assurance Information Listing  
COAL ASH DOE..... Sleam-Electric Plan Operation Data  
PCB TRANSFORMER..... PCB Transformer Registration Database

### **EDR PROPRIETARY RECORDS**

#### ***EDR Proprietary Records***

Manufactured Gas Plants..... EDR Proprietary Manufactured Gas Plants

## EXECUTIVE SUMMARY

### 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 list***

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 02/25/2011 has revealed that there are 2 CERCLIS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KANAHA POND WEST	261 AMALA PLACE	E 1/4 - 1/2 (0.271 mi.)	E25	44
<b><i>BIRD BUILDERS</i></b>	<b><i>261 AMALA PLACE</i></b>	<b><i>E 1/4 - 1/2 (0.271 mi.)</i></b>	<b><i>E26</i></b>	<b><i>46</i></b>

#### ***Federal CERCLIS NFRAP site List***

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 02/25/2011 has revealed that there are 5 CERC-NFRAP sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
KING'S TOWING	AMALA PLACE	SSW 0 - 1/8 (0.069 mi.)	B3	11
SMILE'S JUNK YARD	AMALA PLACE	SSW 0 - 1/8 (0.069 mi.)	B4	12
<b><i>KANAHA POND EAST</i></b>	<b><i>AMALA PLACE</i></b>	<b><i>SSW 0 - 1/8 (0.069 mi.)</i></b>	<b><i>B6</i></b>	<b><i>13</i></b>
RAINBOW HAULING	AMALA PLACE	SSW 0 - 1/8 (0.069 mi.)	B7	14
E & E BLACK CONTRACTORS	AMALA PLACE	SSW 0 - 1/8 (0.069 mi.)	B8	15

## EXECUTIVE SUMMARY

### **Federal RCRA generators list**

RCRA-LQG: 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.

A review of the RCRA-LQG list, as provided by EDR, and dated 06/15/2011 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CHEVRON PRODUCTS CO KAHULUI TE	100 HOBRON AVE	WSW 0 - 1/8 (0.050 mi.)	A2	9

RCRA-SQG: 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.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/15/2011 has revealed that there are 4 RCRA-SQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
TOSCO MAUI BULK PLANT 0323	76 HOBRON AVE	W 0 - 1/8 (0.069 mi.)	C9	16
KAHULUI TRUCKING AND STORAGE	140 HOBRON AVE	SSW 0 - 1/8 (0.073 mi.)	B12	19
TESORO HAWAII CORPORATION	140 HOBRON AVE UNIT A	SSW 0 - 1/8 (0.073 mi.)	B13	22
KAHULUI GENERATING STATION	200 HOBRON LANE	S 0 - 1/8 (0.105 mi.)	18	32

RCRA-CESQG: 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.

A review of the RCRA-CESQG list, as provided by EDR, and dated 06/15/2011 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SHELL OIL PRODUCTS US KAHULUI	60 HOBRON AVE	WNW 0 - 1/8 (0.089 mi.)	C14	24

### **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 12/01/2009 has revealed that there are 17

## EXECUTIVE SUMMARY

SHWS sites within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>KAHULUI TERMINAL</b>	<b>100 HOBRON AVE</b>	<b>WSW 0 - 1/8 (0.050 mi.)</b>	<b>A1</b>	<b>7</b>
BIRD BUILDERS	AMALA PL	SSW 0 - 1/8 (0.069 mi.)	B5	13
<b>KANAHA POND EAST</b>	<b>AMALA PLACE</b>	<b>SSW 0 - 1/8 (0.069 mi.)</b>	<b>B6</b>	<b>13</b>
TOSCO BULK PLANT NUMBER 0323	76 HOBRON AVE	W 0 - 1/8 (0.069 mi.)	C10	18
<b>VIP WAREHOUSE</b>	<b>74 HOBRON AVE</b>	<b>W 0 - 1/8 (0.071 mi.)</b>	<b>C11</b>	<b>18</b>
<b>HOBRON AVE AREA (KAHULUI)</b>	<b>60 HOBRON AVE</b>	<b>WNW 0 - 1/8 (0.089 mi.)</b>	<b>C15</b>	<b>27</b>
<b>IMF (INTERMEDIATE MAINTENANCE)</b>	<b>261 AMALA PL</b>	<b>E 1/4 - 1/2 (0.271 mi.)</b>	<b>E24</b>	<b>43</b>
<b>HONEY BEE INFESTATION</b>	<b>281 AMALA PL</b>	<b>E 1/4 - 1/2 (0.291 mi.)</b>	<b>E27</b>	<b>48</b>
<b>YOUNG BROTHERS KAHULUI</b>	<b>65 WHARF ST</b>	<b>SW 1/4 - 1/2 (0.330 mi.)</b>	<b>30</b>	<b>50</b>
<b>32 LONO AVENUE</b>	<b>32 LONO AVE</b>	<b>SW 1/2 - 1 (0.665 mi.)</b>	<b>36</b>	<b>57</b>
<b>ALII LINEN SERVICE (FKA SNOW W</b>	<b>312 ALAMAHA PL</b>	<b>SSE 1/2 - 1 (0.668 mi.)</b>	<b>37</b>	<b>58</b>
<b>MAUI TOYOTA FKA HI WOOD PRESER</b>	<b>356 HANAKAI STREET</b>	<b>SSE 1/2 - 1 (0.683 mi.)</b>	<b>38</b>	<b>58</b>
<b>KAHULUI SERVICE, INC DBA LLOYD</b>	<b>130 W KAMEHAMEHA AVE</b>	<b>SW 1/2 - 1 (0.753 mi.)</b>	<b>39</b>	<b>64</b>
<b>MAUI DISPOSAL COMPANY</b>	<b>221 LALO PL</b>	<b>SSE 1/2 - 1 (0.794 mi.)</b>	<b>40</b>	<b>65</b>
<b>BEHIND SEA ISLAND</b>	<b>65 KAHULUI BEACH RD</b>	<b>WSW 1/2 - 1 (0.826 mi.)</b>	<b>41</b>	<b>67</b>
PACIFIC MACHINERY, INC MAUI	470 S HANA HWY	SE 1/2 - 1 (0.849 mi.)	42	68
<b>MAUI BUSINESS PARK OIL CONTAMI</b>	<b>370 DAIRY RD</b>	<b>SSE 1/2 - 1 (0.981 mi.)</b>	<b>43</b>	<b>68</b>

### 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 09/06/2011 has revealed that there are 9 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>TROPICAL RENT A CAR</b> Facility Status: Site Cleanup Completed (NFA)	<b>41 HANA HWY</b>	<b>S 1/8 - 1/4 (0.240 mi.)</b>	<b>22</b>	<b>40</b>
<b>ALAMO RENT A CAR INCORPORATED</b> Facility Status: Site Cleanup Completed (NFA)	<b>40 SOUTH HANA HIGHWAY</b>	<b>S 1/4 - 1/2 (0.269 mi.)</b>	<b>23</b>	<b>41</b>
<b>WAILUKU-KAHULUI WWRF</b> Facility Status: Site Cleanup Completed (NFA)	<b>281 AMALA PL</b>	<b>E 1/4 - 1/2 (0.291 mi.)</b>	<b>E28</b>	<b>49</b>
<b>KAHULUI SPS</b> Facility Status: Site Cleanup Completed (NFA)	<b>HANA HWY/HOBRON AVE</b>	<b>S 1/4 - 1/2 (0.299 mi.)</b>	<b>29</b>	<b>50</b>
<b>ISLAND DODGE HONDA</b> Facility Status: Site Cleanup Completed (NFA)	<b>110 SOUTH HANA HIGHWAY</b>	<b>SSE 1/4 - 1/2 (0.345 mi.)</b>	<b>32</b>	<b>53</b>
<b>AMFAC DISTRIBUTION HI. INC</b> Facility Status: Site Cleanup Completed (NFA)	<b>150 HANA HWY</b>	<b>SSE 1/4 - 1/2 (0.389 mi.)</b>	<b>33</b>	<b>55</b>
<b>GOODYEAR AUTO SERVICE CENTER #</b> Facility Status: Site Cleanup Completed (NFA)	<b>121 ALAMAHA ST</b>	<b>S 1/4 - 1/2 (0.413 mi.)</b>	<b>34</b>	<b>56</b>
<b>ISLAND MOVERS, INC.</b> Facility Status: Site Cleanup Completed (NFA)	<b>172 ALAMAHA ST</b>	<b>S 1/4 - 1/2 (0.452 mi.)</b>	<b>35</b>	<b>56</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>YOUNG BROTHERS, LTD.</b> Facility Status: Site Cleanup Completed (NFA)	<b>PIER 2</b>	<b>W 1/4 - 1/2 (0.335 mi.)</b>	<b>31</b>	<b>52</b>

## EXECUTIVE SUMMARY

### ***State and tribal registered storage tank lists***

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Health's Listing of Underground Storage Tanks.

A review of the UST list, as provided by EDR, and dated 09/06/2011 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>MAUI OIL CO. INC.</i>	<i>16 HOBRON AVE.</i>	<i>WNW 1/8 - 1/4 (0.155 mi.)</i>	<i>D21</i>	<i>39</i>
<i>TROPICAL RENT A CAR</i>	<i>41 HANA HWY</i>	<i>S 1/8 - 1/4 (0.240 mi.)</i>	<i>22</i>	<i>40</i>

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Other Ascertainable Records***

RCRA-NonGen: 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.

A review of the RCRA-NonGen list, as provided by EDR, and dated 06/15/2011 has revealed that there are 4 RCRA-NonGen sites within approximately 0.25 miles of the target property.

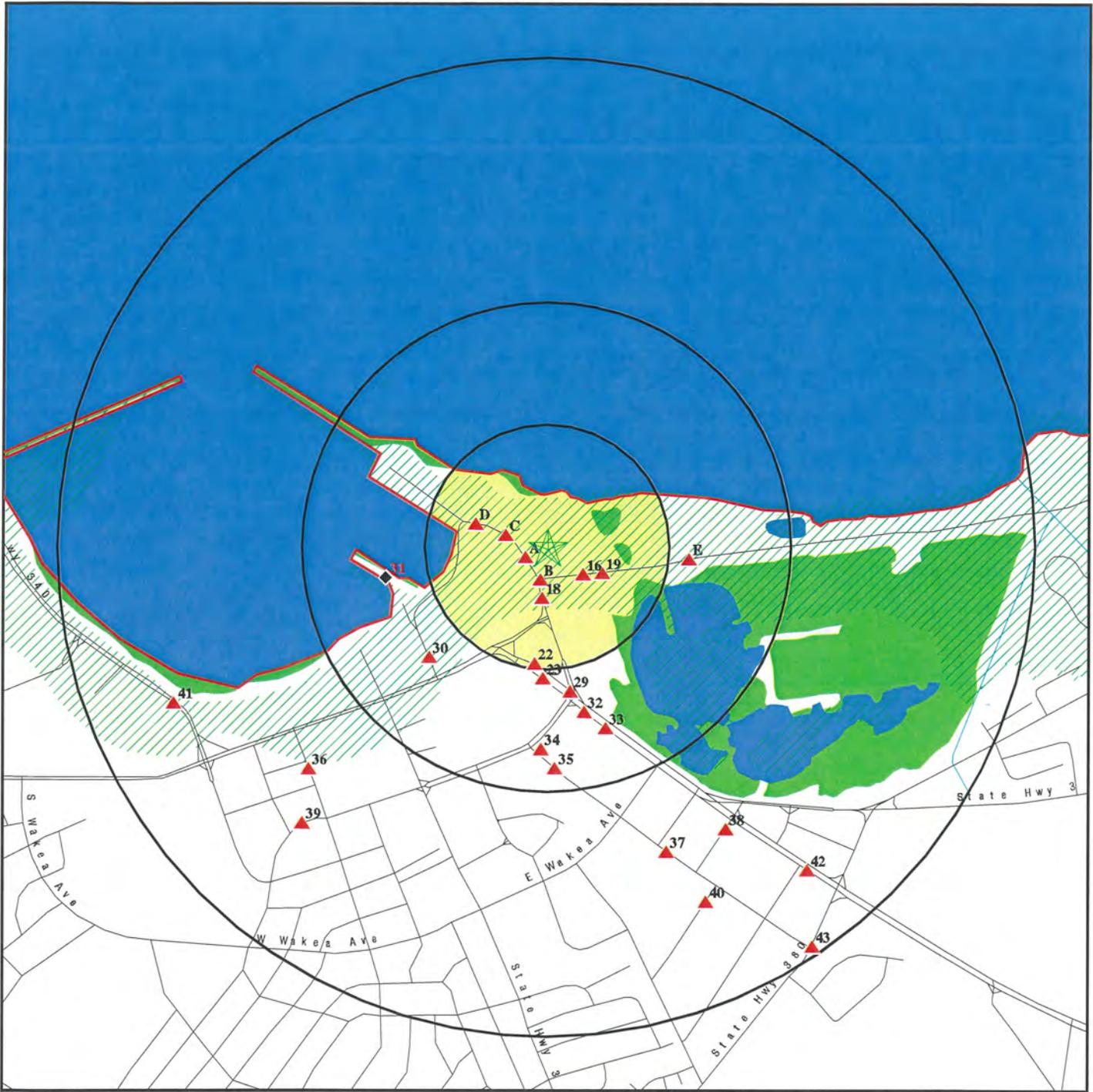
<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>OLEKOI CORPORATION LICENSE ARE</i>	<i>59 AMALA PL</i>	<i>SE 0 - 1/8 (0.092 mi.)</i>	<i>16</i>	<i>29</i>
<i>UNITEK SOLVENT SVCS INC MAUI</i>	<i>140 G HOBRON AVE</i>	<i>SSW 0 - 1/8 (0.095 mi.)</i>	<i>B17</i>	<i>30</i>
<i>VIP FOODSERVICE</i>	<i>90 AMALA PLACE</i>	<i>ESE 0 - 1/8 (0.125 mi.)</i>	<i>19</i>	<i>34</i>
<i>T SNIFFEN AND SONS LLC</i>	<i>30 HOBRON AVE</i>	<i>WNW 1/8 - 1/4 (0.134 mi.)</i>	<i>D20</i>	<i>36</i>

## EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 18 records.

<u>Site Name</u>	<u>Database(s)</u>
MAUI MEAT COMPANY FACILITY (FORMER HOBROU AVE AREA (KAHULUI)	SHWS, SPILLS FINDS, SHWS
FONG CONSTRUCTION	SHWS
MAUI PALMS HOTEL UST	SHWS
MCC-AUTOMOTIVE TECHNOLOGY BUILDING	FINDS, SHWS, SPILLS
A&B DUMP SITE	FINDS, SHWS
WAIKAPU DUMP-MAUI COUNTY DUMP	FINDS, SHWS
PAIA SUGAR MILL	SHWS
ILIMA SHELL	LUST, UST, FINANCIAL ASSURANCE
PORT TOWN CHEVRON	LUST, UST, FINANCIAL ASSURANCE
DAVID PICO CESSPOOL DIGGING	LUST, UST
TROPICAL RENT A CAR KAHULUI	RCRA-NonGen, FINDS
SHELL OIL COMPANY	RCRA-CESQG, FINDS
A&B PARCEL	FINDS
A&B ABOVE-GROUND STORAGE TANK	FINDS
A&B ABOVE-GROUND STORAGE TANK	FINDS
A&B DUMP SITE	FINDS
A&B PROPERTY, 55-GALLON DRUMS BY H	SPILLS

# OVERVIEW MAP - 3218291.2s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- ▨ Indian Reservations BIA
- County Boundary
- Oil & Gas pipelines from USGS
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- National Wetland Inventory

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

<p>SITE NAME: A&amp;B Parcel B          ADDRESS: 180 Hobron Ave.          Kahului HI 96732          LAT/LONG: 20.8956 / 156.4621</p>	<p>CLIENT: Kevin S. Kennedy Consulting, LLC          CONTACT: Kevin Kennedy          INQUIRY #: 3218291.2s          DATE: December 05, 2011 12:44 pm</p>
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# DETAIL MAP - 3218291.2s



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ▲ Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- ▨ Indian Reservations BIA
- ▬ County Boundary
- ▬ Oil & Gas pipelines from USGS
- ▨ 100-year flood zone
- ▨ 500-year flood zone
- National Wetland Inventory

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

<p>SITE NAME: A&amp;B Parcel B          ADDRESS: 180 Hobron Ave.          Kahului HI 96732          LAT/LONG: 20.8956 / 156.4621</p>	<p>CLIENT: Kevin S. Kennedy Consulting, LLC          CONTACT: Kevin Kennedy          INQUIRY #: 3218291.2s          DATE: December 05, 2011 12:44 pm</p>
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## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
<b><u>STANDARD ENVIRONMENTAL RECORDS</u></b>								
<b><i>Federal NPL site list</i></b>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL		1.000	0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
CERCLIS		0.500	0	0	2	NR	NR	2
FEDERAL FACILITY		1.000	0	0	0	0	NR	0
<b><i>Federal CERCLIS NFRAP site List</i></b>								
CERC-NFRAP		0.500	5	0	0	NR	NR	5
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS		1.000	0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG		0.250	1	0	NR	NR	NR	1
RCRA-SQG		0.250	4	0	NR	NR	NR	4
RCRA-CESQG		0.250	1	0	NR	NR	NR	1
<b><i>Federal institutional controls / engineering controls registries</i></b>								
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
<b><i>Federal ERNS list</i></b>								
ERNS		TP	NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
SHWS		1.000	6	0	3	8	NR	17
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
SWF/LF		0.500	0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
LUST		0.500	0	1	8	NR	NR	9
INDIAN LUST		0.500	0	0	0	NR	NR	0
<b><i>State and tribal registered storage tank lists</i></b>								
UST		0.250	0	2	NR	NR	NR	2

## MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN UST		0.250	0	0	NR	NR	NR	0
FEMA UST		0.250	0	0	NR	NR	NR	0
<b><i>State and tribal institutional control / engineering control registries</i></b>								
ENG CONTROLS		0.500	0	0	0	NR	NR	0
INST CONTROL		0.500	0	0	0	NR	NR	0
<b><i>State and tribal voluntary cleanup sites</i></b>								
INDIAN VCP		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	0	NR	NR	0
<b><i>State and tribal Brownfields sites</i></b>								
BROWNFIELDS		0.500	0	0	0	NR	NR	0
<b><u>ADDITIONAL ENVIRONMENTAL RECORDS</u></b>								
<b><i>Local Brownfield lists</i></b>								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
<b><i>Local Lists of Landfill / Solid Waste Disposal Sites</i></b>								
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
<b><i>Local Lists of Hazardous waste / Contaminated Sites</i></b>								
US CDL		TP	NR	NR	NR	NR	NR	0
CDL		TP	NR	NR	NR	NR	NR	0
US HIST CDL		TP	NR	NR	NR	NR	NR	0
<b><i>Local Land Records</i></b>								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
<b><i>Records of Emergency Release Reports</i></b>								
HMIRS		TP	NR	NR	NR	NR	NR	0
SPILLS		TP	NR	NR	NR	NR	NR	0
<b><i>Other Ascertainable Records</i></b>								
RCRA-NonGen		0.250	3	1	NR	NR	NR	4
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>&lt; 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>&gt; 1</u>	<u>Total Plotted</u>
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS		TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
UIC		TP	NR	NR	NR	NR	NR	0
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
AIRS		TP	NR	NR	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0
FINANCIAL ASSURANCE		TP	NR	NR	NR	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0

### EDR PROPRIETARY RECORDS

#### *EDR Proprietary Records*

Manufactured Gas Plants		1.000	0	0	0	0	NR	0
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#### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

A1 KAHULUI TERMINAL  
WSW 100 HOBROTON AVE  
< 1/8 KAHULUI, HI 96732  
0.050 mi.  
262 ft. Site 1 of 2 in cluster A

SHWS S106817657  
SPILLS N/A

Relative:  
Equal

SHWS:

Organization: Chevron Products Company  
Supplemental Location Text: No FRS Number Match Unit A  
Island: Maui  
Environmental Interest: Chevron Kahului Bulk Terminal  
Hid Number: Not reported  
Facility Registry Identifier: 110001764083  
Lead Agency: HEER  
Program: State  
Project Manager: Kelton Otsuka  
Hazard Priority: Low  
Site Status: Ongoing  
Action: Response  
Potential Hazards And Controls: Hazard Present  
Closure Document Title: Not reported  
Date Of Closure Document: Not reported

Actual:  
3 ft.

HI SPILLS:

Island: Maui  
Supplemental Loc. Text: No FRS Number Match Unit A  
Case Number: 19880111-2  
HID Number: Not reported  
Facility Registry Id: 110001764083  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: Chevron Terminal  
Substances: Transmix (Petroleum)  
Less Or Greater Than: Not reported  
Numerical Quantity: 250  
Units: Gallons  
Activity Type: Response  
Activity Lead: Chris Takeno  
Assignment End Date: Not reported  
Result: 8  
File Under: Chevron Products Company

Island: Maui  
Supplemental Loc. Text: No FRS Number Match Unit A  
Case Number: 19950413  
HID Number: Not reported  
Facility Registry Id: 110001764083  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: Chevron Kahului Terminal  
Substances: Diesel Fuel High Sulfur  
Less Or Greater Than: >  
Numerical Quantity: 50  
Units: Gallons  
Activity Type: Response  
Activity Lead: Terry Corpus  
Assignment End Date: Not reported  
Result: 8  
File Under: Chevron Products Company

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

KAHULUI TERMINAL (Continued)

S106817657

Island:	Maui
Supplemental Loc. Text:	No FRS Number Match Unit A
Case Number:	19941104
HID Number:	Not reported
Facility Registry Id:	110001764083
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Chevron Terminal Above Ground
Substances:	Diesel Fuel High Sulfur
Less Or Greater Than:	Not reported
Numerical Quantity:	500
Units:	Gallons
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	8
File Under:	Chevron Products Company
Island:	Maui
Supplemental Loc. Text:	No FRS Number Match Unit A
Case Number:	19960105-1339
HID Number:	Not reported
Facility Registry Id:	110001764083
Lead and Program:	HEER EP&R
ER:	No
Units:	Chevron Terminal (See 960105-0140)
Substances:	Gasoline
Less Or Greater Than:	Not reported
Numerical Quantity:	80
Units:	Gallons
Activity Type:	Response
Activity Lead:	Bill Perry
Assignment End Date:	Not reported
Result:	8
File Under:	Chevron Products Company
Island:	Maui
Supplemental Loc. Text:	No FRS Number Match Unit A
Case Number:	19960105-1340
HID Number:	Not reported
Facility Registry Id:	110001764083
Lead and Program:	HEER EP&R
ER:	Yes
Units:	Chevron Terminal Bulk Storage (See 960105-0139)
Substances:	Gasoline
Less Or Greater Than:	Not reported
Numerical Quantity:	400
Units:	Gallons
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	8
File Under:	Chevron Products Company

[Click this hyperlink](#) while viewing on your computer to access  
1 additional HI SPILLS: record(s) in the EDR Site Report.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

A2  
WSW  
< 1/8  
0.050 mi.  
262 ft.

**CHEVRON PRODUCTS CO KAHULUI TERMINAL**  
**100 HOBRON AVE**  
**KAHULUI, HI 96732**  
**Site 2 of 2 in cluster A**

**RCRA-LQG 1000434551**  
**HIT000615336**

Relative:  
Equal

RCRA-LQG:

Actual:  
3 ft.

Date form received by agency: 04/11/2011  
Facility name: CHEVRON PRODUCTS CO KAHULUI TERMINAL  
Facility address: 100 HOBRON AVE  
KAHULUI, HI 96732  
EPA ID: HIT000615336  
Contact: HUDH MESHELL  
Contact address: 100 HOBRON AVE  
KAHULUI, HI 96732  
Contact country: US  
Contact telephone: (808) 877-5012  
Contact email: NAWTDESK@CHEVRON.COM  
EPA Region: 09  
Land type: Private  
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:

Owner/operator name: CHEVRON  
Owner/operator address: PO BOX 6004  
SAN RAMON, CA 94583  
Owner/operator country: US  
Owner/operator telephone: (877) 386-6044  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 03/10/1988  
Owner/Op end date: Not reported

Owner/operator name: CHEVRON USA INC.  
Owner/operator address: PO BOX 6004  
SAN RAMON, CA 94583  
Owner/operator country: US  
Owner/operator telephone: (877) 386-6044  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 03/10/1988  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CHEVRON PRODUCTS CO KAHULUI TERMINAL (Continued)**

**1000434551**

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  
Used 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: 01/20/1997  
Facility name: CHEVRON PRODUCTS CO KAHULUI TERMINAL  
Classification: Small Quantity Generator

Date form received by agency: 03/31/1994  
Facility name: CHEVRON PRODUCTS CO KAHULUI TERMINAL  
Site name: CHEVRON U.S.A. PRODUCTS CO  
Classification: Large Quantity Generator

Hazardous Waste Summary:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D018  
Waste name: BENZENE

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Generators - Manifest  
Date violation determined: 03/06/1986  
Date achieved compliance: 01/28/1987  
Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: 0  
Final penalty amount: 0  
Paid penalty amount: 0

Regulation violated: Not reported  
Area of violation: Generators - General  
Date violation determined: 03/06/1986  
Date achieved compliance: 01/28/1987

Map ID  
Direction  
Distance  
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number  
EPA ID Number

**CHEVRON PRODUCTS CO KAHULUI TERMINAL (Continued)**

**1000434551**

Violation lead agency: State  
Enforcement action: Not reported  
Enforcement action date: Not reported  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: Not reported  
Proposed penalty amount: 0  
Final penalty amount: 0  
Paid penalty amount: 0

Evaluation Action Summary:

Evaluation date: 01/23/2007  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 03/06/1986  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - General  
Date achieved compliance: 01/28/1987  
Evaluation lead agency: State

Evaluation date: 03/06/1986  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Generators - Manifest  
Date achieved compliance: 01/28/1987  
Evaluation lead agency: State

**B3**  
**SSW**  
**< 1/8**  
**0.069 mi.**  
**362 ft.**

**KING'S TOWING**  
**AMALA PLACE**  
**KAHULUI, HI 96732**  
**Site 1 of 9 in cluster B**

**CERC-NFRAP** **1003879927**  
**HID000149708**

**Relative:**  
**Equal**

CERC-NFRAP:  
Site ID: 0904992  
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

**Actual:**  
**3 ft.**

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13037584.00000  
Person ID: 9000059.00000

Contact Sequence ID: 13087092.00000  
Person ID: 13002167.00000

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY  
Date Started: Not reported  
Date Completed: 03/18/1994  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: Not reported  
Date Completed: 05/17/1995

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KING'S TOWING (Continued)**

1003879927

Priority Level: NFRAP-Site does not qualify for the NPL based on existing information  
Action: ARCHIVE SITE  
Date Started: Not reported  
Date Completed: 01/23/1996  
Priority Level: Not reported

B4  
SSW  
< 1/8  
0.069 mi.  
362 ft.

**SMILE'S JUNK YARD  
AMALA PLACE  
KAHULUI, HI 96732**  
**Site 2 of 9 in cluster B**

CERC-NFRAP 1003879871  
HID984470088

Relative:  
Equal

CERC-NFRAP:  
Site ID: 0904877  
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

Actual:  
3 ft.

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13037175.00000  
Person ID: 9000059.00000

Contact Sequence ID: 13086678.00000  
Person ID: 13002167.00000

CERCLIS-NFRAP Site Alias Name(s):

Alias Name: SMILE'S AUTO SPECIALISTS  
Alias Address: Not reported  
HI

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY  
Date Started: Not reported  
Date Completed: 07/20/1993  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: Not reported  
Date Completed: 05/19/1995  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE  
Date Started: Not reported  
Date Completed: 01/23/1996  
Priority Level: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**B5**  
**SSW**  
**< 1/8**  
**0.069 mi.**  
**362 ft.**  
**BIRD BUILDERS**  
**AMALA PL**  
**KAHULUI, HI 96732**  
**Site 3 of 9 in cluster B**

**SHWS** **S106816558**  
**N/A**

**Relative:**  
**Equal**

**SHWS:**

Organization:	State of Hawaii, Department of Land and Natural Resources
Supplemental Location Text:	Not reported
Island:	Maui
Environmental Interest:	Bird Builders
Hid Number:	HID000149674
Facility Registry Identifier:	110009278833
Lead Agency:	HEER
Program:	State
Project Manager:	Richard Palmer
Hazard Priority:	Medium
Site Status:	Ongoing
Action:	Response
Potential Hazards And Controls:	Hazard Present
Closure Document Title:	Not reported
Date Of Closure Document:	Not reported

**Actual:**  
**3 ft.**

**B6**  
**SSW**  
**< 1/8**  
**0.069 mi.**  
**362 ft.**  
**KANAHA POND EAST**  
**AMALA PLACE**  
**KAHULUI, HI 96732**  
**Site 4 of 9 in cluster B**

**CERC-NFRAP** **1001475719**  
**SHWS** **HISFN0905464**

**Relative:**  
**Equal**

**CERC-NFRAP:**

Site ID:	0905464
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

**Actual:**  
**3 ft.**

**CERCLIS-NFRAP Site Contact Details:**

Contact Sequence ID:	13037339.00000
Person ID:	9000059.00000
Contact Sequence ID:	13086844.00000
Person ID:	13002167.00000

**CERCLIS-NFRAP Site Alias Name(s):**

Alias Name:	KING'S TOWING
Alias Address:	AMALA PLACE KAHULUI, HI 96732
Alias Name:	F&M CONTRACTORS
Alias Address:	AMALA PLACE KAHULUI, HI 96732
Alias Name:	E & E BLACK CONTRACTORS
Alias Address:	AMALA PLACE KAHULUI, HI
Alias Name:	SMILE'S JUNKYARD
Alias Address:	AMALA PLACE KAHULUI, HI

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KANAHA POND EAST (Continued)**

**1001475719**

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY  
Date Started: Not reported  
Date Completed: 03/18/1994  
Priority Level: Not reported

Action: SITE INSPECTION  
Date Started: Not reported  
Date Completed: 09/25/2001  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE  
Date Started: Not reported  
Date Completed: 09/27/2001  
Priority Level: Not reported

SHWS:

Organization: State of Hawaii, Department of Land and Natural Resources  
Supplemental Location Text: Not reported  
Island: Maui  
Environmental Interest: Kanaha Pond Industrial East Site  
Hid Number: HISFN0905464  
Facility Registry Identifier: 110013787465  
Lead Agency: ACOE  
Program: State  
Project Manager: Melody Calisay  
Hazard Priority: NFA  
Site Status: NFA  
Action: Response  
Potential Hazards And Controls: No Hazard  
Closure Document Title: NFA Letter - Unrestricted Residential Use  
Date Of Closure Document: 7/2/2001 1:11:51 AM

**B7**  
**SSW**  
**< 1/8**  
**0.069 mi.**  
**362 ft.**

**RAINBOW HAULING**  
**AMALA PLACE**  
**KAHULUI, HI 96732**

**CERC-NFRAP 1003879928**  
**HID000149716**

**Site 5 of 9 in cluster B**

**Relative:**  
**Equal**

CERC-NFRAP:  
Site ID: 0904994  
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

**Actual:**  
**3 ft.**

CERCLIS-NFRAP Site Contact Details:

Contact Sequence ID: 13037333.00000  
Person ID: 9000059.00000

Contact Sequence ID: 13086838.00000  
Person ID: 13002167.00000

CERCLIS-NFRAP Assessment History:

Action: DISCOVERY  
Date Started: Not reported  
Date Completed: 03/18/1994

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**RAINBOW HAULING (Continued)**

**1003879928**

Priority Level: Not reported

Action: ARCHIVE SITE  
Date Started: Not reported  
Date Completed: 10/07/1994  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: Not reported  
Date Completed: 10/07/1994  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

**B8  
SSW  
< 1/8  
0.069 mi.  
362 ft.**

**E & E BLACK CONTRACTORS  
AMALA PLACE  
KAHULUI, HI 96732  
Site 6 of 9 in cluster B**

**CERC-NFRAP 1003879870  
HID984470070**

**Relative:  
Equal**

CERC-NFRAP:  
Site ID: 0904876  
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

**Actual:  
3 ft.**

**CERCLIS-NFRAP Site Contact Details:**

Contact Sequence ID: 13037313.00000  
Person ID: 9000059.00000

Contact Sequence ID: 13086818.00000  
Person ID: 13002167.00000

**CERCLIS-NFRAP Assessment History:**

Action: DISCOVERY  
Date Started: Not reported  
Date Completed: 07/20/1993  
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT  
Date Started: Not reported  
Date Completed: 05/19/1995  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE  
Date Started: Not reported  
Date Completed: 01/23/1996  
Priority Level: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

C9 TOSCO MAUI BULK PLANT 0323  
West 76 HOBRON AVE  
< 1/8 KAHULUI, HI 96732  
0.069 mi.  
365 ft. Site 1 of 5 in cluster C

RCRA-SQG 1000337332  
FINDS HID044297042

Relative:  
Equal

RCRA-SQG:

Actual:  
3 ft.

Date form received by agency: 03/10/1997  
Facility name: TOSCO MAUI BULK PLANT 0323  
Facility address: 76 HOBRON AVE  
KAHULUI, HI 96732  
EPA ID: HID044297042  
Contact: DON ESPERSON  
Contact address: P O BOX 52085  
PHOENIX, AZ 85072  
Contact country: US  
Contact telephone: (602) 437-0600  
Contact email: Not reported  
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: TOSCO CORP  
Owner/operator address: 72 CUMMINGS PT RD  
STAMFORD, CT 06902  
Owner/operator country: Not reported  
Owner/operator telephone: (602) 437-0600  
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: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TOSCO MAUI BULK PLANT 0323 (Continued)**

1000337332

Used oil processor: No  
Used 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: 02/05/1996  
Facility name: TOSCO MAUI BULK PLANT 0323  
Site name: 76 PRODUCTS CO MAUI TERMINAL  
Classification: Large Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 03/04/1986  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

FINDS:

Registry ID: 110007501881

Environmental Interest/Information System

Hawaii Hazard Evaluation and Emergency Response (HEER-FRS) system maintains basic information for facility/sites of interest to state of Hawaii, Department of Health, Hazard Evaluation and Emergency Response. It is used to index sites for hardcopy file retrieval and to present limited site status information. The environmental interests included are: release assessments, TRI reporters, EPCRA filers, RMP reporters and long term types of site investigations such as environmental cleanup study areas, state cleanup sites, Superfund NPL sites, voluntary clean up programs and Brownfields Pilot/Grants, properties, sites and targeted assessments.

The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and hazardous materials that ensures that program areas and facilities are in compliance with environmental regulations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**TOSCO MAUI BULK PLANT 0323 (Continued)**

**1000337332**

information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

**C10**      **TOSCO BULK PLANT NUMBER 0323**  
**West**     **76 HOBRON AVE**  
**< 1/8**     **KAHULUI, HI 96732**  
**0.069 mi.**  
**365 ft.**    **Site 2 of 5 in cluster C**

**SHWS**    **S106820640**  
**N/A**

<b>Relative:</b>	SHWS:	
<b>Equal</b>	Organization:	TOSCO Corporation
	Supplemental Location Text:	TOSCO Bulk Plant Number 0323
<b>Actual:</b>	Island:	Maui
<b>3 ft.</b>	Environmental Interest:	TOSCO Bulk Plant Number 0323
	Hid Number:	Not reported
	Facility Registry Identifier:	110007501881
	Lead Agency:	HEER
	Program:	State
	Project Manager:	Eric Sadoyama
	Hazard Priority:	NFA
	Site Status:	NFA
	Action:	Response
	Potential Hazards And Controls:	No Hazard
	Closure Document Title:	NFA - Type Undetermined
	Date Of Closure Document:	3/10/2004 1:13:22 AM

**C11**      **VIP WAREHOUSE**  
**West**     **74 HOBRON AVE**  
**< 1/8**     **KAHULUI, HI 96732**  
**0.071 mi.**  
**376 ft.**    **Site 3 of 5 in cluster C**

**SHWS**    **S106820926**  
**SPILLS**   **N/A**

<b>Relative:</b>	SHWS:	
<b>Equal</b>	Organization:	Shell Oil Company
	Supplemental Location Text:	VIP Foodservice Warehouse
<b>Actual:</b>	Island:	Maui
<b>3 ft.</b>	Environmental Interest:	VIP Warehouse
	Hid Number:	Not reported
	Facility Registry Identifier:	110013773265
	Lead Agency:	HEER
	Program:	State
	Project Manager:	Kelton Otsuka
	Hazard Priority:	Low
	Site Status:	Ongoing
	Action:	Assessment
	Potential Hazards And Controls:	Hazard Present
	Closure Document Title:	Not reported
	Date Of Closure Document:	Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VIP WAREHOUSE (Continued)

S106820926

HI SPILLS:

Island: Maui  
Supplemental Loc. Text: VIP Foodservice Warehouse  
Case Number: 19920426  
HID Number: Not reported  
Facility Registry Id: 110013773265  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: Valley Isle Produce Food Service at TMK # 3-7-11-6  
Substances: Diesel Fuel  
Less Or Greater Than: Not reported  
Numerical Quantity: Not reported  
Units: Not reported  
Activity Type: Response  
Activity Lead: Kevin Wood  
Assignment End Date: Not reported  
Result: 8  
File Under: Shell Oil Company

B12  
SSW  
< 1/8  
0.073 mi.  
383 ft.

KAHULUI TRUCKING AND STORAGE  
140 HOBROTON AVE  
KAHULUI, HI 96732

RCRA-SQG 1004689004  
FINDS HIR000074492

Site 7 of 9 in cluster B

Relative:  
Equal

RCRA-SQG:

Date form received by agency: 06/05/2000  
Facility name: KAHULUI TRUCKING AND STORAGE  
Facility address: 140 HOBROTON AVE  
KAHULUI, HI 96732  
EPA ID: HIR000074492  
Contact: JOHN JACKSON  
Contact address: 140 HOBROTON AVE  
KAHULUI, HI 96732

Actual:  
3 ft.

Contact country: US  
Contact telephone: (808) 877-5001  
Contact email: Not reported  
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: ALEXANDER AND BALDWIN INC  
Owner/operator address: 822 BISHOP ST  
HONOLULU, HI 96801  
Owner/operator country: Not reported  
Owner/operator telephone: (808) 525-6611  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

KAHULUI TRUCKING AND STORAGE (Continued)

1004689004

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  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Hazardous Waste Summary:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002  
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS, HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D007  
Waste name: CHROMIUM

Waste code: D008  
Waste name: LEAD

Waste code: D018  
Waste name: BENZENE

Waste code: D039  
Waste name: TETRACHLOROETHYLENE

Waste code: F001  
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAHULUI TRUCKING AND STORAGE (Continued)**

**1004689004**

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F002  
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F003  
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005  
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

Evaluation Action Summary:  
Evaluation date: 05/13/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

**FINDS:**

Registry ID: 110009360360

**Environmental Interest/Information System**

Hawaii Hazard Evaluation and Emergency Response (HEER-FRS) system maintains basic information for facility/sites of interest to state of Hawaii, Department of Health, Hazard Evaluation and Emergency Response. It is used to index sites for hardcopy file retrieval and to present limited site status information. The environmental interests included are: release assessments, TRI reporters, EPCRA filers, RMP reporters and long term types of site investigations such as environmental cleanup study areas, state cleanup sites, Superfund NPL sites, voluntary clean up programs and Brownfields Pilot/Grants.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**KAHULUI TRUCKING AND STORAGE (Continued)**

**1004689004**

properties, sites and targeted assessments.

The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and hazardous materials that ensures that program areas and facilities are in compliance with environmental regulations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

**B13**  
**SSW**  
 < 1/8  
 0.073 mi.  
 383 ft.

**TESORO HAWAII CORPORATION**  
**140 HOBROON AVE UNIT A**  
**KAHULUI, HI 96733**  
**Site 8 of 9 in cluster B**

**RCRA-SQG 1000906710**  
**FINDS HI0000146365**

**Relative:**  
**Equal**

**RCRA-SQG:**

Date form received by agency: 03/10/2009

Facility name: TESORO HAWAII-MAUI TERMINAL  
 Facility address: 140 A HOBROON AVENUE  
 KAHULUI, HI 96732

EPA ID: HI0000146365  
 Mailing address: 431 KUWILI STREET  
 2ND FLOOR  
 HONOLULU, HI 96817

Contact: ROSE I CHU  
 Contact address: 431 KUWILI STREET 2ND FLOOR  
 HONOLULU, HI 96817

Contact country: US  
 Contact telephone: (808) 547-3817  
 Contact email: RCHU@TSOCORP.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: TESORO HAWAII CORPORATION  
 Owner/operator address: KUWILI STREET, 2ND FLOOR  
 HONOLULU, HI 96817

Owner/operator country: US  
 Owner/operator telephone: Not reported  
 Legal status: Private

Owner/Operator Type: Owner  
 Owner/Op start date: 05/29/1998  
 Owner/Op end date: Not reported

Owner/operator name: TESORO HAWAII CORPORATION

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

TESORO HAWAII CORPORATION (Continued)

1000906710

Owner/operator address: HOBRON AVENUE  
KAHULUI, HI 96732  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 05/29/1998  
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  
Used 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: 03/12/2007  
Facility name: TESORO HAWAII-MAUI TERMINAL  
Classification: Large Quantity Generator

Date form received by agency: 02/28/2006  
Facility name: TESORO HAWAII-MAUI TERMINAL  
Classification: Large Quantity Generator

Date form received by agency: 03/01/2004  
Facility name: TESORO HAWAII-MAUI TERMINAL  
Site name: TESORO HAWAII MAUI TERMINAL  
Classification: Large Quantity Generator

Date form received by agency: 03/28/2002  
Facility name: TESORO HAWAII-MAUI TERMINAL  
Site name: TESORO HAWAII - MAUI TERMINAL  
Classification: Large Quantity Generator

Date form received by agency: 06/03/1998  
Facility name: TESORO HAWAII-MAUI TERMINAL  
Site name: TESORO HAWAII MAUI TERMINAL  
Classification: Small Quantity Generator

Hazardous Waste Summary:

Waste code: D018  
Waste name: BENZENE

Waste code: D018  
Waste name: BENZENE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**TESORO HAWAII CORPORATION (Continued)**

**1000906710**

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 02/05/2009  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 01/23/2007  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

FINDS:

Registry ID: 110001412481

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and hazardous materials that ensures that program areas and facilities are in compliance with environmental regulations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

C14  
WNW  
< 1/8  
0.089 mi.  
472 ft.

**SHELL OIL PRODUCTS US KAHULUI TERMINAL**  
**60 HOBRON AVE**  
**KAHULUI, HI 96732**  
**Site 4 of 5 in cluster C**

**RCRA-CESQG 1000288044**  
**HID000631713**

Relative:  
Equal

RCRA-CESQG:  
Date form received by agency: 07/12/2010  
Facility name: SHELL OIL PRODUCTS US KAHULUI TERMINAL  
Facility address: 60 HOBRON AVE  
KAHULUI, HI 96732  
EPA ID: HID000631713  
Mailing address: PO BOX 2648

Actual:  
3 ft.

Map ID  
Direction  
Distance  
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number  
EPA ID Number

**SHELL OIL PRODUCTS US KAHULUI TERMINAL (Continued)**

**1000288044**

Contact: HOUSTON, TX 77252-2648  
Contact address: RAY WALDING  
PO BOX 2648  
HOUSTON, TX 77252-2648  
Contact country: US  
Contact telephone: (713) 241-7008  
Contact email: RAY.WALDING@SHELL.COM  
EPA Region: 09  
Land type: Private  
Classification: Conditionally Exempt Small Quantity Generator  
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 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; 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 at any time: 1 kg or less of acutely hazardous waste; or 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

**Owner/Operator Summary:**

Owner/operator name: EQUILON ENTERPRISES LLC DBA SHELL OIL PR  
Owner/operator address: PO BOX 2648  
HOUSTON, TX 77252  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 07/01/1998  
Owner/Op end date: Not reported

Owner/operator name: EQUILON ENTERPRISES LLC DBA SHELL OIL PR  
Owner/operator address: PO BOX 2648  
HOUSTON, TX 77252  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 07/01/1998  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**SHELL OIL PRODUCTS US KAHULUI TERMINAL (Continued)**

**1000288044**

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

Universal Waste Summary:

Waste type: E  
Accumulated waste on-site: No  
Generated waste on-site: No

Waste type: Batteries  
Accumulated waste on-site: No  
Generated waste on-site: Not reported

Waste type: Lamps  
Accumulated waste on-site: No  
Generated waste on-site: Not reported

Waste type: Pesticides  
Accumulated waste on-site: No  
Generated waste on-site: Not reported

Waste type: Thermostats  
Accumulated waste on-site: No  
Generated waste on-site: Not reported

Historical Generators:

Date form received by agency: 10/08/2009  
Facility name: SHELL OIL PRODUCTS US KAHULUI TERMINAL  
Classification: Small Quantity Generator

Date form received by agency: 05/28/2004  
Facility name: SHELL OIL PRODUCTS US KAHULUI TERMINAL  
Classification: Small Quantity Generator

Date form received by agency: 03/06/2000  
Facility name: SHELL OIL PRODUCTS US KAHULUI TERMINAL  
Site name: SHELL OIL COMPANY/ KAHULUI TERMINAL  
Classification: Large Quantity Generator

Date form received by agency: 08/15/1993  
Facility name: SHELL OIL PRODUCTS US KAHULUI TERMINAL  
Site name: SHELL OIL CO KAHULUI PLANT  
Classification: Not a generator, verified

Hazardous Waste Summary:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**SHELL OIL PRODUCTS US KAHULUI TERMINAL (Continued)**

**1000288044**

Waste code: D008  
 Waste name: LEAD

Waste code: D018  
 Waste name: BENZENE

Violation Status: No violations found

**Evaluation Action Summary:**

Evaluation date: 02/21/2007  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Not reported  
 Date achieved compliance: Not reported  
 Evaluation lead agency: State

Evaluation date: 03/04/1986  
 Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
 Area of violation: Not reported  
 Date achieved compliance: Not reported  
 Evaluation lead agency: State

C15  
 WNW  
 < 1/8  
 0.089 mi.  
 472 ft.

**HOBRON AVE AREA (KAHULUI)  
 60 HOBRON AVE  
 KAHULUI, HI 96732**

**Relative:  
 Equal**

**Actual:  
 3 ft.**

**Site 5 of 5 in cluster C**

**FINDS 1006820864  
 SHWS N/A  
 SPILLS**

**FINDS:**

Registry ID: 110013788856

**Environmental Interest/Information System**

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

Hawaii Hazard Evaluation and Emergency Response (HEER-FRS) system maintains basic information for facility/sites of interest to state of Hawaii, Department of Health, Hazard Evaluation and Emergency Response. It is used to index sites for hardcopy file retrieval and to present limited site status information. The environmental interests included are: release assessments, TRI reporters, EPCRA filers, RMP reporters and long term types of site investigations such as environmental cleanup study areas, state cleanup sites, Superfund NPL sites, voluntary clean up programs and Brownfields Pilot/Grants, properties, sites and targeted assessments.

The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and hazardous materials that ensures that program areas and facilities are

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**HOBRON AVE AREA (KAHULUI) (Continued)**

**1006820864**

in compliance with environmental regulations

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

US Facility Response Plan (FRP) contains plans for responding, to the maximum extent practical, to worst case discharges of oil.

**SHWS:**

Organization:	Equilon Enterprises LLC dba Shell Oil Products US
Supplemental Location Text:	Kahului Fuel Distribution Terminal
Island:	Maui
Environmental Interest:	Shell Kahului Bulk Terminal
Hid Number:	Not reported
Facility Registry Identifier:	110013788856
Lead Agency:	HEER
Program:	State
Project Manager:	Kelton Otsuka
Hazard Priority:	Low
Site Status:	Ongoing
Action:	Response
Potential Hazards And Controls:	Hazard Present
Closure Document Title:	Not reported
Date Of Closure Document:	Not reported

**HI SPILLS:**

Island:	Maui
Supplemental Loc. Text:	Kahului Fuel Distribution Terminal
Case Number:	19941103-2
HID Number:	Not reported
Facility Registry Id:	110013788856
Lead and Program:	HEER EP&R
ER:	Not reported
Units:	Shell Terminal Kahului
Substances:	Diesel Fuel High Sulfur
Less Or Greater Than:	Not reported
Numerical Quantity:	500
Units:	Gallons
Activity Type:	Response
Activity Lead:	Terry Corpus
Assignment End Date:	Not reported
Result:	8

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site Database(s) EDR ID Number  
EPA ID Number

HOBRON AVE AREA (KAHULUI) (Continued)

1006820864

File Under: Equilon Enterprises LLC dba Shell Oil Products US

16  
SE  
< 1/8  
0.092 mi.  
484 ft.

OLEKOI CORPORATION LICENSE AREA  
59 AMALA PL  
KAHULUI, HI 96732

RCRA-NonGen 1012178236  
HIP000139451

Relative:  
Equal

RCRA-NonGen:

Actual:  
3 ft.

Date form received by agency: 01/27/2010  
Facility name: OLEKOI CORPORATION LICENSE AREA  
Facility address: 59 AMALA PL  
KAHULUI, HI 96732  
EPA ID: HIP000139451  
Mailing address: C/O SEAN O'KEEFE AT A & B, INC  
P.O. BOX 266  
PUUNENE, HI 96784  
Contact: SEAN M O'KEEFE  
Contact address: P.O. BOX 266  
PUUNENE, HI 96784  
Contact country: US  
Contact telephone: (808) 877-2959  
Contact email: SOKEEFE@HCSUGAR.COM  
EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: OLEKOI CORPORATION  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1994  
Owner/Op end date: Not reported  
Owner/operator name: ALEXANDER & BALDWIN, INC.  
Owner/operator address: P.O. BOX 266  
PUUNENE, HI 96784  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1900  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

OLEKOI CORPORATION LICENSE AREA (Continued)

1012178236

Used oil fuel burner: No  
Used oil processor: No  
Used 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: 10/28/2009  
Facility name: OLEKOI CORPORATION LICENSE AREA  
Classification: Small Quantity Generator

Hazardous Waste Summary:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002  
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Waste code: D003  
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Waste code: D008  
Waste name: LEAD

Violation Status: No violations found

B17  
SSW  
< 1/8  
0.095 mi.  
503 ft.

UNITEK SOLVENT SVCS INC MAUI  
140 G HOBROON AVE  
KAHULUI, HI 96732

RCRA-NonGen 1000601443  
FINDS HID984466656

Site 9 of 9 in cluster B

Relative:  
Equal

RCRA-NonGen:  
Date form received by agency: 11/09/1999  
Facility name: UNITEK SOLVENT SVCS INC MAUI  
Facility address: 140 G HOBROON AVE  
KAHULUI, HI 96732

Actual:  
3 ft.

EPA ID: HID984466656  
Contact: MELANIE HAHN  
Contact address: 2889 MOKUMOA ST

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**UNITEK SOLVENT SVCS INC MAUI (Continued)**

**1000601443**

HONOLULU, HI 96819  
Contact country: US  
Contact telephone: (808) 831-3066  
Contact email: Not reported  
EPA Region: 09  
Land type: Private  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Owner/Operator Summary:**

Owner/operator name: UNITEK SOLVENT SVCS INC  
Owner/operator address: 2889 MOKUMOA ST  
HONOLULU, HI 96819  
Owner/operator country: Not reported  
Owner/operator telephone: (808) 834-1444  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
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  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: Yes  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

**Evaluation Action Summary:**

Evaluation date: 09/03/2004  
Evaluation: FOLLOW-UP INSPECTION  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

**FINDS:**

Registry ID: 110005727375

**Environmental Interest/Information System**

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

UNITEK SOLVENT SVCS INC MAUI (Continued)

1000601443

corrective action activities required under RCRA.

18  
South  
< 1/8  
0.105 mi.  
553 ft.

KAHULUI GENERATING STATION  
200 HOBROTON LANE  
KAHULUI, HI 96732

RCRA-SQG 1007092167  
HAZNET HIT000610915

Relative:  
Equal

Actual:  
3 ft.

RCRA-SQG:

Date form received by agency: 03/19/2003  
Facility name: KAHULUI GENERATING STATION  
Facility address: 200 HOBROTON LANE  
KAHULUI, HI 96732  
EPA ID: HIT000610915  
Mailing address: PO BOX 398  
KAHULUI, HI 96733-6898  
Contact: DONN FUKADA  
Contact address: Not reported  
HI 96732  
Contact country: US  
Contact telephone: 808-543-4525  
Contact email: Not reported  
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: MAUI ELECTRIC COMPANY, LTD.  
Owner/operator address: Not reported  
HI 96732  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 01/01/1946  
Owner/Op end date: Not reported

Owner/operator name: MAUI ELEC CO, LTD  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/1946  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAHULUI GENERATING STATION (Continued)**

**1007092167**

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  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: Yes  
Used oil transfer facility: No  
Used oil transporter: No

Historical Generators:

Date form received by agency: 07/29/1993  
Facility name: KAHULUI GENERATING STATION  
Site name: MAUI ELECTRIC CO LTD KAHULUI GEN STE  
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 07/23/1991  
Facility name: KAHULUI GENERATING STATION  
Site name: MAUI ELECTRIC CO LTD KAHULUI GEN STE  
Classification: Not a generator, verified

Hazardous Waste Summary:

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D006  
Waste name: CADMIUM

Waste code: D008  
Waste name: LEAD

Facility Has Received Notices of Violations:

Regulation violated: F - 279.20-24  
Area of violation: Used Oil - Generators  
Date violation determined: 06/14/2001  
Date achieved compliance: 11/26/2001  
Violation lead agency: EPA  
Enforcement action: Not reported  
Enforcement action date: 08/03/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: 0  
Final penalty amount: 0  
Paid penalty amount: 0

Regulation violated: F - 279.20-24

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**KAHULUI GENERATING STATION (Continued)**

1007092167

Area of violation: Used Oil - Generators  
Date violation determined: 06/14/2001  
Date achieved compliance: 11/26/2001  
Violation lead agency: EPA  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 11/26/2001  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: EPA  
Proposed penalty amount: 0  
Final penalty amount: 0  
Paid penalty amount: 0

Evaluation Action Summary:

Evaluation date: 06/14/2001  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Used Oil - Generators  
Date achieved compliance: 11/26/2001  
Evaluation lead agency: EPA

Evaluation date: 02/25/1983  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: EPA

HAZNET:

Year: 2004  
Gepaid: HIT000610915  
Contact: DONN FUKADA  
Telephone: 8085434525  
Mailing Name: Not reported  
Mailing Address: PO BOX 398  
Mailing City,St,Zip: KAHULUI, HI 967336898  
Gen County: Not reported  
TSD EPA ID: CAT000646117  
TSD County: Kings  
Waste Category: Other inorganic solid waste  
Disposal Method: T01  
Tons: 0.05  
Facility County: Not reported

19  
ESE  
< 1/8  
0.125 mi.  
658 ft.

VIP FOODSERVICE  
90 AMALA PLACE  
KAHULUI, HI 96732

RCRA-NonGen 1000114312  
FINDS HID981965874

Relative:  
Equal

Actual:  
3 ft.

RCRA-NonGen:  
Date form received by agency: 03/16/1987  
Facility name: VIP FOODSERVICE  
Facility address: 90 AMALA PLACE  
KAHULUI, HI 96732  
EPA ID: HID981965874  
Mailing address: PO BOX 517  
KAHULUI, HI 96732  
Contact: RICHARD MURRAY  
Contact address: 90 AMALA PLACE

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)  
EDR ID Number  
EPA ID Number

VIP FOODSERVICE (Continued)

1000114312

KAHULUI, HI 96732  
Contact country: US  
Contact telephone: (808) 877-5055  
Contact email: Not reported  
EPA Region: 09  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NOT REQUIRED  
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: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: ROY OKUMURA  
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

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  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 01/17/1996  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

VIP FOODSERVICE (Continued)

1000114312

FINDS:

Registry ID: 110005725590

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

D20  
WNW  
1/8-1/4  
0.134 mi.  
707 ft.

T SNIFFEN AND SONS LLC  
30 HOBROON AVE  
KAHULUI, HI 96732  
Site 1 of 2 in cluster D

RCRA-NonGen 1005904975  
FINDS HIR000122275

Relative:  
Equal

Actual:  
3 ft.

RCRA-NonGen:  
Date form received by agency: 03/06/2008  
Facility name: T SNIFFEN AND SONS LLC  
Facility address: 687 KAHALE ST  
KAHULUI, HI 96732  
EPA ID: HIR000122275  
Mailing address: PO BOX 874  
WAILUKU, HI 96793  
Contact: THEODORE A SNIFFEN  
Contact address: PO BOX 874  
WAILUKU, HI 96793  
Contact country: US  
Contact telephone: 808-871-7781  
Telephone ext.: 301  
Contact email: Not reported  
EPA Region: 09  
Land type: State  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: THEODORE A SNIFFEN  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: Not reported  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 01/01/2007  
Owner/Op end date: Not reported  
Owner/operator name: STATE OF HAWAII  
Owner/operator address: 400 RODGERS BLVD STE 700  
HONOLULU, HI 96819  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: State  
Owner/Operator Type: Owner

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

T SNIFFEN AND SONS LLC (Continued)

1005904975

Owner/Op start date: 01/01/1955  
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: Yes  
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: Yes

Historical Generators:

Date form received by agency: 09/19/2002  
Facility name: T SNIFFEN AND SONS LLC  
Site name: T SNIFFEN AND SONS L L C  
Classification: Not a generator, verified

Facility Has Received Notices of Violations:

Regulation violated: Not reported  
Area of violation: Used Oil - Generators  
Date violation determined: 10/27/2003  
Date achieved compliance: 11/10/2010  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 10/27/2003  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 0  
Final penalty amount: 0  
Paid penalty amount: 0

Regulation violated: Not reported  
Area of violation: TSD IS-Container Use and Management  
Date violation determined: 10/27/2003  
Date achieved compliance: 11/10/2010  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 10/27/2003  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 0  
Final penalty amount: 0  
Paid penalty amount: 0

Regulation violated: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)  
EDR ID Number  
EPA ID Number

T SNIFFEN AND SONS LLC (Continued)

1005904975

Area of violation: Federal or State Statute  
Date violation determined: 10/27/2003  
Date achieved compliance: 11/10/2010  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 10/27/2003  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 0  
Final penalty amount: 0  
Paid penalty amount: 0

Regulation violated: Not reported  
Area of violation: Used Oil - Dust Suppressant and Disposal  
Date violation determined: 10/27/2003  
Date achieved compliance: 11/10/2010  
Violation lead agency: State  
Enforcement action: WRITTEN INFORMAL  
Enforcement action date: 10/27/2003  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 0  
Final penalty amount: 0  
Paid penalty amount: 0

Evaluation Action Summary:

Evaluation date: 08/25/2003  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD IS-Container Use and Management  
Date achieved compliance: 11/10/2010  
Evaluation lead agency: State

Evaluation date: 08/25/2003  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Federal or State Statute  
Date achieved compliance: 11/10/2010  
Evaluation lead agency: State

Evaluation date: 08/25/2003  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Used Oil - Dust Suppressant and Disposal  
Date achieved compliance: 11/10/2010  
Evaluation lead agency: State

Evaluation date: 08/25/2003  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Used Oil - Generators  
Date achieved compliance: 11/10/2010  
Evaluation lead agency: State

FINDS:

Registry ID: 110012576499

Environmental Interest/Information System

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**T SNIFFEN AND SONS LLC (Continued)**

1005904975

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

D21  
 WNW  
 1/8-1/4  
 0.155 mi.  
 820 ft.

MAUI OIL CO. INC.  
 16 HOBROON AVE.  
 KAHULUI, HI 96732

UST U001236826  
 FINANCIAL ASSURANCE N/A

Site 2 of 2 in cluster D

Relative:  
 Equal

UST:

Facility ID: 9-502218  
 Owner: MAUI OIL CO. INC.  
 Owner Address: 16 HOBROON AVE.  
 Owner City, St, Zip: Kahului, 96732 96732

Actual:  
 3 ft.

Tank ID: 1  
 Date Installed: 9/9/1989  
**Tank Status: Currently In Use**  
 Date Closed: Not reported  
 Tank Capacity: 8000  
 Substance: Diesel

Tank ID: 2A - 87  
 Date Installed: 9/9/1989  
**Tank Status: Currently In Use**  
 Date Closed: Not reported  
 Tank Capacity: 6000  
 Substance: Gasoline

Tank ID: 2B - 92  
 Date Installed: 9/9/1989  
**Tank Status: Currently In Use**  
 Date Closed: Not reported  
 Tank Capacity: 6000  
 Substance: Gasoline

Tank ID: R-1  
 Date Installed: 2/7/1963  
**Tank Status: Permanently Out of Use**  
 Date Closed: Not reported  
 Tank Capacity: 280  
 Substance: Other

Tank ID: R-2  
 Date Installed: 2/7/1964  
**Tank Status: Permanently Out of Use**  
 Date Closed: Not reported  
 Tank Capacity: 4000  
 Substance: Other

Map ID  
Direction  
Distance  
Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number  
EPA ID Number

MAUI OIL CO. INC. (Continued)

U001236826

Tank ID: R-3  
Date Installed: 2/7/1964  
**Tank Status: Permanently Out of Use**  
Date Closed: Not reported  
Tank Capacity: 4000  
Substance: Other

HI FINANCIAL ASSURANCE:

Alt Facility ID: 9-502218  
Tank Id: 1  
Tank Status Desc: Currently in Use  
FRTYPE: Insurance  
Expiration Date: 6/1/2012

Alt Facility ID: 9-502218  
Tank Id: 2A - 87  
Tank Status Desc: Currently in Use  
FRTYPE: Insurance  
Expiration Date: 6/1/2012

Alt Facility ID: 9-502218  
Tank Id: 2B - 92  
Tank Status Desc: Currently in Use  
FRTYPE: Insurance  
Expiration Date: 6/1/2012

Alt Facility ID: 9-502218  
Tank Id: R-1  
Tank Status Desc: Permanently Out of Use  
FRTYPE: Insurance  
Expiration Date: 6/1/2012

Alt Facility ID: 9-502218  
Tank Id: R-2  
Tank Status Desc: Permanently Out of Use  
FRTYPE: Insurance  
Expiration Date: 6/1/2012

Alt Facility ID: 9-502218  
Tank Id: R-3  
Tank Status Desc: Permanently Out of Use  
FRTYPE: Insurance  
Expiration Date: 6/1/2012

22  
South  
1/8-1/4  
0.240 mi.  
1266 ft.

TROPICAL RENT A CAR  
41 HANA HWY  
KAHULUI, HI 96732

LUST U001236747  
UST N/A

Relative:  
Equal

Actual:  
3 ft.

LUST:  
Facility ID: 9-501383  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 10/7/1994  
Release ID: 940046  
Project Officer: Raymond Seid

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

TROPICAL RENT A CAR (Continued)

U001236747

UST:

Facility ID: 9-501383  
Owner: ESTATE OF HARRY WEINBERG  
Owner Address: C/O STEEL TECH, INC / 99-1379 KOAHA PLACE  
Owner City, St, Zip: Kahului, 96732 96732

Tank ID: R-1  
Date Installed: 4/18/1971  
**Tank Status: Permanently Out of Use**  
Date Closed: 12/14/1993  
Tank Capacity: 1000  
Substance: Gasoline

Tank ID: R-2  
Date Installed: 4/18/1971  
**Tank Status: Permanently Out of Use**  
Date Closed: 12/14/1993  
Tank Capacity: 3000  
Substance: Gasoline

Tank ID: R-3  
Date Installed: 4/18/1971  
**Tank Status: Permanently Out of Use**  
Date Closed: Not reported  
Tank Capacity: 4000  
Substance: Diesel

Tank ID: R-4  
Date Installed: 4/18/1971  
**Tank Status: Permanently Out of Use**  
Date Closed: Not reported  
Tank Capacity: 6000  
Substance: Diesel

23  
South  
1/4-1/2  
0.269 mi.  
1419 ft.

ALAMO RENT A CAR INCORPORATED  
40 SOUTH HANA HIGHWAY  
KAHULUI, HI 96732

RCRA-NonGen 1000601508  
FINDS HID984467415  
LUST  
UST

Relative:  
Equal

RCRA-NonGen:  
Date form received by agency: 12/10/1993  
Facility name: ALAMO CAR SALES  
Facility address: 40 S HANA HWY  
KAHULUI, HI 96732  
EPA ID: HID984467415  
Mailing address: P O BOX 209  
PAIA, HI 96779  
Contact: JOHN FITZGIBBON  
Contact address: P O BOX 209  
PAIA, HI 96779  
Contact country: US  
Contact telephone: (808) 877-3426  
Contact email: Not reported

Actual:  
3 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ALAMO RENT A CAR INCORPORATED (Continued)**

**1000601508**

EPA Region: 09  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Owner/Operator Summary:**

Owner/operator name: A AND B PROPERTIES INC  
Owner/operator address: P O BOX 156  
KAHULUI, HI 96732  
Owner/operator country: Not reported  
Owner/operator telephone: (808) 877-5523  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
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  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Violation Status: No violations found

**FINDS:**

Registry ID: 110014031939

**Environmental Interest/Information System**

HI-UST (Hawaii - Underground Storage Tank). Hawaii Underground Storage Tank Program regulates underground storage tanks which store petroleum or hazardous substances and offers documents and data products for downloading.

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**LUST:**

Facility ID: 9-502454  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 2/11/1994

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**ALAMO RENT A CAR INCORPORATED (Continued)**

**1000601508**

Release ID: 920021  
 Project Officer: Sheila Mackenzie

**UST:**

Facility ID: 9-502454  
 Owner: ALAMO RENT A CAR  
 Owner Address: 40 SOUTH HANA HWY  
 Owner City, St, Zip: Kahului, 96732 96732

Tank ID: R-1  
 Date Installed: Not reported  
**Tank Status: Permanently Out of Use**  
 Date Closed: 10/21/1991  
 Tank Capacity: 1000  
 Substance: Used Oil

Tank ID: R-2  
 Date Installed: Not reported  
**Tank Status: Permanently Out of Use**  
 Date Closed: 10/21/1991  
 Tank Capacity: 2000  
 Substance: Gasoline

Tank ID: R-3  
 Date Installed: Not reported  
**Tank Status: Permanently Out of Use**  
 Date Closed: 10/21/1991  
 Tank Capacity: 550  
 Substance: Used Oil

**E24**  
 East  
 1/4-1/2  
 0.271 mi.  
 1430 ft.  
 Relative:  
 Equal  
 Actual:  
 3 ft.

**IMF (INTERMEDIATE MAINTENANCE FACILITY), NAVAL SHIPYARD**  
 261 AMALA PL  
 KAHULUI, HI 96732  
 Site 1 of 5 in cluster E

**FINDS 1006820799**  
**SHWS N/A**

**FINDS:**

Registry ID: 110013788115

**Environmental Interest/Information System**

Hawaii Hazard Evaluation and Emergency Response (HEER-FRS) system maintains basic information for facility/sites of interest to state of Hawaii, Department of Health, Hazard Evaluation and Emergency Response. It is used to index sites for hardcopy file retrieval and to present limited site status information. The environmental interests included are: release assessments, TRI reporters, EPCRA filers, RMP reporters and long term types of site investigations such as environmental cleanup study areas, state cleanup sites, Superfund NPL sites, voluntary clean up programs and Brownfields Pilot/Grants, properties, sites and targeted assessments.

The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and hazardous materials that ensures that program areas and facilities are

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**IMF (INTERMEDIATE MAINTENANCE FACILITY), NAVAL SHIPYARD (Continued)**

**1006820799**

in compliance with environmental regulations

SHWS:

Organization:	State of Hawaii, Department of Land and Natural Resources
Supplemental Location Text:	Not reported
Island:	Maui
Environmental Interest:	Kanaha Pond Industrial West Site
Hid Number:	HISFN0905463
Facility Registry Identifier:	110013788115
Lead Agency:	HEER
Program:	Site Discovery
Project Manager:	Richard Palmer
Hazard Priority:	Medium
Site Status:	Ongoing
Action:	Assessment
Potential Hazards And Controls:	Hazard Present
Closure Document Title:	Not reported
Date Of Closure Document:	Not reported

**E25**  
**East**  
**1/4-1/2**  
**0.271 mi.**  
**1430 ft.**

**KANAHA POND WEST**  
**261 AMALA PLACE**  
**KAHULUI, HI 96732**  
**Site 2 of 5 in cluster E**

**CERCLIS 1001475718**  
**HISFN0905463**

**Relative:**  
**Equal**

CERCLIS:

Site ID:	0905463
EPA ID:	HISFN0905463
Facility County:	MAUI
Short Name:	KANAHA POND WEST
Congressional District:	Not reported
IFMS ID:	Not reported
SMSA Number:	Not reported
USGC Hydro Unit:	Not reported
Federal Facility:	Not a Federal Facility
DMNSN Number:	Not reported
Site Orphan Flag:	Not reported
RCRA ID:	Not reported
USGS Quadrangle:	Not reported
Site Init By Prog:	Not reported
NFRAP Flag:	Not reported
Parent ID:	Not reported
RST Code:	Not reported
EPA Region:	09
Classification:	Not reported
Site Settings Code:	Not reported
NPL Status:	Not on the NPL
DMNSN Unit Code:	Not reported
RBRAC Code:	Not reported
RResp Fed Agency Code:	Not reported
Non NPL Status:	Other Cleanup Activity: State-Lead Cleanup
Non NPL Status Date:	20051102
Site Fips Code:	15009
CC Concurrence Date:	Not reported
CC Concurrence FY:	Not reported
Alias EPA ID:	Not reported

**Actual:**  
**3 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

KANAHA POND WEST (Continued)

1001475718

Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):

Contact ID: 9000059.00000  
Contact Name: Eugenia Chow  
Contact Tel: (415) 972-3160  
Contact Title: Site Assessment Manager (SAM)  
Contact Email: Not reported

Contact ID: 13002167.00000  
Contact Name: Carl Brickner  
Contact Tel: (415) 972-3814  
Contact Title: Site Assessment Manager (SAM)  
Contact Email: Not reported

CERCLIS Site Alias Name(s):

Alias ID: 101  
Alias Name: BIRD BUILDERS  
Alias Address: 261 AMALA PLACE  
KAHULUI, HI 96732

Alias ID: 102  
Alias Name: RAINBOW HAULING  
Alias Address: 261 AMALA PLACE  
KAHULUI, HI 96732

Alias Comments: Not reported  
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001  
Action: DISCOVERY  
Date Started: Not reported  
Date Completed: 03/18/1994  
Priority Level: Not reported  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001  
Action: SITE INSPECTION  
Date Started: Not reported  
Date Completed: 10/31/2005  
Priority Level: Low priority for further assessment  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

E26 BIRD BUILDERS  
East 261 AMALA PLACE  
1/4-1/2 KAHULUI, HI 96732  
0.271 mi.  
1430 ft. Site 3 of 5 in cluster E

CERCLIS 1000855950  
FINDS HID000149674

Relative:  
Equal

Actual:  
3 ft.

CERCLIS:  
Site ID: 0904993  
EPA ID: HID000149674  
Facility County: MAUI  
Short Name: BIRD BUILDERS  
Congressional District: 02  
IFMS ID: Not reported  
SMSA Number: Not reported  
USGC Hydro Unit: Not reported  
Federal Facility: Not a Federal Facility  
DMNSN Number: Not reported  
Site Orphan Flag: N  
RCRA ID: Not reported  
USGS Quadrangle: Not reported  
Site Init By Prog: Not reported  
NFRAP Flag: Not reported  
Parent ID: Not reported  
RST Code: Not reported  
EPA Region: 09  
Classification: Not reported  
Site Settings Code: Not reported  
NPL Status: Not on the NPL  
DMNSN Unit Code: Not reported  
RBRAC Code: Not reported  
RResp Fed Agency Code: Not reported  
Non NPL Status: Other Cleanup Activity: State-Lead Cleanup  
Non NPL Status Date: 20051102  
Site Fips Code: 15009  
CC Concurrence Date: Not reported  
CC Concurrence FY: Not reported  
Alias EPA ID: Not reported  
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):

Contact ID: 9000059.00000  
Contact Name: Eugenia Chow  
Contact Tel: (415) 972-3160  
Contact Title: Site Assessment Manager (SAM)  
Contact Email: Not reported

Contact ID: 13002167.00000  
Contact Name: Carl Brickner  
Contact Tel: (415) 972-3814  
Contact Title: Site Assessment Manager (SAM)  
Contact Email: Not reported

Alias Comments: Not reported  
Site Description: Not reported

CERCLIS Assessment History:

Action Code: 001  
Action: DISCOVERY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**BIRD BUILDERS (Continued)**

1000855950

Date Started: Not reported  
Date Completed: 03/18/1994  
Priority Level: Not reported  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001  
Action: PRELIMINARY ASSESSMENT  
Date Started: Not reported  
Date Completed: 05/10/1995  
Priority Level: Higher priority for further assessment  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001  
Action: SITE INSPECTION  
Date Started: Not reported  
Date Completed: 10/31/2005  
Priority Level: Addressed as part of another non-NPL site  
Operable Unit: SITEWIDE  
Primary Responsibility: State, Fund Financed  
Planning Status: Not reported  
Urgency Indicator: Not reported  
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

**FINDS:**

Registry ID: 110009278833

**Environmental Interest/Information System**

Hawaii Hazard Evaluation and Emergency Response (HEER-FRS) system maintains basic information for facility/sites of interest to state of Hawaii, Department of Health, Hazard Evaluation and Emergency Response. It is used to index sites for hardcopy file retrieval and to present limited site status information. The environmental interests included are: release assessments, TRI reporters, EPCRA filers, RMP reporters and long term types of site investigations such as environmental cleanup study areas, state cleanup sites, Superfund NPL sites, voluntary clean up programs and Brownfields Pilot/Grants, properties, sites and targeted assessments.

The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**BIRD BUILDERS (Continued)**

**1000855950**

hazardous materials that ensures that program areas and facilities are in compliance with environmental regulations

CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) is the Superfund database that is used to support management in all phases of the Superfund program. The system contains information on all aspects of hazardous waste sites, including an inventory of sites, planned and actual site activities, and financial information.

**E27**  
**East**  
**1/4-1/2**  
**0.291 mi.**  
**1535 ft.**

**HONEY BEE INFESTATION**  
**281 AMALA PL**  
**KAHULUI, HI 96732**  
**Site 4 of 5 in cluster E**

**FINDS 1006820867**  
**SHWS N/A**  
**SPIILLS**

**Relative:**  
**Equal**

**FINDS:**

Registry ID: 110013788883

**Actual:**  
**3 ft.**

Environmental Interest/Information System

Hawaii Hazard Evaluation and Emergency Response (HEER-FRS) system maintains basic information for facility/sites of interest to state of Hawaii, Department of Health, Hazard Evaluation and Emergency Response. It is used to index sites for hardcopy file retrieval and to present limited site status information. The environmental interests included are: release assessments, TRI reporters, EPCRA filers, RMP reporters and long term types of site investigations such as environmental cleanup study areas, state cleanup sites, Superfund NPL sites, voluntary clean up programs and Brownfields Pilot/Grants, properties, sites and targeted assessments.

The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and hazardous materials that ensures that program areas and facilities are in compliance with environmental regulations

**SHWS:**

Organization:	County of Maui, Department of Public Works and Waste Management, Wastewater Reclamation
Supplemental Location Text:	Not reported
Island:	Maui
Environmental Interest:	Kahului Wastewater Reclamation Facility 30 Gallon Diesel Release
Hid Number:	Not reported
Facility Registry Identifier:	110013788883
Lead Agency:	Not reported
Program:	State
Project Manager:	Amy Playdon
Hazard Priority:	NFA
Site Status:	NFA
Action:	Assessment
Potential Hazards And Controls:	Hazard Undetermined
Closure Document Title:	NFA - Type Undetermined
Date Of Closure Document:	2/28/2001 1:19:06 AM

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

HONEY BEE INFESTATION (Continued)

1006820867

HI SPILLS:

Island: Maui  
Supplemental Loc. Text: Not reported  
Case Number: 19980721-1400  
HID Number: Not reported  
Facility Registry Id: 110013788883  
Lead and Program: HEER EP&R  
ER: Yes  
Units: Kahului Wastewater Reclamation Facility Diesel Spill  
Substances: Diesel Fuel  
Less Or Greater Than: Not reported  
Numerical Quantity: 30  
Units: Gallons  
Activity Type: Response  
Activity Lead: Mike Cripps  
Assignment End Date: Not reported  
Result: 8  
File Under: County of Maui, Department of Public Works and Waste Management, Wastewater Reclamation Division

E28  
East  
1/4-1/2  
0.291 mi.  
1535 ft.

WAILUKU-KAHULUI WWRF  
281 AMALA PL  
KAHULUI, HI 96732  
Site 5 of 5 in cluster E

LUST U003222225  
UST N/A  
FINANCIAL ASSURANCE

Relative:  
Equal

LUST:

Facility ID: 9-501353  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 9/5/2000  
Release ID: 990117  
Project Officer: Shaobin Li

Actual:  
3 ft.

UST:

Facility ID: 9-501353  
Owner: COUNTY OF MAUI - PUBLIC WORKS & WASTE MANAGEMENT  
Owner Address: 200 S HIGH ST  
Owner City, St, Zip: Kahului, 96732 96732

Tank ID: R-M-1  
Date Installed: 5/5/1977  
Tank Status: Permanently Out of Use  
Date Closed: 12/12/1998  
Tank Capacity: 12000  
Substance: Diesel

Tank ID: R-M-2  
Date Installed: 5/5/1977  
Tank Status: Permanently Out of Use  
Date Closed: 8/17/1998  
Tank Capacity: 700  
Substance: Used Oil

HI FINANCIAL ASSURANCE:

Alt Facility ID: 9-501353

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

WAILUKU-KAHULUI WWRF (Continued)

U003222225

Tank Id: R-M-1  
Tank Status Desc: Permanently Out of Use  
FRTYPE: Self Insured  
Expiration Date: Not reported

Alt Facility ID: 9-501353  
Tank Id: R-M-2  
Tank Status Desc: Permanently Out of Use  
FRTYPE: Self Insured  
Expiration Date: Not reported

29  
South  
1/4-1/2  
0.299 mi.  
1577 ft.

KAHULUI SPS  
HANA HWY/HOBROTON AVE  
KAHULUI, HI 96732

LUST U001236741  
UST N/A  
FINANCIAL ASSURANCE

Relative:  
Equal

LUST:  
Facility ID: 9-501350  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 4/19/2001  
Release ID: 990039  
Project Officer: Shaobin Li

Actual:  
3 ft.

UST:  
Facility ID: 9-501350  
Owner: COUNTY OF MAUI - PUBLIC WORKS & WASTE MANAGEMENT  
Owner Address: 200 S HIGH ST  
Ownder City,St,Zip: Kahului, 96732 96732

Tank ID: R-M-1  
Date Installed: 5/5/1977  
Tank Status: Permanently Out of Use  
Date Closed: 10/9/1998  
Tank Capacity: 1500  
Substance: Diesel

HI FINANCIAL ASSURANCE:  
Alt Facility ID: 9-501350  
Tank Id: R-M-1  
Tank Status Desc: Permanently Out of Use  
FRTYPE: Self Insured  
Expiration Date: Not reported

30  
SW  
1/4-1/2  
0.330 mi.  
1744 ft.

YOUNG BROTHERS KAHULUI  
65 WHARF ST  
KAHULUI, HI 96732

SHWS S106821170  
SPILLS N/A

Relative:  
Equal

SHWS:  
Organization: Young Brothers, Ltd.  
Supplemental Location Text: Kahului Harbor Pier 2  
Island: Maui  
Environmental Interest: Young Brothers Kahului

Actual:  
3 ft.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

YOUNG BROTHERS KAHULUI (Continued)

S106821170

Hid Number: Not reported  
Facility Registry Identifier: 110013774576  
Lead Agency: Not reported  
Program: State  
Project Manager: Clarence Callahan  
Hazard Priority: NFA  
Site Status: NFA  
Action: Assessment  
Potential Hazards And Controls: Hazard Undetermined  
Closure Document Title: NFA - Type Undetermined  
Date Of Closure Document: 8/6/2004 1:20:17 AM

HI SPILLS:

Island: Maui  
Supplemental Loc. Text: Kahului Harbor Pier 2  
Case Number: 19990923-1741  
HID Number: Not reported  
Facility Registry Id: 110013774576  
Lead and Program: HEER EP&R  
ER: Off Scene  
Units: Young Brothers Pier 2, Solvent Spill  
Substances: Solvent  
Less Or Greater Than: Not reported  
Numerical Quantity: 780  
Units: Gallons  
Activity Type: Response  
Activity Lead: Terry Corpus  
Assignment End Date: Not reported  
Result: 8  
File Under: Young Brothers, Ltd.

Island: Maui  
Supplemental Loc. Text: Kahului Harbor Pier 2  
Case Number: 19981014-1725  
HID Number: Not reported  
Facility Registry Id: 110013774576  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: M/V Hokukea, Kahului Harbor  
Substances: Oil, No. 2-D  
Less Or Greater Than: Not reported  
Numerical Quantity: 50  
Units: Gallons  
Activity Type: Response  
Activity Lead: Bill Perry  
Assignment End Date: 10/16/1998  
Result: 8  
File Under: Young Brothers, Ltd.

Island: Maui  
Supplemental Loc. Text: Kahului Harbor Pier 2  
Case Number: 20020826-1000  
HID Number: Not reported  
Facility Registry Id: 110013774576  
Lead and Program: HEER EP&R  
ER: Off Scene  
Units: Young Brothers Kahului

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

YOUNG BROTHERS KAHULUI (Continued)

S106821170

Substances: Oil, Used  
Less Or Greater Than: <  
Numerical Quantity: 350  
Units: Gallons  
Activity Type: Response  
Activity Lead: Liz Galvez  
Assignment End Date: 3/24/2003  
Result: 8  
File Under: Young Brothers, Ltd.

Island: Maui  
Supplemental Loc. Text: Kahului Harbor Pier 2  
Case Number: 20090123-0921  
HID Number: Not reported  
Facility Registry Id: 110013774576  
Lead and Program: HEER EP&R  
ER: Off Scene  
Units: Hokuloa Diesel Release NRC 895660  
Substances: Diesel Fuel  
Less Or Greater Than: Not reported  
Numerical Quantity: 10  
Units: Gallons  
Activity Type: Response  
Activity Lead: Paul Chong  
Assignment End Date: 1/23/2009  
Result: 8  
File Under: Young Brothers, Ltd.

31  
West  
1/4-1/2  
0.335 mi.  
1771 ft.

YOUNG BROTHERS, LTD.  
PIER 2  
KAHULUI, HI 96732

LUST U003541880  
UST N/A

Relative:  
Lower

LUST:  
Facility ID: 9-500667  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 5/16/2003  
Release ID: 000089  
Project Officer: Shunsheng Fu

Actual:  
2 ft.

UST:  
Facility ID: 9-500667  
Owner: YOUNG BROTHERS, LTD.  
Owner Address: P.O. BOX 3288  
Owner City, St, Zip: Kahului, 96732 96732

Tank ID: R-01  
Date Installed: 3/31/1951  
Tank Status: Permanently Out of Use  
Date Closed: 9/30/1989  
Tank Capacity: 1000  
Substance: Gasoline

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

32  
SSE  
1/4-1/2  
0.345 mi.  
1824 ft.

ISLAND DODGE HONDA  
110 SOUTH HANA HIGHWAY  
KAHULUI, HI 96732

RCRA-NonGen 1000151958  
FINDS HID981637747  
LUST  
UST

Relative:  
Equal

RCRA-NonGen:

Date form received by agency: 01/09/1987  
Facility name: ISLAND DODGE HONDA  
Facility address: 110 S HANA HWY  
KAHULUI, HI 96732  
EPA ID: HID981637747  
Contact: ENVIRONMENTAL MANAGER  
Contact address: 110 S HANA HWY  
KAHULUI, HI 96732  
Contact country: US  
Contact telephone: (808) 877-6578  
Contact email: Not reported  
EPA Region: 09  
Land type: Other land type  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Actual:  
3 ft.

Owner/Operator Summary:

Owner/operator name: ROY KITAGAWA  
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: Not reported  
Owner/operator telephone: (415) 555-1212  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
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  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ISLAND DODGE HONDA (Continued)

1000151958

Used oil transfer facility: No  
Used oil transporter: No  
Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 01/17/1996  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

FINDS:

Registry ID: 110005724216

Environmental Interest/Information System

HI-UST (Hawaii - Underground Storage Tank). Hawaii Underground Storage Tank Program regulates underground storage tanks which store petroleum or hazardous substances and offers documents and data products for downloading.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST:

Facility ID: 9-501697  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 9/25/1998  
Release ID: 930067  
Project Officer: Richard Takaba

UST:

Facility ID: 9-501697  
Owner: KITAGAWA MOTORS INC  
Owner Address: ISLAND DODGE / 110 S HANA HWY  
Owner City, St, Zip: Kahului, 96732 96732

Tank ID: R-1  
Date Installed: Not reported  
Tank Status: **Permanently Out of Use**  
Date Closed: 3/3/1997  
Tank Capacity: 1000  
Substance: Gasoline

Tank ID: R-2  
Date Installed: 5/16/1971  
Tank Status: **Permanently Out of Use**  
Date Closed: 3/3/1997  
Tank Capacity: 2000

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ISLAND DODGE HONDA (Continued)

1000151958

Substance: Gasoline  
  
Tank ID: R-2  
Date Installed: 5/16/1971  
**Tank Status: Permanently Out of Use**  
Date Closed: 2/24/1993  
Tank Capacity: 2000  
Substance: Used Oil

Tank ID: R-4  
Date Installed: 1/1/1969  
**Tank Status: Permanently Out of Use**  
Date Closed: 2/23/1993  
Tank Capacity: 500  
Substance: Hazardous Substance

33  
SSE  
1/4-1/2  
0.389 mi.  
2056 ft.

AMFAC DISTRIBUTION HI. INC  
150 HANA HWY  
KAHULUI, HI 96732

LUST U001236787  
UST N/A

Relative:  
Equal

LUST:  
Facility ID: 9-501686  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 10/19/2001  
Release ID: 900073  
Project Officer: Mark Sutterfield

Actual:  
3 ft.

UST:  
Facility ID: 9-501686  
Owner: OAHU DISTRIBUTION  
Owner Address: c/o Tamara Edwards Amfac Land Company 700 Bishop St, #501  
Owner City, St, Zip: Kahului, 96732 96732

Tank ID: R-1  
Date Installed: Not reported  
**Tank Status: Permanently Out of Use**  
Date Closed: 5/8/1990  
Tank Capacity: Not reported  
Substance: Gasoline

Tank ID: R-2  
Date Installed: Not reported  
**Tank Status: Permanently Out of Use**  
Date Closed: 5/2/1990  
Tank Capacity: Not reported  
Substance: Diesel

MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Site

Database(s)

EDR ID Number  
EPA ID Number

**34**  
South  
1/4-1/2  
0.413 mi.  
2182 ft.

**GOODYEAR AUTO SERVICE CENTER #8026**  
121 ALAMAHA ST  
KAHULUI, HI 96732

**LUST U003155145**  
**UST N/A**  
**FINANCIAL ASSURANCE**

**Relative:**  
**Equal**

**LUST:**  
Facility ID: 9-503099  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 7/5/1996  
Release ID: 950128  
Project Officer: Jose Ruiz

**Actual:**  
**3 ft.**

**UST:**  
Facility ID: 9-503099  
Owner: GOODYEAR TIRE & RUBBER CO.  
Owner Address: Not reported  
Owner City, St, Zip: Kahului, 96732 96732

Tank ID: R-1  
Date Installed: 4/1/1987  
**Tank Status: Permanently Out of Use**  
Date Closed: 8/20/1995  
Tank Capacity: 250  
Substance: Used Oil

**HI FINANCIAL ASSURANCE:**  
Alt Facility ID: 9-503099  
Tank Id: R-1  
Tank Status Desc: Permanently Out of Use  
FRTYPE: Self Insured  
Expiration Date: Not reported

**35**  
South  
1/4-1/2  
0.452 mi.  
2387 ft.

**ISLAND MOVERS, INC.**  
172 ALAMAHA ST  
KAHULUI, HI 96732

**LUST U001236701**  
**UST N/A**

**Relative:**  
**Equal**

**LUST:**  
Facility ID: 9-500768  
Facility Status: Site Cleanup Completed (NFA)  
Facility Status Date: 5/9/2000  
Release ID: 960047  
Project Officer: Renato Maniulit

**Actual:**  
**3 ft.**

**UST:**  
Facility ID: 9-500768  
Owner: ISLAND MOVERS, INC.  
Owner Address: Not reported  
Owner City, St, Zip: Kahului, 96732 96732

Tank ID: R-001  
Date Installed: 5/28/1980  
**Tank Status: Permanently Out of Use**  
Date Closed: 6/25/1996  
Tank Capacity: 1000  
Substance: Gasoline

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

ISLAND MOVERS, INC. (Continued)

U001236701

Tank ID: R-002  
Date Installed: 5/28/1980  
Tank Status: **Permanently Out of Use**  
Date Closed: 6/25/1996  
Tank Capacity: 1000  
Substance: Gasoline

Tank ID: R-003  
Date Installed: 5/28/1980  
Tank Status: **Permanently Out of Use**  
Date Closed: 6/25/1996  
Tank Capacity: 1000  
Substance: Diesel

36  
SW  
1/2-1  
0.665 mi.  
3510 ft.

32 LONO AVENUE  
32 LONO AVE  
KAHULUI, HI 96732

SHWS S106815477  
SPILLS N/A

Relative:  
Equal

Actual:  
3 ft.

SHWS:  
Organization: Alexander & Baldwin, Inc.  
Supplemental Location Text: Not reported  
Island: Maui  
Environmental Interest: 32 Lono Avenue  
Hid Number: Not reported  
Facility Registry Identifier: Not reported  
Lead Agency: HEER  
Program: State  
Project Manager: Ukris Wongse-Ont  
Hazard Priority: NFA  
Site Status: NFA  
Action: Assessment  
Potential Hazards And Controls: Hazard Undetermined  
Closure Document Title: NFA - Type Undetermined  
Date Of Closure Document: 12/6/2004 1:18:12 AM

HI SPILLS:

Island: Maui  
Supplemental Loc. Text: Not reported  
Case Number: 20030822-1400  
HID Number: Not reported  
Facility Registry Id: Not reported  
Lead and Program: HEER EP&R  
ER: No  
Units: 32 Lono Avenue  
Substances: Oil  
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  
Result: 8  
File Under: Alexander & Baldwin, Inc.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
 EPA ID Number

**37**      **ALII LINEN SERVICE (FKA SNOW WHITE LINEN)**      **SHWS**      **S106816121**  
**SSE**      **312 ALAMAHA PL**      **ENG CONTROLS**      **N/A**  
**1/2-1**      **KAHULUI, HI 96732**  
**0.668 mi.**  
**3529 ft.**

**Relative:**  
**Higher**

**SHWS:**  
 Organization:      Alii Linen Service (Formerly Snow White Linen)  
 Supplemental Location Text:      Unit H  
 Island:      Maui  
 Environmental Interest:      Snow White Linen Solvent Contamination  
 Hid Number:      Not reported  
 Facility Registry Identifier:      110013771374  
 Lead Agency:      HEER  
 Program:      State  
 Project Manager:      Kelton Otsuka  
 Hazard Priority:      Low  
 Site Status:      Ongoing  
 Action:      Response  
 Potential Hazards And Controls:      Hazard Managed With Engineering Controls  
 Closure Document Title:      Not reported  
 Date Of Closure Document:      Not reported

**Actual:**  
**10 ft.**

**ENG CONTROLS:**

Supplemental Location Text:      Unit H  
 Island:      Maui  
 Potential Hazards And Controls:      Hazard Managed With Engineering Controls

**38**      **MAUI TOYOTA FKA HI WOOD PRESERVING CO**      **CERC-NFRAP**      **1000146664**  
**SSE**      **356 HANAKAI STREET**      **RCRA-NonGen**      **HID980883185**  
**1/2-1**      **KAHULUI, HI 96732**      **FINDS**  
**0.683 mi.**           **SHWS**  
**3607 ft.**

**Relative:**  
**Higher**

**CERC-NFRAP:**  
 Site ID:      0903238  
 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

**Actual:**  
**7 ft.**

**CERCLIS-NFRAP Site Contact Details:**

Contact Sequence ID:      13037189.00000  
 Person ID:      9000059.00000  
  
 Contact Sequence ID:      13086693.00000  
 Person ID:      13002167.00000

**CERCLIS-NFRAP Assessment History:**

Action:      DISCOVERY  
 Date Started:      Not reported  
 Date Completed:      04/01/1988  
 Priority Level:      Not reported  
  
 Action:      PRELIMINARY ASSESSMENT  
 Date Started:      Not reported  
 Date Completed:      01/25/1990  
 Priority Level:      Low priority for further assessment

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MAUI TOYOTA FKA HI WOOD PRESERVING CO (Continued)**

**1000146664**

Action: SITE INSPECTION  
Date Started: Not reported  
Date Completed: 02/25/1991  
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE  
Date Started: Not reported  
Date Completed: 02/25/1991  
Priority Level: Not reported

**RCRA-NonGen:**

Date form received by agency: 02/25/2010  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Facility address: 356 HANAKAI STREET  
KAHULUI, HI 96732  
EPA ID: HID980883185  
Mailing address: 320 HANA HIGHWAY  
KAHULUI, HI 96732  
Contact: DAMIEN J FARIAS  
Contact address: Not reported  
Not reported  
Contact country: US  
Contact telephone: (808) 877-2781  
Contact email: DAMIEN@MAUITOYOTA.NET  
EPA Region: 09  
Land type: Private  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

**Owner/Operator Summary:**

Owner/operator name: DAMIEN FARIAS  
Owner/operator address: 320 HANA HIGHWAY  
KAHULUI, HI 96732  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Owner  
Owner/Op start date: 08/30/2002  
Owner/Op end date: Not reported

Owner/operator name: DAMIEN FARIAS  
Owner/operator address: Not reported  
Not reported  
Owner/operator country: US  
Owner/operator telephone: Not reported  
Legal status: Private  
Owner/Operator Type: Operator  
Owner/Op start date: 08/30/2002  
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

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)  
EDR ID Number  
EPA ID Number

MAUI TOYOTA FKA HI WOOD PRESERVING CO (Continued)

1000146664

Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
Used oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Universal Waste Summary:

Waste type: E  
Accumulated waste on-site: No  
Generated waste on-site: No

Waste type: Batteries  
Accumulated waste on-site: No  
Generated waste on-site: Not reported

Waste type: Lamps  
Accumulated waste on-site: No  
Generated waste on-site: Not reported

Waste type: Pesticides  
Accumulated waste on-site: No  
Generated waste on-site: Not reported

Waste type: Thermostats  
Accumulated waste on-site: No  
Generated waste on-site: Not reported

Historical Generators:

Date form received by agency: 04/12/2006  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Classification: Large Quantity Generator

Date form received by agency: 02/04/2000  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Site name: HAWAII WOOD PRESERVING COMPANY  
Classification: Large Quantity Generator

Date form received by agency: 10/14/1998  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Site name: HAWAII WOOD PRESERVING COMPANY  
Classification: Large Quantity Generator

Date form received by agency: 03/05/1998  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Site name: HAWAII WOOD PRESERVING CO  
Classification: Large Quantity Generator

Date form received by agency: 03/05/1998  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Site name: HAWAII WOOD PRESERVING CO  
Classification: Large Quantity Generator

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MAUI TOYOTA FKA HI WOOD PRESERVING CO (Continued)**

**1000146664**

Date form received by agency: 04/22/1997  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Site name: HAWAII WOOD PRESERVING CO  
Classification: Large Quantity Generator

Date form received by agency: 02/21/1996  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Site name: HAWAII WOOD PRESERVING CO  
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994  
Facility name: MAUI TOYOTA FKA HI WOOD PRESERVING CO  
Site name: HAWAII WOOD PRESERVING COMPANY  
Classification: Large Quantity Generator

**Hazardous Waste Summary:**

Waste code: D001  
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D004  
Waste name: ARSENIC

Waste code: D007  
Waste name: CHROMIUM

Waste code: F035  
Waste name: WASTEWATERS, PROCESS RESIDUALS, PRESERVATIVE DRIPPAGE, AND SPENT FORMULATIONS FROM WOOD PRESERVING PROCESS GENERATED AT PLANTS THAT USE INORGANIC PRESERVATIVES CONTAINING ARSENIC OR CHROMIUM. THIS LISTING DOES NOT INCLUDE K001 BOTTOM SEDIMENT SLUDGE FROM THE TREATMENT OF WASTEWATER FROM WOOD PRESERVING PROCESSES THAT USE CREOSOTE AND/OR PENTACHLOROPHENOL (NOTE: THE LISTING OF WASTEWATERS THAT HAVE NOT COME INTO CONTACT WITH PROCESS CONTAMINANTS IS STAYED ADMINISTRATIVELY. THE STAY WILL REMAIN IN EFFECT UNTIL FURTHER ADMINISTRATIVE ACTION IS TAKEN.).

**Facility Has Received Notices of Violations:**

Regulation violated: FR - 264.10-18.B  
Area of violation: TSD - General  
Date violation determined: 08/19/1994  
Date achieved compliance: 08/11/1999  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/26/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 0  
Final penalty amount: 15259  
Paid penalty amount: 2544

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MAUI TOYOTA FKA HI WOOD PRESERVING CO (Continued)

1000146664

Regulation violated: FR - 270  
Area of violation: TSD - General  
Date violation determined: 08/19/1994  
Date achieved compliance: 08/11/1999  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/26/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 0  
Final penalty amount: 15259  
Paid penalty amount: 2544

Regulation violated: FR - 264.170-177.1  
Area of violation: TSD - General  
Date violation determined: 08/19/1994  
Date achieved compliance: 08/11/1999  
Violation lead agency: State  
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER  
Enforcement action date: 05/26/1995  
Enf. disposition status: Not reported  
Enf. disp. status date: Not reported  
Enforcement lead agency: State  
Proposed penalty amount: 0  
Final penalty amount: 15259  
Paid penalty amount: 2544

Evaluation Action Summary:

Evaluation date: 02/05/2009  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 01/26/2007  
Evaluation: FOCUSED COMPLIANCE INSPECTION  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 08/24/2001  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 10/24/2000  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 08/11/1999  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

MAUI TOYOTA FKA HI WOOD PRESERVING CO (Continued)

1000146664

Evaluation lead agency: State

Evaluation date: 02/07/1997  
Evaluation: NOT A SIGNIFICANT NON-COMPLIER  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 12/30/1994  
Evaluation: SIGNIFICANT NON-COMPLIER  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

Evaluation date: 07/12/1994  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: TSD - General  
Date achieved compliance: 08/11/1999  
Evaluation lead agency: State

Evaluation date: 06/02/1993  
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE  
Area of violation: Not reported  
Date achieved compliance: Not reported  
Evaluation lead agency: State

FINDS:

Registry ID: 110000486386

Environmental Interest/Information System

Hawaii Hazard Evaluation and Emergency Response (HEER-FRS) system maintains basic information for facility/sites of interest to state of Hawaii, Department of Health, Hazard Evaluation and Emergency Response. It is used to index sites for hardcopy file retrieval and to present limited site status information. The environmental interests included are: release assessments, TRI reporters, EPCRA filers, RMP reporters and long term types of site investigations such as environmental cleanup study areas, state cleanup sites, Superfund NPL sites, voluntary clean up programs and Brownfields Pilot/Grants, properties, sites and targeted assessments.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and hazardous materials that ensures that program areas and facilities are in compliance with environmental regulations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
 EPA ID Number

**MAUI TOYOTA FKA HI WOOD PRESERVING CO (Continued)**

**1000146664**

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

**SHWS:**

Organization:	Hawaii Wood Preserving Company
Supplemental Location Text:	Not reported
Island:	Maui
Environmental Interest:	Hawaii Wood Preserving Co. (Osmose)
Hid Number:	HID980883185
Facility Registry Identifier:	110000486386
Lead Agency:	SHWB
Program:	State
Project Manager:	Eric Sadoyama
Hazard Priority:	NFA
Site Status:	NFA
Action:	Response
Potential Hazards And Controls:	No Hazard
Closure Document Title:	NFA Letter - Unrestricted Residential Use
Date Of Closure Document:	12/29/2008 1:28:12 AM

**39**  
**SW**  
**1/2-1**  
**0.753 mi.**  
**3978 ft.**

**KAHULUI SERVICE, INC DBA LLOYD'S KAHULUI CHEVRON**  
**130 W KAMEHAMEHA AVE**  
**KAHULUI, HI 96732**

**SHWS S106817655**  
**SPILLS N/A**

**Relative:**  
**Equal**

**SHWS:**

**Actual:**  
**3 ft.**

Organization:	Chevron Products Company
Supplemental Location Text:	Not reported
Island:	Maui
Environmental Interest:	Kahului Service, Inc dba Lloyd's Kahului Chevron
Hid Number:	Not reported
Facility Registry Identifier:	110013788829
Lead Agency:	Not reported
Program:	State
Project Manager:	Clarence Callahan
Hazard Priority:	NFA
Site Status:	NFA
Action:	Assessment
Potential Hazards And Controls:	Hazard Undetermined
Closure Document Title:	NFA - Type Undetermined
Date Of Closure Document:	8/25/2005 1:19:06 AM

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

KAHULUI SERVICE, INC DBA LLOYD'S KAHULUI CHEVRON (Continued)

S106817655

HI SPILLS:

Island: Maui  
Supplemental Loc. Text: Not reported  
Case Number: 20040721-1514  
HID Number: Not reported  
Facility Registry Id: 110013788829  
Lead and Program: HEER EP&R  
ER: Referred  
Units: Hoist & Sand Grease Trap Removal  
Substances: TPH gas  
Less Or Greater Than: Not reported  
Numerical Quantity: Not reported  
Units: Not reported  
Activity Type: Response  
Activity Lead: Terry Corpus  
Assignment End Date: 8/24/2005  
Result: 8  
File Under: Chevron Products Company

40  
SSE  
1/2-1  
0.794 mi.  
4194 ft.

MAUI DISPOSAL COMPANY  
221 LALO PL  
KAHULUI, HI 96732

SHWS S106818999  
SPILLS N/A

Relative:  
Higher

SHWS:

Organization: Maui Disposal Company, Inc.  
Supplemental Location Text: Not reported  
Island: Maui  
Environmental Interest: Opala Partners Diesel Release  
Hid Number: Not reported  
Facility Registry Identifier: 110013767218  
Lead Agency: Not reported  
Program: State  
Project Manager: Melody Calisay  
Hazard Priority: NFA  
Site Status: NFA  
Action: Assessment  
Potential Hazards And Controls: Hazard Undetermined  
Closure Document Title: NFA - Type Undetermined  
Date Of Closure Document: 1/18/2002 1:19:40 AM

Actual:  
14 ft.

HI SPILLS:

Island: Maui  
Supplemental Loc. Text: Not reported  
Case Number: 19950227  
HID Number: Not reported  
Facility Registry Id: 110013767218  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: Maui Disposal Company  
Substances: Oil, Waste  
Less Or Greater Than: Not reported  
Numerical Quantity: Not reported  
Units: Not reported  
Activity Type: Response  
Activity Lead: Chris Takeno

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
EPA ID Number

MAUI DISPOSAL COMPANY (Continued)

S106818999

Assignment End Date: Not reported  
Result: 8  
File Under: Maui Disposal Company, Inc.

Island: Maui  
Supplemental Loc. Text: Not reported  
Case Number: 19950227  
HID Number: Not reported  
Facility Registry Id: 110013767218  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: Maui Disposal Company  
Substances: Paint  
Less Or Greater Than: Not reported  
Numerical Quantity: Not reported  
Units: Not reported  
Activity Type: Response  
Activity Lead: Chris Takeno  
Assignment End Date: Not reported  
Result: 8  
File Under: Maui Disposal Company, Inc.

Island: Maui  
Supplemental Loc. Text: Not reported  
Case Number: 20000320-0954  
HID Number: Not reported  
Facility Registry Id: 110013767218  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: Lalo St-release  
Substances: Oil Lubricating  
Less Or Greater Than: Not reported  
Numerical Quantity: Not reported  
Units: Not reported  
Activity Type: Response  
Activity Lead: Bill Perry  
Assignment End Date: Not reported  
Result: 8  
File Under: Maui Disposal Company, Inc.

Island: Maui  
Supplemental Loc. Text: Not reported  
Case Number: 20000320-0954  
HID Number: Not reported  
Facility Registry Id: 110013767218  
Lead and Program: HEER EP&R  
ER: Not reported  
Units: Lalo St-release  
Substances: Diesel Fuel  
Less Or Greater Than: <  
Numerical Quantity: 25  
Units: Gallons  
Activity Type: Response  
Activity Lead: Bill Perry  
Assignment End Date: Not reported  
Result: 8  
File Under: Maui Disposal Company, Inc.

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
 EPA ID Number

41  
 WSW  
 1/2-1  
 0.826 mi.  
 4360 ft.

**BEHIND SEA ISLAND**  
**65 KAHULUI BEACH RD**  
**KAHULUI, HI 96732**

**FINDS** 1006820089  
**SHWS** N/A  
**SPILLS**

Relative:  
 Equal

**FINDS:**

Registry ID: 110013779884

Actual:  
 3 ft.

Environmental Interest/Information System

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The HI-ECS (Hawaii Environmental Compliance Program) is the Hawaii state regulatory program relating to environmental compliance and hazardous materials that ensures that program areas and facilities are in compliance with environmental regulations

**SHWS:**

Organization: Brewer Environmental Industries, Inc.  
 Supplemental Location Text: Kahului Harbor  
 Island: Maui  
 Environmental Interest: 65 Kahului Beach Road  
 Hid Number: Not reported  
 Facility Registry Identifier: 110013779884  
 Lead Agency: Not reported  
 Program: State  
 Project Manager: Unassigned  
 Hazard Priority: NFA  
 Site Status: NFA  
 Action: Assessment  
 Potential Hazards And Controls: Hazard Undetermined  
 Closure Document Title: NFA - Type Undetermined  
 Date Of Closure Document: 6/25/1998 1:18:13 AM

**HI SPILLS:**

Island: Maui  
 Supplemental Loc. Text: Kahului Harbor  
 Case Number: 19940718  
 HID Number: Not reported  
 Facility Registry Id: 110013779884  
 Lead and Program: HEER EP&R  
 ER: Not reported  
 Units: Brewer Kahului Harbor 20,000 Gallon Urea Ammonium Nitrate Spill  
 Substances: Urea Ammonium Nitrate  
 Less Or Greater Than: Not reported  
 Numerical Quantity: 20000  
 Units: Gallons

Map ID  
 Direction  
 Distance  
 Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number  
 EPA ID Number

**BEHIND SEA ISLAND (Continued)**

1006820089

Activity Type: Response  
 Activity Lead: Terry Corpus  
 Assignment End Date: Not reported  
 Result: 8  
 File Under: Brewer Environmental Industries, Inc.

42  
 SE  
 1/2-1  
 0.849 mi.  
 4481 ft.

**PACIFIC MACHINERY, INC MAUI**  
 470 S HANA HWY  
 KAHULUI, HI 96732

SHWS S106819524  
 N/A

Relative:  
 Higher

SHWS:

Organization: Pacific Machinery, Inc  
 Supplemental Location Text: Not reported  
 Island: Maui  
 Environmental Interest: Pacific Machinery, Inc Maui  
 Hid Number: Not reported  
 Facility Registry Identifier: Not reported  
 Lead Agency: Not reported  
 Program: State  
 Project Manager: Mark Sutterfield  
 Hazard Priority: NFA  
 Site Status: NFA  
 Action: Response  
 Potential Hazards And Controls: No Hazard  
 Closure Document Title: NFA - Type Undetermined  
 Date Of Closure Document: 8/5/2004 1:19:41 AM

Actual:  
 7 ft.

43  
 SSE  
 1/2-1  
 0.981 mi.  
 5178 ft.

**MAUI BUSINESS PARK OIL CONTAMINATION**  
 370 DAIRY RD  
 KAHULUI, HI 96732

SHWS S104657472  
 SPILLS N/A

Relative:  
 Higher

SHWS:

Organization: Alexander & Baldwin, Inc.  
 Supplemental Location Text: Not reported  
 Island: Maui  
 Environmental Interest: Maui Business Park Oil Contamination  
 Hid Number: Not reported  
 Facility Registry Identifier: 110013767227  
 Lead Agency: HEER  
 Program: State  
 Project Manager: Mark Sutterfield  
 Hazard Priority: NFA  
 Site Status: NFA  
 Action: Response  
 Potential Hazards And Controls: No Hazard  
 Closure Document Title: NFA Letter - Unrestricted Residential Use  
 Date Of Closure Document: 8/10/2005 1:14:37 AM

Actual:  
 13 ft.

HI SPILLS:

Island: Maui  
 Supplemental Loc. Text: Not reported  
 Case Number: 19951220-1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**MAUI BUSINESS PARK OIL CONTAMINATION (Continued)**

**S104657472**

HID Number: Not reported  
Facility Registry Id: 110013767227  
Lead and Program: HEER EP&R  
ER: No  
Units: Maui Business Park Oil Contamination  
Substances: Gasoline  
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  
Result: 8  
File Under: Alexander & Baldwin, Inc.

Count: 18 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KAHULUI	S106819004	MAUI MEAT COMPANY FACILITY (FORMER	601 2ND ST	96732	SHWS, SPILLS
KAHULUI	S107024301	A&B PROPERTY, 55-GALLON DRUMS BY H	HALEAKALA HWY	96732	SPILLS
KAHULUI	1000860452	TROPICAL RENT A CAR KAHULUI	HOBRON AVE TRIANGLE A	96732	RCRA-NonGen, FINDS
KAHULUI	1006820577	HOBRON AVE AREA (KAHULUI)	HOBRON AVE	96732	FINDS, SHWS
KAHULUI	S106817098	FONG CONSTRUCTION	HUKILIKI ST	96732	SHWS
KAHULUI	1004688846	SHELL OIL COMPANY	137 KAAHUMANU AVE	96732	RCRA-CESQG, FINDS
KAHULUI	U001236710	LIMA SHELL	137 KAAHUMANU AVE	96732	LUST, UST, FINANCIAL ASSURANCE
KAHULUI	U001236816	PORT TOWN CHEVRON	109 KAAHUMANU AVE	96732	LUST, UST, FINANCIAL ASSURANCE
KAHULUI	S104534290	MAUI PALMS HOTEL UST	150 KAAHUMANU AVE	96732	SHWS
KAHULUI	1006818999	MCC-AUTOMOTIVE TECHNOLOGY BUILDING	310 E KAAHUMANU AVE	96732	FINDS, SHWS, SPILLS
KAHULUI	1006820344	A&B PARCEL	KAHULUI RD	96732	FINDS
KAHULUI	1006820390	A&B ABOVE-GROUND STORAGE TANK	KAHULUI RD	96732	FINDS
KAHULUI	1009798550	A&B ABOVE-GROUND STORAGE TANK	NOT GIVEN	96732	FINDS
KAHULUI	U001236769	DAVID PICO CESSPOOL DIGGING	OLD HALEAKALA HWY	96732	LUST, UST
KAHULUI	1009798551	A&B DUMP SITE	W PAPA AVE	96732	FINDS
KAHULUI	1006820345	A&B DUMP SITE	W PAPA AVE	96732	FINDS, SHWS
KAHULUI	1006819647	WAIKAPU DUMP-MAUI COUNTY DUMP	WAIKAPU RD	96732	FINDS, SHWS
PAIA	S106819555	PAIA SUGAR MILL	BALDWIN AVE	96732	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: 06/30/2011	Source: EPA
Date Data Arrived at EDR: 07/12/2011	Telephone: N/A
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 10/12/2011
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Quarterly

##### **NPL Site Boundaries**

###### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
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: 06/30/2011	Source: EPA
Date Data Arrived at EDR: 07/12/2011	Telephone: N/A
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 10/12/2011
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/23/2012
	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.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	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: 06/30/2011	Source: EPA
Date Data Arrived at EDR: 07/12/2011	Telephone: N/A
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 10/12/2011
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Quarterly

### ***Federal CERCLIS list***

#### CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS 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). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/25/2011	Source: EPA
Date Data Arrived at EDR: 03/01/2011	Telephone: 703-412-9810
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 11/29/2011
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Quarterly

#### 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: 12/10/2010	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/11/2011	Telephone: 703-603-8704
Date Made Active in Reports: 02/16/2011	Last EDR Contact: 10/14/2011
Number of Days to Update: 36	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Varies

### ***Federal CERCLIS NFRAP site List***

#### CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS 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 this 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. This 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 a potential NPL site.

Date of Government Version: 02/25/2011	Source: EPA
Date Data Arrived at EDR: 03/01/2011	Telephone: 703-412-9810
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 11/29/2011
Number of Days to Update: 62	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Quarterly

### ***Federal RCRA CORRACTS facilities list***

#### CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/09/2011	Source: EPA
Date Data Arrived at EDR: 03/15/2011	Telephone: 800-424-9346
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 11/14/2011
Number of Days to Update: 91	Next Scheduled EDR Contact: 02/27/2012
	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: 06/15/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/07/2011	Telephone: (415) 495-8895
Date Made Active in Reports: 08/08/2011	Last EDR Contact: 10/05/2011
Number of Days to Update: 32	Next Scheduled EDR Contact: 01/16/2012
	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: 06/15/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/07/2011	Telephone: (415) 495-8895
Date Made Active in Reports: 08/08/2011	Last EDR Contact: 10/05/2011
Number of Days to Update: 32	Next Scheduled EDR Contact: 01/16/2012
	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: 06/15/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/07/2011	Telephone: (415) 495-8895
Date Made Active in Reports: 08/08/2011	Last EDR Contact: 10/05/2011
Number of Days to Update: 32	Next Scheduled EDR Contact: 01/16/2012
	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: 06/15/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/07/2011	Telephone: (415) 495-8895
Date Made Active in Reports: 08/08/2011	Last EDR Contact: 10/05/2011
Number of Days to Update: 32	Next Scheduled EDR Contact: 01/16/2012
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### *Federal institutional controls / engineering controls registries*

#### 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: 03/16/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2011	Telephone: 703-603-0695
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 09/12/2011
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/26/2011
	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: 03/16/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2011	Telephone: 703-603-0695
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 09/12/2011
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/26/2011
	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: 10/03/2011	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 10/04/2011	Telephone: 202-267-2180
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/04/2011
Number of Days to Update: 38	Next Scheduled EDR Contact: 01/16/2012
	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: 12/01/2009	Source: Department of Health
Date Data Arrived at EDR: 12/07/2009	Telephone: 808-586-4249
Date Made Active in Reports: 01/08/2010	Last EDR Contact: 12/02/2012
Number of Days to Update: 32	Next Scheduled EDR Contact: 03/12/2012
	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: 04/01/2011	Source: Department of Health
Date Data Arrived at EDR: 04/12/2011	Telephone: 808-586-4245
Date Made Active in Reports: 05/17/2011	Last EDR Contact: 10/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 01/16/2012
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### *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: 09/06/2011	Source: Department of Health
Date Data Arrived at EDR: 09/07/2011	Telephone: 808-586-4228
Date Made Active in Reports: 10/05/2011	Last EDR Contact: 12/05/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 03/19/2012
	Data Release Frequency: Semi-Annually

#### INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011	Source: EPA Region 6
Date Data Arrived at EDR: 09/13/2011	Telephone: 214-665-6597
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 59	Next Scheduled EDR Contact: 02/13/2012
	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: 01/31/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/01/2011	Telephone: 415-972-3372
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 48	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Quarterly

#### 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: 08/18/2011	Source: EPA Region 8
Date Data Arrived at EDR: 08/19/2011	Telephone: 303-312-6271
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 25	Next Scheduled EDR Contact: 02/13/2012
	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: 02/16/2011	Source: EPA Region 7
Date Data Arrived at EDR: 06/02/2011	Telephone: 913-551-7003
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 103	Next Scheduled EDR Contact: 02/13/2012
	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: 08/11/2011	Source: EPA Region 4
Date Data Arrived at EDR: 08/12/2011	Telephone: 404-562-8677
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 32	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Semi-Annually

#### INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/01/2011  
Date Data Arrived at EDR: 11/01/2011  
Date Made Active in Reports: 11/11/2011  
Number of Days to Update: 10

Source: EPA Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 11/01/2011  
Next Scheduled EDR Contact: 02/13/2012  
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land  
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/02/2011  
Date Data Arrived at EDR: 11/04/2011  
Date Made Active in Reports: 11/11/2011  
Number of Days to Update: 7

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 10/31/2011  
Next Scheduled EDR Contact: 02/13/2012  
Data Release Frequency: Quarterly

### **State and tribal registered storage tank lists**

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: 09/06/2011  
Date Data Arrived at EDR: 09/07/2011  
Date Made Active in Reports: 10/05/2011  
Number of Days to Update: 28

Source: Department of Health  
Telephone: 808-586-4228  
Last EDR Contact: 12/05/2011  
Next Scheduled EDR Contact: 12/19/2011  
Data Release Frequency: Semi-Annually

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: 08/04/2011  
Date Data Arrived at EDR: 08/05/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 39

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 10/31/2011  
Next Scheduled EDR Contact: 02/13/2012  
Data Release Frequency: Quarterly

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: 08/18/2011  
Date Data Arrived at EDR: 08/19/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 25

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 10/31/2011  
Next Scheduled EDR Contact: 02/13/2012  
Data Release Frequency: Quarterly

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: 10/01/2011  
Date Data Arrived at EDR: 11/01/2011  
Date Made Active in Reports: 11/11/2011  
Number of Days to Update: 10

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 10/31/2011  
Next Scheduled EDR Contact: 02/13/2012  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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: 04/01/2011	Source: EPA Region 7
Date Data Arrived at EDR: 06/01/2011	Telephone: 913-551-7003
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 13	Next Scheduled EDR Contact: 02/13/2012
	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: 05/10/2011	Source: EPA Region 6
Date Data Arrived at EDR: 05/11/2011	Telephone: 214-665-7591
Date Made Active in Reports: 06/14/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/13/2012
	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: 07/01/2011	Source: EPA Region 5
Date Data Arrived at EDR: 08/26/2011	Telephone: 312-886-6136
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 18	Next Scheduled EDR Contact: 02/13/2012
	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: 11/02/2011	Source: EPA Region 10
Date Data Arrived at EDR: 11/04/2011	Telephone: 206-553-2857
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 7	Next Scheduled EDR Contact: 02/13/2012
	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: 08/11/2011	Source: EPA Region 4
Date Data Arrived at EDR: 08/12/2011	Telephone: 404-562-9424
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 32	Next Scheduled EDR Contact: 02/13/2012
	Data Release Frequency: Semi-Annually

### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 10/17/2011
Number of Days to Update: 55	Next Scheduled EDR Contact: 01/30/2012
	Data Release Frequency: Varies

### *State and tribal institutional control / engineering control registries*

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ENG CONTROLS: Engineering Control Sites

A listing of sites with engineering controls in place.

Date of Government Version: 12/01/2009	Source: Department of Health
Date Data Arrived at EDR: 12/07/2009	Telephone: 404-586-4249
Date Made Active in Reports: 01/08/2010	Last EDR Contact: 12/02/2012
Number of Days to Update: 32	Next Scheduled EDR Contact: 03/12/2012
	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: 12/01/2009	Source: Department of Health
Date Data Arrived at EDR: 12/07/2009	Telephone: 808-586-4249
Date Made Active in Reports: 01/08/2010	Last EDR Contact: 12/02/2012
Number of Days to Update: 32	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Varies

### *State and tribal voluntary cleanup sites*

#### 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: 08/04/2011	Source: EPA, Region 1
Date Data Arrived at EDR: 10/04/2011	Telephone: 617-918-1102
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 10/04/2011
Number of Days to Update: 38	Next Scheduled EDR Contact: 01/16/2012
	Data Release Frequency: Varies

#### 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: 12/01/2009	Source: Department of Health
Date Data Arrived at EDR: 12/07/2009	Telephone: 808-586-4249
Date Made Active in Reports: 01/08/2010	Last EDR Contact: 12/02/2012
Number of Days to Update: 32	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Varies

#### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	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: 12/01/2009	Source: Department of Health
Date Data Arrived at EDR: 12/07/2009	Telephone: 808-586-4249
Date Made Active in Reports: 01/08/2010	Last EDR Contact: 12/02/2012
Number of Days to Update: 32	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### ADDITIONAL ENVIRONMENTAL RECORDS

#### **Local Brownfield lists**

##### US BROWNFIELDS: A Listing of Brownfields Sites

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities--especially those without EPA Brownfields Assessment Demonstration Pilots--minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields. Cooperative Agreement Recipients-States, political subdivisions, territories, and Indian tribes become Brownfields Cleanup Revolving Loan Fund (BCRLF) cooperative agreement recipients when they enter into BCRLF cooperative agreements with the U.S. EPA. EPA selects BCRLF cooperative agreement recipients based on a proposal and application process. BCRLF cooperative agreement recipients must use EPA funds provided through BCRLF cooperative agreement for specified brownfields-related cleanup activities.

Date of Government Version: 06/27/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/27/2011	Telephone: 202-566-2777
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 09/28/2011
Number of Days to Update: 78	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: Semi-Annually

#### **Local Lists of Landfill / Solid Waste Disposal Sites**

##### 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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	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	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 09/26/2011
Number of Days to Update: 137	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

##### 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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 11/07/2011
Number of Days to Update: 52	Next Scheduled EDR Contact: 02/20/2012
	Data Release Frequency: Varies

#### **Local Lists of Hazardous waste / Contaminated Sites**

##### 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.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/08/2011  
Date Data Arrived at EDR: 09/16/2011  
Date Made Active in Reports: 09/29/2011  
Number of Days to Update: 13

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 09/07/2011  
Next Scheduled EDR Contact: 12/19/2011  
Data Release Frequency: Quarterly

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: 12/05/2011  
Next Scheduled EDR Contact: 03/19/2012  
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

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: 09/01/2007  
Date Data Arrived at EDR: 11/19/2008  
Date Made Active in Reports: 03/30/2009  
Number of Days to Update: 131

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 03/23/2009  
Next Scheduled EDR Contact: 06/22/2009  
Data Release Frequency: No Update Planned

### **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: 09/09/2011  
Date Data Arrived at EDR: 09/16/2011  
Date Made Active in Reports: 09/29/2011  
Number of Days to Update: 13

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 10/31/2011  
Next Scheduled EDR Contact: 02/13/2012  
Data Release Frequency: Varies

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: 12/09/2005  
Date Data Arrived at EDR: 12/11/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 31

Source: Department of the Navy  
Telephone: 843-820-7326  
Last EDR Contact: 11/22/2011  
Next Scheduled EDR Contact: 03/05/2012  
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: 10/04/2011  
Date Data Arrived at EDR: 10/04/2011  
Date Made Active in Reports: 11/11/2011  
Number of Days to Update: 38

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 10/04/2011  
Next Scheduled EDR Contact: 01/16/2012  
Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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: 03/10/2010	Source: Department of Health
Date Data Arrived at EDR: 03/16/2010	Telephone: 808-586-4249
Date Made Active in Reports: 04/13/2010	Last EDR Contact: 12/02/2012
Number of Days to Update: 28	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Varies

### Other Ascertainable Records

#### RCRA-NonGen: RCRA - Non 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). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/15/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/07/2011	Telephone: (415) 495-8895
Date Made Active in Reports: 08/08/2011	Last EDR Contact: 10/05/2011
Number of Days to Update: 32	Next Scheduled EDR Contact: 01/16/2012
	Data Release Frequency: Varies

#### DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/29/2011	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/09/2011	Telephone: 202-366-4595
Date Made Active in Reports: 11/11/2011	Last EDR Contact: 11/08/2011
Number of Days to Update: 94	Next Scheduled EDR Contact: 02/20/2012
	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	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/20/2011
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/30/2012
	Data Release Frequency: Semi-Annually

#### 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: 12/31/2009	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 08/12/2010	Telephone: 202-528-4285
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 09/12/2011
Number of Days to Update: 112	Next Scheduled EDR Contact: 12/26/2011
	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: 06/01/2011	Source: Department of Justice, Consent Decree Library
Date Data Arrived at EDR: 08/19/2011	Telephone: Varies
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 10/03/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 01/16/2012
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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: 07/31/2011	Source: EPA
Date Data Arrived at EDR: 09/14/2011	Telephone: 703-416-0223
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 09/14/2011
Number of Days to Update: 15	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Annually

### 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	Source: Department of Energy
Date Data Arrived at EDR: 10/21/2010	Telephone: 505-845-0011
Date Made Active in Reports: 01/28/2011	Last EDR Contact: 11/29/2011
Number of Days to Update: 99	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Varies

### 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: 08/18/2011	Source: Department of Labor, Mine Safety and Health Administration
Date Data Arrived at EDR: 09/08/2011	Telephone: 303-231-5959
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 09/08/2011
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: Semi-Annually

### 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: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/17/2010	Telephone: 202-566-0250
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 12/02/2011
Number of Days to Update: 94	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Annually

### 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: 12/31/2006	Source: EPA
Date Data Arrived at EDR: 09/29/2010	Telephone: 202-260-5521
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 09/27/2011
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: Every 4 Years

### 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	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/28/2011
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/12/2012
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

**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	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/28/2011
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/12/2012
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

**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	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 10/31/2011
Number of Days to Update: 77	Next Scheduled EDR Contact: 02/13/2012
	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: 01/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/21/2011	Telephone: 202-564-5088
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 09/26/2011
Number of Days to Update: 59	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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: 11/01/2010	Source: EPA
Date Data Arrived at EDR: 11/10/2010	Telephone: 202-566-0500
Date Made Active in Reports: 02/16/2011	Last EDR Contact: 10/19/2011
Number of Days to Update: 98	Next Scheduled EDR Contact: 01/30/2012
	Data Release Frequency: Annually

### 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: 06/21/2011	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 07/15/2011	Telephone: 301-415-7169
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 09/12/2011
Number of Days to Update: 60	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Quarterly

### 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: 01/11/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/13/2011	Telephone: 202-343-9775
Date Made Active in Reports: 02/16/2011	Last EDR Contact: 10/13/2011
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/23/2012
	Data Release Frequency: Quarterly

### 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: 04/14/2010	Source: EPA
Date Data Arrived at EDR: 04/16/2010	Telephone: (415) 947-8000
Date Made Active in Reports: 05/27/2010	Last EDR Contact: 09/13/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Quarterly

### 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	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

### 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.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2009  
Date Data Arrived at EDR: 03/01/2011  
Date Made Active in Reports: 05/02/2011  
Number of Days to Update: 62

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 11/30/2011  
Next Scheduled EDR Contact: 03/12/2012  
Data Release Frequency: Biennially

**UIC: Underground Injection Wells Listing**  
A listing of underground injection well locations.

Date of Government Version: 04/05/2011  
Date Data Arrived at EDR: 04/15/2011  
Date Made Active in Reports: 05/17/2011  
Number of Days to Update: 32

Source: Department of Health  
Telephone: 808-586-4258  
Last EDR Contact: 12/05/2011  
Next Scheduled EDR Contact: 03/19/2012  
Data Release Frequency: Varies

**DRYCLEANERS: Permitted Drycleaner Facility Listing**  
A listing of permitted drycleaner facilities in the state.

Date of Government Version: 10/31/2011  
Date Data Arrived at EDR: 11/02/2011  
Date Made Active in Reports: 12/05/2011  
Number of Days to Update: 33

Source: Department of Health  
Telephone: 808-586-4200  
Last EDR Contact: 10/25/2011  
Next Scheduled EDR Contact: 01/23/2012  
Data Release Frequency: Varies

**AIRS: List of Permitted Facilities**  
A listing of permitted facilities in the state.

Date of Government Version: 10/31/2011  
Date Data Arrived at EDR: 11/02/2011  
Date Made Active in Reports: 12/05/2011  
Number of Days to Update: 33

Source: Department of Health  
Telephone: 808-586-4200  
Last EDR Contact: 10/25/2011  
Next Scheduled EDR Contact: 01/23/2012  
Data Release Frequency: Varies

**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: 12/31/2005  
Date Data Arrived at EDR: 12/08/2006  
Date Made Active in Reports: 01/11/2007  
Number of Days to Update: 34

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 10/20/2011  
Next Scheduled EDR Contact: 01/30/2012  
Data Release Frequency: Semi-Annually

**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: 10/24/2011  
Next Scheduled EDR Contact: 02/06/2012  
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: 01/01/2008  
Date Data Arrived at EDR: 02/18/2009  
Date Made Active in Reports: 05/29/2009  
Number of Days to Update: 100

Source: Environmental Protection Agency  
Telephone: 202-566-0517  
Last EDR Contact: 11/04/2011  
Next Scheduled EDR Contact: 02/13/2012  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 10/18/2011
Number of Days to Update: 76	Next Scheduled EDR Contact: 01/30/2012
	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: 08/17/2010	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/03/2011	Telephone: N/A
Date Made Active in Reports: 03/21/2011	Last EDR Contact: 09/16/2011
Number of Days to Update: 77	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: Varies

### 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	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/20/2011
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/30/2012
	Data Release Frequency: N/A

### 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: 09/23/2011	Source: Department of Health
Date Data Arrived at EDR: 09/23/2011	Telephone: 808-586-4226
Date Made Active in Reports: 10/05/2011	Last EDR Contact: 09/19/2011
Number of Days to Update: 12	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: Varies

### EDR PROPRIETARY RECORDS

#### *EDR Proprietary Records*

#### Manufactured Gas Plants: 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	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: No Update Planned

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 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:** This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

#### Electric Power Transmission Line Data

Source: Rextag Strategies Corp.

Telephone: (281) 769-2247

U.S. Electric Transmission and Power Plants Systems Digital GIS Data

**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, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

#### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### STREET AND ADDRESS INFORMATION

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## GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM

### TARGET PROPERTY ADDRESS

A&B PARCEL B  
180 HOBRON AVE.  
KAHULUI, HI 96732

### TARGET PROPERTY COORDINATES

Latitude (North):	20.89560 - 20° 53' 44.2"
Longitude (West):	156.4621 - 156° 27' 43.5"
Universal Transverse Mercator:	Zone 4
UTM X (Meters):	764012.9
UTM Y (Meters):	2312543.5
Elevation:	3 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	20156-H4 KAHAKULOA, HI
Most Recent Revision:	Not reported

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 principle 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.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## 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).

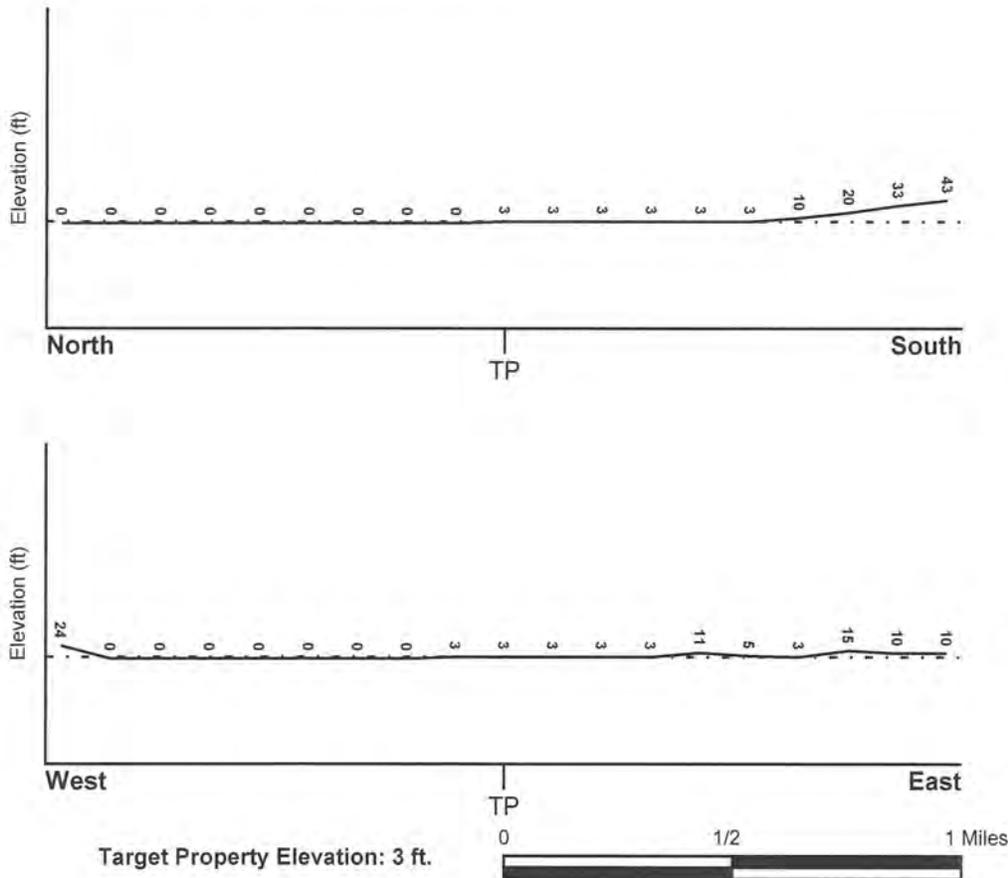
## TOPOGRAPHIC INFORMATION

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 NW

## 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.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### 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**

Target Property County  
MAUI, HI

FEMA Flood  
Electronic Data  
YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 1500030190D - FEMA Q3 Flood data

Additional Panels in search area: Not Reported

### **NATIONAL WETLAND INVENTORY**

NWI Quad at Target Property  
NOT AVAILABLE

NWI Electronic  
Data Coverage  
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.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### 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

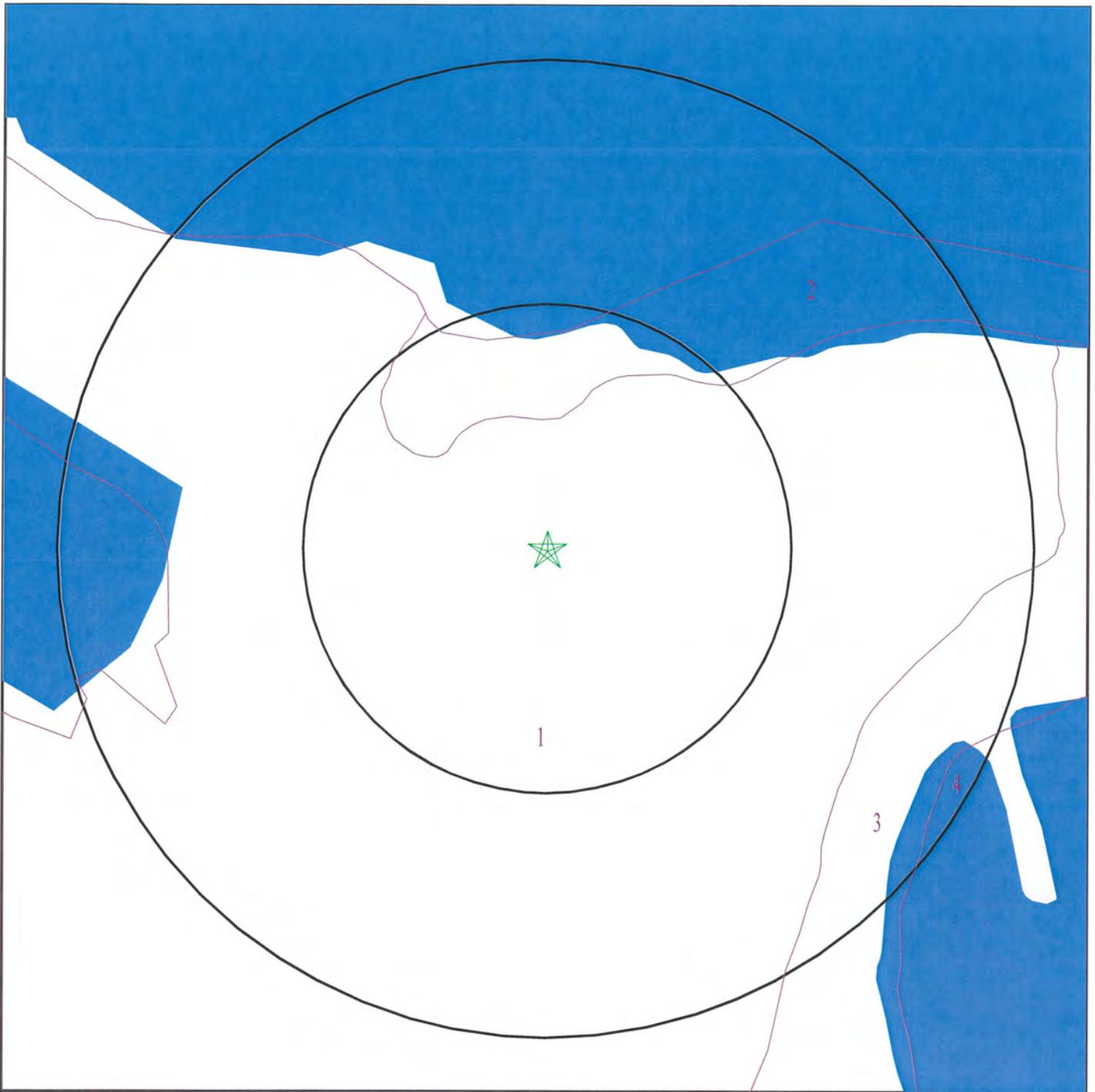
Era: -  
System: -  
Series: -  
Code: N/A (*decoded above as Era, System & Series*)

#### GEOLOGIC AGE IDENTIFICATION

Category: -

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 - 3218291.2s



- ★ Target Property
- ∕ SSURGO Soil
- ∕ Water



SITE NAME: A&B Parcel B  
ADDRESS: 180 Hobron Ave.  
Kahului HI 96732  
LAT/LONG: 20.8956 / 156.4621

CLIENT: Kevin S. Kennedy Consulting, LLC  
CONTACT: Kevin Kennedy  
INQUIRY #: 3218291.2s  
DATE: December 05, 2011 12:44 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### 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: Fill land

Soil Surface Texture: silty clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 152 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.02	Max: Min:
2	11 inches	29 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.02	Max: Min:
3	29 inches	59 inches	sand	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.02	Max: Min:
4	59 inches	63 inches	bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 0.42 Min: 0.02	Max: Min:

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### Soil Map ID: 2

Soil Component Name: Beaches

Soil Surface Texture: coarse sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1
2	5 inches	59 inches	coarse sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 7.8 Min: 6.1

### Soil Map ID: 3

Soil Component Name: Jaucas

Soil Surface Texture: sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	12 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 8.4 Min: 7.9
2	12 inches	59 inches	sand	Granular materials (35 pct. or less passing No. 200), Fine Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42.34	Max: 8.4 Min: 7.9

### Soil Map ID: 4

Soil Component Name: Water > 40 acres

Soil Surface Texture: sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class:  
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### 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

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

### FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
9	HI0000204	1/4 - 1/2 Mile SW

Note: PWS System location is not always the same as well location.

### STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	HI6000000001467	0 - 1/8 Mile North
A2	HI6000000001468	0 - 1/8 Mile North
A3	HI6000000001465	0 - 1/8 Mile North
A4	HI6000000001466	0 - 1/8 Mile North
A5	HI6000000001471	0 - 1/8 Mile North
A6	HI6000000001470	0 - 1/8 Mile North
A7	HI6000000001469	0 - 1/8 Mile North
8	HI6000000001472	1/4 - 1/2 Mile ENE
10	HI6000000001434	1/2 - 1 Mile SE
11	HI6000000001428	1/2 - 1 Mile SSW
B12	HI6000000001416	1/2 - 1 Mile South
13	HI6000000001447	1/2 - 1 Mile WSW
C14	HI6000000001427	1/2 - 1 Mile SW
B15	HI6000000001410	1/2 - 1 Mile SSW
16	HI6000000001412	1/2 - 1 Mile SSE
C17	HI6000000001422	1/2 - 1 Mile SW
18	HI6000000001385	1/2 - 1 Mile South
D19	HI6000000001400	1/2 - 1 Mile SSW
E20	HI6000000001415	1/2 - 1 Mile SW
D21	HI6000000001390	1/2 - 1 Mile SSW

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
22	HI6000000001436	1/2 - 1 Mile WSW
E23	HI6000000001420	1/2 - 1 Mile SW
F24	HI6000000001403	1/2 - 1 Mile SSW
D25	HI6000000001389	1/2 - 1 Mile SSW
G26	HI6000000001380	1/2 - 1 Mile South
27	HI6000000001446	1/2 - 1 Mile WSW
H28	HI6000000001425	1/2 - 1 Mile SW
F29	HI6000000001399	1/2 - 1 Mile SSW
G30	HI6000000001369	1/2 - 1 Mile South
31	HI6000000001367	1/2 - 1 Mile South
E32	HI6000000001409	1/2 - 1 Mile SW
D33	HI6000000001372	1/2 - 1 Mile SSW
34	HI6000000001368	1/2 - 1 Mile SSW
H35	HI6000000001424	1/2 - 1 Mile SW
G36	HI6000000001366	1/2 - 1 Mile SSW
F37	HI6000000001384	1/2 - 1 Mile SSW
38	HI6000000001388	1/2 - 1 Mile SSW
39	HI6000000001360	1/2 - 1 Mile South

# PHYSICAL SETTING SOURCE MAP - 3218291.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

SITE NAME: A&B Parcel B  
 ADDRESS: 180 Hobron Ave.  
 Kahului HI 96732  
 LAT/LONG: 20.8956 / 156.4621

CLIENT: Kevin S. Kennedy Consulting, LLC  
 CONTACT: Kevin Kennedy  
 INQUIRY #: 3218291.2s  
 DATE: December 05, 2011 12:44 pm

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**A1**

**North**  
**0 - 1/8 Mile**  
**Higher**

**HI WELLS      HI6000000001467**

Wid:	6-5427-003	Island:	6
Well no:	5427-03	Well name:	Maui Elec C
Old name:	Not Reported	Yr drilled:	1949
Driller:	CAMAY DRLG CO	Quad map:	05
Longitude2:	1562754	Latitude27:	205401
Longitude8:	1562744	Latitude83:	205349
Lat83d:	20	Lat83m:	53
Lat83s:	49	Lon83d:	156
Lon83m:	27	Lon83s:	44
Lat83dd:	20.89694		
Lon83dd:	-156.46222		
Long83dd:	-156.46222		
Lat83dd 1:	20.89694		
Gps:	0	Utm:	1
Owner user:	Maui Electric Co. Ltd.	Old number:	25-C
Well type:	Not Reported	Casing dia:	24
Ground el:	Not Reported	Well depth:	237
Solid case:	232	Perf case:	Not Reported
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	00
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Trmk:	3-7-011:020	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1949
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001467

**A2**  
**North**  
**0 - 1/8 Mile**  
**Higher**

**HI WELLS      HI6000000001468**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wid:	6-5427-004	Island:	6
Well no:	5427-04	Well name:	Maui Elec D
Old name:	Not Reported	Yr drilled:	1949
Driller:	CAMAY DRLG CO	Quad map:	05
Longitude2:	1562754	Latitude27:	205401
Longitude8:	1562744	Latitude83:	205349
Lat83d:	20	Lat83m:	53
Lat83s:	49	Lon83d:	156
Lon83m:	27	Lon83s:	44
Lat83dd:	20.89694		
Lon83dd:	-156.46222		
Long83dd:	-156.46222		
Lat83dd 1:	20.89694		
Gps:	0	Utm:	1
Owner user:	Maui Electric Co. Ltd.	Old number:	25-D
Well type:	Not Reported	Casing dia:	24
Ground el:	Not Reported	Well depth:	245
Solid case:	232	Perf case:	Not Reported
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	00
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	Not Reported	Bot hole:	Not Reported
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	Not Reported	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqu:	Not Reported
Trnk:	3-7-011:020	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1949
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported	Pump elev:	Not Reported
T:	Not Reported	Site id:	HI6000000001468
Pump depth:	Not Reported		

**A3**  
**North**  
**0 - 1/8 Mile**  
**Higher**

**HI WELLS      HI6000000001465**

Wid:	6-5427-001	Island:	6
Well no:	5427-01	Well name:	Kahului PP A
Old name:	Maui Elec A	Yr drilled:	1946
Driller:	MULLIN	Quad map:	05
Longitude2:	1562754	Latitude27:	205401
Longitude8:	1562744	Latitude83:	205349
Lat83d:	20	Lat83m:	53
Lat83s:	49	Lon83d:	156
Lon83m:	27	Lon83s:	44
Lat83dd:	20.89694		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon83dd:	-156.46222	Utm:	1
Long83dd:	-156.46222	Old number:	25-A
Lat83dd 1:	20.89694	Casing dia:	20
Gps:	0	Well depth:	225
Owner user:	Maui Electric Co. Ltd.	Perf case:	Not Reported
Well type:	Not Reported		
Ground el:	9		
Solid case:	175		
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	3500.00000	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	99	Draft yr:	00
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	-216
Bot solid:	-166	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	5.040
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-7-011:020	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1946
Pir:	Not Reported	Surveyor:	REED ARIYOSHI
T:	Not Reported	Pump elev:	-13
Pump depth:	22	Site id:	HI6000000001465

**A4**  
**North**  
**0 - 1/8 Mile**  
**Higher**

**HI WELLS      HI6000000001466**

Wid:	6-5427-002	Island:	6
Well no:	5427-02	Well name:	Maui Elec B
Old name:	Not Reported	Yr drilled:	1947
Driller:	MULLIN	Quad map:	05
Longitude2:	1562754	Latitude27:	205401
Longitude8:	1562744	Latitude83:	205349
Lat83d:	20	Lat83m:	53
Lat83s:	49	Lon83d:	156
Lon83m:	27	Lon83s:	44
Lat83dd:	20.89694		
Lon83dd:	-156.46222		
Long83dd:	-156.46222		
Lat83dd 1:	20.89694		
Gps:	0	Utm:	1
Owner user:	Maui Electric Co. Ltd.	Old number:	25-B
Well type:	Not Reported	Casing dia:	24
Ground el:	Not Reported	Well depth:	200
Solid case:	200	Perf case:	Not Reported
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	71		
Init water:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	00
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	58	Bot hole:	Not Reported
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	Not Reported	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqui:	Not Reported
Tmk:	3-7-011:020	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1947
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported	Pump elev:	Not Reported
T:	Not Reported	Site id:	HI6000000001466
Pump depth:	Not Reported		

**A5  
North  
0 - 1/8 Mile  
Higher**

**HI WELLS      HI6000000001471**

Wid:	6-5427-007	Island:	6
Well no:	5427-07	Well name:	Maui Elec G
Old name:	Not Reported	Yr drilled:	1953
Driller:	SAMSON-SMOCK	Quad map:	05
Longitude2:	1562754	Latitude27:	205401
Longitude8:	1562744	Latitude83:	205349
Lat83d:	20	Lat83m:	53
Lat83s:	49	Lon83d:	156
Lon83m:	27	Lon83s:	44
Lat83dd:	20.89694		
Lon83dd:	-156.46222		
Long83dd:	-156.46222		
Lat83dd 1:	20.89694		
Gps:	0	Utm:	1
Owner user:	Maui Electric Co. Ltd.	Old number:	25-G
Well type:	Not Reported	Casing dia:	24
Ground el:	255	Well depth:	255
Solid case:	99	Perf case:	Not Reported
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	00
Head yr:	Not Reported	Maxchl:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	0
Bot solid:	156	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-7-011:020	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1953
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI600000001471

**A6**  
**North**  
**0 - 1/8 Mile**  
**Higher**

**HI WELLS      HI600000001470**

Wid:	6-5427-006	Island:	6
Well no:	5427-06	Well name:	Maui Elec F
Old name:	Not Reported	Yr drilled:	1953
Driller:	SAMSON-SMOCK	Quad map:	05
Longitude2:	1562754	Latitude27:	205401
Longitude8:	1562744	Latitude83:	205349
Lat83d:	20	Lat83m:	53
Lat83s:	49	Lon83d:	156
Lon83m:	27	Lon83s:	44
Lat83dd:	20.89694		
Lon83dd:	-156.46222		
Long83dd:	-156.46222		
Lat83dd 1:	20.89694		
Gps:	0	Utm:	1
Owner user:	Maui Electric Co. Ltd.	Old number:	25-F
Well type:	Not Reported	Casing dia:	24
Ground el:	Not Reported	Well depth:	250
Solid case:	101	Perf case:	Not Reported
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	00
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-7-011:020	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1953
Pir:	Not Reported	Surveyor:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001470

**A7**  
**North**  
**0 - 1/8 Mile**  
**Higher**

**HI WELLS      HI6000000001469**

Wid:	6-5427-005	Island:	6
Well no:	5427-05	Well name:	Maui Elec E
Old name:	Not Reported	Yr drilled:	1953
Driller:	SAMSON-SMOCK	Quad map:	05
Longitude2:	1562754	Latitude27:	205401
Longitude8:	1562744	Latitude83:	205349
Lat83d:	20	Lat83m:	53
Lat83s:	49	Lon83d:	156
Lon83m:	27	Lon83s:	44
Lat83dd:	20.89694		
Lon83dd:	-156.46222		
Long83dd:	-156.46222		
Lat83dd 1:	20.89694		
Gps:	0	Utm:	1
Owner user:	Maui Electric Co. Ltd.	Old number:	25-E
Well type:	Not Reported	Casing dia:	24
Ground el:	Not Reported	Well depth:	257
Solid case:	120	Perf case:	Not Reported
Use:	IND - Geothermal, Thermoelectric Cooling, Power De		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	Not Reported		
Test date:	Not Reported		
Test ddown:	Not Reported		
Test temp:	Not Reported		
Pump gpm:	Not Reported		
Head feet:	Not Reported		
Min chlor:	Not Reported		
Pump yr:	Not Reported		
Head yr:	Not Reported		
Maxchl yr:	Not Reported		
Minchl yr:	Not Reported		
Bot solid:	Not Reported		
Spec capac:	Not Reported		
Draft mgd:	Not Reported		
Tmk:	3-7-011:020		
Aqui code:	60301		
Cur head:	Not Reported		
Cur temp:	Not Reported		
Pir:	Not Reported		
T:	Not Reported		
Pump depth:	Not Reported		
		Init cl:	0
		Test gpm:	Not Reported
		Test chlor:	Not Reported
		Temp unit:	Not Reported
		Draft mgy:	Not Reported
		Max chlor:	Not Reported
		Geology:	THO
		Draft yr:	00
		Maxchl:	Not Reported
		Minchl:	Not Reported
		Bot hole:	Not Reported
		Bot perf:	Not Reported
		Pump mgd:	Not Reported
		Aquifer:	60301
		Old aqui:	Not Reported
		Latest hd:	Not Reported
		Cur cl:	Not Reported
		Wcr:	01/01/1953
		Surveyor:	Not Reported
		Pump elev:	Not Reported
		Site id:	HI6000000001469

**8**  
**ENE**  
**1/4 - 1/2 Mile**  
**Higher**

**HI WELLS      HI6000000001472**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wid:	6-5427-008	Island:	6
Well no:	5427-08	Well name:	Injection Test
Old name:	Not Reported	Yr drilled:	1971
Driller:	LAYNE INTL	Quad map:	05
Longitude2:	1562734	Latitude27:	205401
Longitude8:	1562724	Latitude83:	205349
Lat83d:	20	Lat83m:	53
Lat83s:	49	Lon83d:	156
Lon83m:	27	Lon83s:	24
Lat83dd:	20.89694		
Lon83dd:	-156.45667		
Long83dd:	-156.45667		
Lat83dd 1:	20.89694		
Gps:	0	Utm:	1
Owner user:	Maui DPW	Old number:	Not Reported
Well type:	ROT	Casing dia:	19
Ground el:	8	Well depth:	385
Solid case:	180	Perf case:	Not Reported
Use:	Other		
Use year:	71		
Init water:	2.4		
Init head:	2.40000		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	-377
Bot solid:	-172	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	Not Reported	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1971
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001472

9  
SW  
1/4 - 1/2 Mile  
Higher

FRDS PWS HI0000204

PWS ID: HI0000204  
Date Initiated: Not Reported Date Deactivated: Not Reported  
PWS Name: KAPALUA  
KAPALUA WATER COMPANY  
KAPALUA, MAUI, HI 96761

Addressee / Facility: System Owner/Responsible Party  
MR. PAUL SEITZ, MANAGER  
KAPALUA WATER COMPANY, LTD.  
500 OFFICE ROAD  
KAPALUA, MAUI, HI 96761

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Facility Latitude:	00 20 59	Facility Longitude:	156 38 00
Facility Latitude:	20 53 40	Facility Longitude:	156 28 12
City Served:	KAPALUA		
City Served:	KAPALUA, MAUI		
Treatment Class:	Treated	Population:	4142

Violations information not reported.

### ENFORCEMENT INFORMATION:

Truedate:	03/31/2009	Pwsid:	HI0000204
Pwsname:	KAPALUA		
Retpopsrvd:	4150	Pwstypecod:	C
Void:	20104	Contaminant:	GROSS ALPHA, EXCL. RADON & U
Viol. Type:	3		
Complperbe:	1/1/2000 0:00:00		
Complperen:	12/8/2003 0:00:00	Enfdate:	No Enf Action as of
Enf action:	7/8/2009 0:00:00		
Violmeasur:	Not Reported		

System Name:	KAPALUA		
Violation Type:	3		
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Compliance Period:	1/1/2000 0:00:00 - 12/8/2003 0:00:00		
Violation ID:	20104		
Enforcement Date:	No Enf Action as of	Enf. Action:	10/17/2006 0:00:00
System Name:	KAPALUA		
Violation Type:	3		
Contaminant:	GROSS ALPHA, EXCL. RADON & U		
Compliance Period:	1/1/2000 0:00:00 - 12/8/2003 0:00:00		
Violation ID:	20104		
Enforcement Date:	4/12/2007 0:00:00	Enf. Action:	Not Reported
System Name:	KAPALUA		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1995-06-01 - 1995-06-30		
Violation ID:	9500022		
Enforcement Date:	1995-06-19	Enf. Action:	State Violation/Reminder Notice
System Name:	KAPALUA		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1995-06-01 - 1995-06-30		
Violation ID:	9500022		
Enforcement Date:	1995-06-19	Enf. Action:	State Public Notif Requested
System Name:	KAPALUA		
Violation Type:	MCL, Monthly (TCR)		
Contaminant:	COLIFORM (TCR)		
Compliance Period:	1995-06-01 - 1995-06-30		
Violation ID:	9500022		
Enforcement Date:	1995-06-29	Enf. Action:	State Public Notif Issued

### CONTACT INFORMATION:

Name:	KAPALUA	Population:	4150
Contact:	PEARSON, JEFF	Phone:	808-877-1606
Address:	Maui Land & Pineapple Co., Inc.		
Address 2:	P.O. Box 187		
	KAHULUI, HI 96733		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database      EDR ID Number

**10**  
**SE**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001434**

Wid:	6-5327-010	Island:	6
Well no:	5327-10	Well name:	Kanaha Pond
Old name:	Not Reported	Yr drilled:	1962
Driller:	SAMSON-ZERBE	Quad map:	07
Longitude2:	1562729	Latitude27:	205330
Longitude8:	1562719	Latitude83:	205318
Lat83d:	20	Lat83m:	53
Lat83s:	18	Lon83d:	156
Lon83m:	27	Lon83s:	19
Lat83dd:	20.88833		
Lon83dd:	-156.45528		
Long83dd:	-156.45528		
Lat83dd 1:	20.88833		
Gps:	0	Utm:	1
Owner user:	State DLNR-Engineering	Old number:	116-TH
Well type:	PER	Casing dia:	14
Ground el:	5	Well depth:	86
Solid case:	45	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	71		
Init water:	2.6		
Init head:	2.60000		
Init chlor:	550	Init cl:	550
Test date:	Not Reported	Test gpm:	800
Test ddown:	4.0	Test chlor:	530
Test temp:	26.4	Temp unit:	C
Pump gpm:	1000.00000	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	530
Min chlor:	Not Reported	Geology:	THO
Pump yr:	71	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	71	Minchl:	1/1/1971
Minchl yr:	Not Reported	Bot hole:	-81
Bot solid:	-40	Bot perf:	Not Reported
Spec capac:	200	Pump mgd:	1.430
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	Not Reported	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1962
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001434

**11**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001428**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wid:	6-5328-017	Island:	6
Well no:	5328-17	Well name:	TMK 3-8-17-46
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562815	Latitude27:	205326
Longitude8:	1562805	Latitude83:	205314
Lat83d:	20	Lat83m:	53
Lat83s:	14	Lon83d:	156
Lon83m:	28	Lon83s:	05
Lat83dd:	20.88722		
Lon83dd:	-156.46806		
Long83dd:	-156.46806		
Lat83dd 1:	20.88722		
Gps:	0	Utm:	1
Owner user:	Union Church	Old number:	20-81
Well type:	ROT	Casing dia:	4
Ground el:	20	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-017.046	Old aquil:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001428

**B12**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001416**

Wid:	6-5328-024	Island:	6
Well no:	5328-24	Well name:	Fair Grounds
Old name:	Not Reported	Yr drilled:	1936
Driller:	JM HEIZER	Quad map:	05
Longitude2:	1562801	Latitude27:	205320
Longitude8:	1562751	Latitude83:	205308
Lat83d:	20	Lat83m:	53
Lat83s:	08	Lon83d:	156
Lon83m:	27	Lon83s:	51
Lat83dd:	20.88556		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon83dd:	-156.46417	Utm:	1
Long83dd:	-156.46417	Old number:	106-TH
Lat83dd 1:	20.88556	Casing dia:	2
Gps:	0	Well depth:	157
Owner user:	Maui County	Perf case:	Not Reported
Well type:	ROT		
Ground el:	7		
Solid case:	52		
Use:	UNU - Unused		
Use year:	71		
Init water:	3.2		
Init head:	3.24000		
Init chlor:	17900	Init cl:	17900
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	-150
Bot solid:	-45	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	Not Reported	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	05/10/1936
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI600000001416

**13  
WSW  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI600000001447**

Wid:	6-5328-052	Island:	6
Well no:	5328-52	Well name:	Maui Beach Hotel
Old name:	Not Reported	Yr drilled:	1998
Driller:	WAILANI DRLG	Quad map:	05
Longitude2:	1562830	Latitude27:	205336
Longitude8:	1562820	Latitude83:	205324
Lat83d:	20	Lat83m:	53
Lat83s:	24	Lon83d:	156
Lon83m:	28	Lon83s:	20
Lat83dd:	20.89		
Lon83dd:	-156.47222		
Long83dd:	-156.47222		
Lat83dd 1:	20.89		
Gps:	0	Utm:	1
Owner user:	Maui Beach Hotel	Old number:	Not Reported
Well type:	ROT	Casing dia:	6
Ground el:	9	Well depth:	75
Solid case:	55	Perf case:	Not Reported
Use:	IRR - Hotel		
Use year:	98		
Init water:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Init head:	0.89000	Init cl:	250
Init chlor:	Not Reported	Test gpm:	70
Test date:	#####	Test chlor:	250
Test ddown:	.3	Temp unit:	C
Test temp:	23.9	Draft mgy:	Not Reported
Pump gpm:	70.00000	Max chlor:	Not Reported
Head feet:	.9	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	98	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	Not Reported	Bot hole:	-66
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	-46	Pump mgd:	0.100
Spec capac:	Not Reported	Aquifer:	Not Reported
Draft mgd:	Not Reported	Old aqui:	Not Reported
Tmk:	3-7-003:009	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1969
Cur temp:	Not Reported	Surveyor:	EDGARDO VALERA
Pir:	Not Reported	Pump elev:	-15
T:	147880.00000	Site id:	HI6000000001447
Pump depth:	24		

**C14  
SW  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI6000000001427**

Wid:	6-5328-010	Island:	6
Well no:	5328-10	Well name:	TMK 3-8-17-44
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562820	Latitude27:	205325
Longitude8:	1562810	Latitude83:	205313
Lat83d:	20	Lat83m:	53
Lat83s:	13	Lon83d:	156
Lon83m:	28	Lon83s:	10
Lat83dd:	20.88694		
Lon83dd:	-156.46944		
Long83dd:	-156.46944		
Lat83dd 1:	20.88694		
Gps:	0	Utm:	1
Owner user:	Church Of Lds	Old number:	20-40
Well type:	ROT	Casing dia:	4
Ground el:	20	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-017:044	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001427

**B15  
SSW  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI6000000001410**

Wid:	6-5328-044	Island:	6
Well no:	5328-44	Well name:	Wakea
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562803	Latitude27:	205317
Longitude8:	1562753	Latitude83:	205305
Lat83d:	20	Lat83m:	53
Lat83s:	05	Lon83d:	156
Lon83m:	27	Lon83s:	53
Lat83dd:	20.88472		
Lon83dd:	-156.46472		
Long83dd:	-156.46472		
Lat83dd 1:	20.88472		
Gps:	0	Utm:	1
Owner user:	Maui County	Old number:	Not Reported
Well type:	Not Reported	Casing dia:	6
Ground el:	40	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Other		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	Not Reported	Bot hole:	Not Reported
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	Not Reported	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqui:	Not Reported
Tmk:	Not Reported	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	07/07/1971
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001410

**16**  
**SSE**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001412**

Wid:	6-5327-005	Island:	6
Well no:	5327-05	Well name:	Kahului
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562737	Latitude27:	205318
Longitude8:	1562727	Latitude83:	205306
Lat83d:	20	Lat83m:	53
Lat83s:	06	Lon83d:	156
Lon83m:	27	Lon83s:	27
Lat83dd:	20.885		
Lon83dd:	-156.4575		
Long83dd:	-156.4575		
Lat83dd 1:	20.885		
Gps:	0	Utm:	1
Owner user:	Haleakala Dair	Old number:	21-
Well type:	Not Reported	Casing dia:	14
Ground el:	5	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	3.9	Max chlor:	449
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	70	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	1/1/1956
Minchl yr:	0	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Trnk:	Not Reported	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	3.90000
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1962
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001412

**C17**  
**SW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001422**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wid:	6-5328-009	Island:	6
Well no:	5328-09	Well name:	Tmk 3-8-17-39
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562821	Latitude27:	205323
Longitude8:	1562811	Latitude83:	205311
Lat83d:	20	Lat83m:	53
Lat83s:	11	Lon83d:	156
Lon83m:	28	Lon83s:	11
Lat83dd:	20.88639		
Lon83dd:	-156.46972		
Long83dd:	-156.46972		
Lat83dd 1:	20.88639		
Gps:	0	Utm:	1
Owner user:	Yamanishi G	Old number:	20-39
Well type:	ROT	Casing dia:	4
Ground el:	20	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-017:039	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001422

**18  
South  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI6000000001385**

Wid:	6-5327-004	Island:	6
Well no:	5327-04	Well name:	Tmk 3-8-10-76
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562747	Latitude27:	205311
Longitude8:	1562737	Latitude83:	205259
Lat83d:	20	Lat83m:	52
Lat83s:	59	Lon83d:	156
Lon83m:	27	Lon83s:	37
Lat83dd:	20.88306		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon83dd:	-156.46028	Utm:	1
Long83dd:	-156.46028	Old number:	20-113
Lat83dd 1:	20.88306	Casing dia:	4
Gps:	0	Well depth:	Not Reported
Owner user:	Fernandez G	Perf case:	Not Reported
Well type:	ROT		
Ground el:	Not Reported		
Solid case:	Not Reported		
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-010:076	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1962
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001385

**D19**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001400**

Wid:	6-5328-019	Island:	6
Well no:	5328-19	Well name:	Tmk 3-8-16-27
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	OCEAN VIEW	Quad map:	05
Longitude2:	1562810	Latitude27:	205313
Longitude8:	1562760	Latitude83:	205301
Lat83d:	20	Lat83m:	53
Lat83s:	01	Lon83d:	156
Lon83m:	27	Lon83s:	60
Lat83dd:	20.88361		
Lon83dd:	-156.46667		
Long83dd:	-156.46667		
Lat83dd 1:	20.88361		
Gps:	0	Utm:	1
Owner user:	Joaquin J	Old number:	20-84
Well type:	ROT	Casing dia:	4
Ground el:	30	Well depth:	70
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	Not Reported	Bot hole:	-40
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	Not Reported	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqui:	Not Reported
Tmk:	3-8-016:027	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1926
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported	Pump elev:	Not Reported
T:	Not Reported	Site id:	HI6000000001400
Pump depth:	Not Reported		

**E20  
SW  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI6000000001415**

Wid:	6-5328-008	Island:	6
Well no:	5328-08	Well name:	Tmk 3-8-17-16
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	PAUL SMITH	Quad map:	05
Longitude2:	1562824	Latitude27:	205320
Longitude8:	1562814	Latitude83:	205308
Lat83d:	20	Lat83m:	53
Lat83s:	08	Lon83d:	156
Lon83m:	28	Lon83s:	14
Lat83dd:	20.88556		
Lon83dd:	-156.47056	Utm:	1
Long83dd:	-156.47056	Old number:	20-38
Lat83dd 1:	20.88556	Casing dia:	4
Gps:	0	Well depth:	20
Owner user:	Okada R	Perf case:	Not Reported
Well type:	ROT		
Ground el:	20	Init cl:	0
Solid case:	Not Reported	Test gpm:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Test chlor:	Not Reported
Use year:	71	Temp unit:	Not Reported
Init water:	Not Reported	Draft mgy:	Not Reported
Init head:	Not Reported	Max chlor:	Not Reported
Init chlor:	Not Reported	Geology:	THO
Test date:	Not Reported	Draft yr:	Not Reported
Test ddown:	Not Reported	Maxchl:	Not Reported
Test temp:	Not Reported		
Pump gpm:	Not Reported		
Head feet:	Not Reported		
Min chlor:	Not Reported		
Pump yr:	Not Reported		
Head yr:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	0
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-017:016	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001415

**D21  
SSW  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI6000000001390**

Wid:	6-5328-021	Island:	6
Well no:	5328-21	Well name:	Tmk 3-8-12-52
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562808	Latitude27:	205312
Longitude8:	1562758	Latitude83:	205300
Lat83d:	20	Lat83m:	53
Lat83s:	00	Lon83d:	156
Lon83m:	27	Lon83s:	58
Lat83dd:	20.88333		
Lon83dd:	-156.46611		
Long83dd:	-156.46611		
Lat83dd 1:	20.88333		
Gps:	0	Utm:	1
Owner user:	Pacheco R	Old number:	20-92
Well type:	ROT	Casing dia:	4
Ground el:	30	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-012:052	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001390

**22**  
**WSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001436**

Wid:	6-5328-002	Island:	6
Well no:	5328-02	Well name:	Cannery
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562835	Latitude27:	205331
Longitude8:	1562825	Latitude83:	205319
Lat83d:	20	Lat83m:	53
Lat83s:	19	Lon83d:	156
Lon83m:	28	Lon83s:	25
Lat83dd:	20.88861		
Lon83dd:	-156.47361		
Long83dd:	-156.47361		
Lat83dd 1:	20.88861		
Gps:	0	Utm:	1
Owner user:	Maui Land & Pine Co Inc	Old number:	20-D
Well type:	Not Reported	Casing dia:	20
Ground el:	20	Well depth:	300
Solid case:	140	Perf case:	Not Reported
Use:	IND - Industrial Other		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	Not Reported	Bot hole:	-280
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	-120	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqui:	Not Reported
Trnk:	Not Reported	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1926
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported	Pump elev:	Not Reported
T:	Not Reported	Site id:	HI6000000001436
Pump depth:	Not Reported		

**E23**  
**SW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001420**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wid:	6-5328-051	Island:	6
Well no:	5328-51	Well name:	Akahi
Old name:	Not Reported	Yr drilled:	1969
Driller:	Not Reported	Quad map:	05
Longitude2:	1562827	Latitude27:	205322
Longitude8:	1562817	Latitude83:	205310
Lat83d:	20	Lat83m:	53
Lat83s:	10	Lon83d:	156
Lon83m:	28	Lon83s:	17
Lat83dd:	20.88611		
Lon83dd:	-156.47139		
Long83dd:	-156.47139		
Lat83dd 1:	20.88611		
Gps:	0	Utm:	1
Owner user:	Hale Mahaolu	Old number:	Not Reported
Well type:	Not Reported	Casing dia:	Not Reported
Ground el:	30	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Landscape/Water Features		
Use year:	Not Reported		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	100.00000	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	0.140
Draft mgd:	Not Reported	Aquifer:	Not Reported
Tmk:	3-8-007.050	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1969
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001420

**F24**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001403**

Wid:	6-5328-015	Island:	6
Well no:	5328-15	Well name:	Tmk 3-8-18-1
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	PAUL SMITH	Quad map:	05
Longitude2:	1562815	Latitude27:	205314
Longitude8:	1562805	Latitude83:	205302
Lat83d:	20	Lat83m:	53
Lat83s:	02	Lon83d:	156
Lon83m:	28	Lon83s:	05
Lat83dd:	20.88389		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon83dd:	-156.46806	Utm:	1
Long83dd:	-156.46806	Old number:	20-51
Lat83dd 1:	20.88389	Casing dia:	4
Gps:	0	Well depth:	Not Reported
Owner user:	Molina D	Perf case:	Not Reported
Well type:	ROT		
Ground el:	35		
Solid case:	Not Reported		
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-018:001	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001403

**D25**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001389**

Wid:	6-5328-018	Island:	6
Well no:	5328-18	Well name:	Tmk 3-8-16-29
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	OCEAN VIEW	Quad map:	05
Longitude2:	1562810	Latitude27:	205312
Longitude8:	1562760	Latitude83:	205300
Lat83d:	20	Lat83m:	53
Lat83s:	00	Lon83d:	156
Lon83m:	27	Lon83s:	60
Lat83dd:	20.88333		
Lon83dd:	-156.46667		
Long83dd:	-156.46667		
Lat83dd 1:	20.88333		
Gps:	0	Utm:	1
Owner user:	Kern J	Old number:	20-83
Well type:	ROT	Casing dia:	4
Ground el:	35	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	0	Bot hole:	Not Reported
Minchl yr:	0	Bot perf:	Not Reported
Bot solid:	Not Reported	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqui:	Not Reported
Tmk:	3-8-016:029	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1926
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported	Pump elev:	Not Reported
T:	Not Reported	Site id:	HI6000000001389
Pump depth:	Not Reported		

**G26**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001380**

Wid:	6-5328-022	Island:	6
Well no:	5328-22	Well name:	Kahiki St
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562803	Latitue27:	205310
Longitude8:	1562753	Latitue83:	205258
Lat83d:	20	Lat83m:	52
Lat83s:	58	Lon83d:	156
Lon83m:	27	Lon83s:	53
Lat83dd:	20.88278		
Lon83dd:	-156.46472	Utm:	1
Long83dd:	-156.46472	Old number:	20-98
Lat83dd 1:	20.88278	Casing dia:	6
Gps:	0	Well depth:	97
Owner user:	Maui County	Perf case:	Not Reported
Well type:	Not Reported		
Ground el:	25	Init cl:	0
Solid case:	31	Test gpm:	Not Reported
Use:	Other	Test chlor:	Not Reported
Use year:	71	Temp unit:	Not Reported
Init water:	Not Reported	Draft mgy:	Not Reported
Init head:	Not Reported	Max chlor:	Not Reported
Init chlor:	Not Reported	Geology:	THO
Test date:	Not Reported	Draft yr:	Not Reported
Test ddown:	Not Reported	Maxchl:	Not Reported
Test temp:	Not Reported		
Pump gpm:	Not Reported		
Head feet:	Not Reported		
Min chlor:	Not Reported		
Pump yr:	Not Reported		
Head yr:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	-72
Bot solid:	-6	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	Not Reported	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI600000001380

**27**  
**WSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI600000001446**

Wid:	6-5328-050	Island:	6
Well no:	5328-50	Well name:	Aoao Harb Lts
Old name:	Not Reported	Yr drilled:	1989
Driller:	BRYAN SARASIN	Quad map:	05
Longitude2:	1562839	Latitude27:	205336
Longitude8:	1562829	Latitude83:	205324
Lat83d:	20	Lat83m:	53
Lat83s:	24	Lon83d:	156
Lon83m:	28	Lon83s:	29
Lat83dd:	20.89		
Lon83dd:	-156.47472		
Long83dd:	-156.47472		
Lat83dd 1:	20.89		
Gps:	0	Utm:	1
Owner user:	Aoao Harb Lts	Old number:	Not Reported
Well type:	PER	Casing dia:	6
Ground el:	Not Reported	Well depth:	65
Solid case:	50	Perf case:	Not Reported
Use:	IRR - Landscape/Water Features		
Use year:	Not Reported		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	100.00000	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	89	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	0.140
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-7-002:018	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1989
Pir:	Not Reported	Surveyor:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001446

**H28  
SW  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI6000000001425**

Wid:	6-5328-026	Island:	6
Well no:	5328-26	Well name:	Cannery
Old name:	Not Reported	Yr drilled:	1954
Driller:	SAMSON-SMOCK	Quad map:	05
Longitude2:	1562831	Latitude27:	205323
Longitude8:	1562821	Latitude83:	205311
Lat83d:	20	Lat83m:	53
Lat83s:	11	Lon83d:	156
Lon83m:	28	Lon83s:	21
Lat83dd:	20.88639		
Lon83dd:	-156.4725		
Long83dd:	-156.4725		
Lat83dd 1:	20.88639		
Gps:	0	Utm:	1
Owner user:	Maui Ld & Pine	Old number:	20-A
Well type:	Not Reported	Casing dia:	8
Ground el:	300	Well depth:	214
Solid case:	Not Reported	Perf case:	Not Reported
Use:	Other		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	19300	Init cl:	19300
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	00
Head yr:	54	Maxchl:	Not Reported
Maxchl yr:	58	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	86
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	Not Reported	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1954
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001425

**F29  
SSW  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI6000000001399**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wid:	6-5328-030	Island:	6
Well no:	5328-30	Well name:	Tmk 3-8-18-9
Old name:	Not Reported	Yr drilled:	1962
Driller:	PAUL SMITH	Quad map:	05
Longitude2:	1562818	Latitude27:	205313
Longitude8:	1562808	Latitude83:	205301
Lat83d:	20	Lat83m:	53
Lat83s:	01	Lon83d:	156
Lon83m:	28	Lon83s:	08
Lat83dd:	20.88361		
Lon83dd:	-156.46889		
Long83dd:	-156.46889		
Lat83dd 1:	20.88361		
Gps:	0	Utm:	1
Owner user:	Hashimoto T	Old number:	20-50
Well type:	ROT	Casing dia:	4
Ground el:	30	Well depth:	40
Solid case:	14	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	-10
Bot solid:	16	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-018.009	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1962
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001399

**G30**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001369**

Wid:	6-5328-039	Island:	6
Well no:	5328-39	Well name:	Tmk 3-8-12-60
Old name:	Not Reported	Yr drilled:	1963
Driller:	PAUL SMITH	Quad map:	05
Longitude2:	1562803	Latitude27:	205308
Longitude8:	1562753	Latitude83:	205256
Lat83d:	20	Lat83m:	52
Lat83s:	56	Lon83d:	156
Lon83m:	27	Lon83s:	53
Lat83dd:	20.88222		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon83dd:	-156.46472	Utm:	1
Long83dd:	-156.46472	Old number:	20-97
Lat83dd 1:	20.88222	Casing dia:	4
Gps:	0	Well depth:	78
Owner user:	Imada K	Perf case:	Not Reported
Well type:	ROT		
Ground el:	35		
Solid case:	Not Reported		
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	5.0		
Init head:	5.00000	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	Not Reported	Bot hole:	-43
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	Not Reported	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqui:	Not Reported
Tmk:	3-8-012:060	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1963
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported	Pump elev:	Not Reported
T:	Not Reported	Site id:	HI6000000001369
Pump depth:	Not Reported		

**31**  
**South**  
**1/2 - 1 Mile**  
**Higher**

HI WELLS      HI6000000001367

Wid:	6-5327-009	Island:	6
Well no:	5327-09	Well name:	Tmk 3-8-10-46
Old name:	Not Reported	Yr drilled:	1962
Driller:	PAUL SMITH	Quad map:	05
Longitude2:	1562753	Latitude27:	205307
Longitude8:	1562743	Latitude83:	205255
Lat83d:	20	Lat83m:	52
Lat83s:	55	Lon83d:	156
Lon83m:	27	Lon83s:	43
Lat83dd:	20.88194		
Lon83dd:	-156.46194		
Long83dd:	-156.46194		
Lat83dd 1:	20.88194		
Gps:	0	Utm:	1
Owner user:	Saiki K	Old number:	20-103
Well type:	ROT	Casing dia:	4
Ground el:	Not Reported	Well depth:	76
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	Not Reported	Bot hole:	Not Reported
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	Not Reported	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqui:	Not Reported
Tmk:	3-8-010:046	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1962
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported	Pump elev:	Not Reported
T:	Not Reported	Site id:	HI6000000001367
Pump depth:	Not Reported		

**E32  
SW  
1/2 - 1 Mile  
Higher**

**HI WELLS      HI6000000001409**

Wid:	6-5328-007	Island:	6
Well no:	5328-07	Well name:	Tmk 3-8-18-34
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562825	Latitude27:	205316
Longitude8:	1562815	Latitude83:	205304
Lat83d:	20	Lat83m:	53
Lat83s:	04	Lon83d:	156
Lon83m:	28	Lon83s:	15
Lat83dd:	20.88444		
Lon83dd:	-156.47083	Utm:	1
Long83dd:	-156.47083	Old number:	20-37
Lat83dd 1:	20.88444	Casing dia:	36
Gps:	0	Well depth:	20
Owner user:	Takahashi F	Perf case:	Not Reported
Well type:	DUG		
Ground el:	20	Init cl:	0
Solid case:	Not Reported	Test gpm:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)	Test chlor:	Not Reported
Use year:	71	Temp unit:	Not Reported
Init water:	Not Reported	Draft mgy:	Not Reported
Init head:	Not Reported	Max chlor:	Not Reported
Init chlor:	Not Reported	Geology:	THO
Test date:	Not Reported	Draft yr:	Not Reported
Test ddown:	Not Reported	Maxchl:	Not Reported
Test temp:	Not Reported		
Pump gpm:	Not Reported		
Head feet:	Not Reported		
Min chlor:	Not Reported		
Pump yr:	Not Reported		
Head yr:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	0
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-018:034	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001409

**D33**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001372**

Wid:	6-5328-040	Island:	6
Well no:	5328-40	Well name:	Tmk 3-8-16-31
Old name:	Not Reported	Yr drilled:	1963
Driller:	PAUL SMITH	Quad map:	05
Longitude2:	1562811	Latitude27:	205309
Longitude8:	1562801	Latitude83:	205257
Lat83d:	20	Lat83m:	52
Lat83s:	57	Lon83d:	156
Lon83m:	28	Lon83s:	01
Lat83dd:	20.8825		
Lon83dd:	-156.46694		
Long83dd:	-156.46694		
Lat83dd 1:	20.8825		
Gps:	0	Utm:	1
Owner user:	Yoshizawa K	Old number:	20-82
Well type:	ROT	Casing dia:	4
Ground el:	35	Well depth:	61
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	6.0		
Init head:	6.00000		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	305
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	71	Minchl:	1/1/1971
Minchl yr:	Not Reported	Bot hole:	-26
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-016:031	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1963
Pir:	Not Reported	Surveyor:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI600000001372

**34**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI600000001368**

Wid:	6-5328-020	Island:	6
Well no:	5328-20	Well name:	Tmk 3-8-15-14
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562809	Latitude27:	205308
Longitude8:	1562759	Latitude83:	205256
Lat83d:	20	Lat83m:	52
Lat83s:	56	Lon83d:	156
Lon83m:	27	Lon83s:	59
Lat83dd:	20.88222		
Lon83dd:	-156.46639		
Long83dd:	-156.46639		
Lat83dd 1:	20.88222		
Gps:	0	Utm:	1
Owner user:	Abreu J	Old number:	20-91
Well type:	ROT	Casing dia:	4
Ground el:	35	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-015:014	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI600000001368

**H35**  
**SW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI600000001424**

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wid:	6-5328-028	Island:	6
Well no:	5328-28	Well name:	Cannery
Old name:	Not Reported	Yr drilled:	1958
Driller:	SAMSON-SMOCK	Quad map:	05
Longitude2:	1562834	Latitude27:	205323
Longitude8:	1562824	Latitude83:	205311
Lat83d:	20	Lat83m:	53
Lat83s:	11	Lon83d:	156
Lon83m:	28	Lon83s:	24
Lat83dd:	20.88639		
Lon83dd:	-156.47333		
Long83dd:	-156.47333		
Lat83dd 1:	20.88639		
Gps:	0	Utm:	1
Owner user:	Maui Ld & Pine	Old number:	20-C
Well type:	Not Reported	Casing dia:	16
Ground el:	Not Reported	Well depth:	312
Solid case:	278	Perf case:	Not Reported
Use:	IND - Industrial		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported		
Init chlor:	13800	Init cl:	13800
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	00
Head yr:	58	Maxchl:	Not Reported
Maxchl yr:	0	Minchl:	Not Reported
Minchl yr:	0	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	Not Reported	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1958
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001424

**G36**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

HI WELLS      HI6000000001366

Wid:	6-5328-035	Island:	6
Well no:	5328-35	Well name:	Tmk 3-8-15-1
Old name:	Not Reported	Yr drilled:	1962
Driller:	PAUL SMITH	Quad map:	05
Longitude2:	1562806	Latitude27:	205307
Longitude8:	1562756	Latitude83:	205255
Lat83d:	20	Lat83m:	52
Lat83s:	55	Lon83d:	156
Lon83m:	27	Lon83s:	56
Lat83dd:	20.88194		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon83dd:	-156.46556	Utm:	1
Long83dd:	-156.46556	Old number:	20-95
Lat83dd 1:	20.88194	Casing dia:	4
Gps:	0	Well depth:	71
Owner user:	Alexander J	Perf case:	Not Reported
Well type:	ROT		
Ground el:	35		
Solid case:	Not Reported		
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	3.0		
Init head:	3.00000		
Init chlor:	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	Temp unit:	Not Reported
Pump gpm:	Not Reported	Draft mgy:	Not Reported
Head feet:	Not Reported	Max chlor:	Not Reported
Min chlor:	Not Reported	Geology:	THO
Pump yr:	Not Reported	Draft yr:	Not Reported
Head yr:	Not Reported	Maxchl:	Not Reported
Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	-36
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-015:001	Old aquil:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1962
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001366

**F37**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001384**

Wid:	6-5328-014	Island:	6
Well no:	5328-14	Well name:	Tmk 3-8-19-29
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562818	Latitude27:	205311
Longitude8:	1562808	Latitude83:	205259
Lat83d:	20	Lat83m:	52
Lat83s:	59	Lon83d:	156
Lon83m:	28	Lon83s:	08
Lat83dd:	20.88306		
Lon83dd:	-156.46889		
Long83dd:	-156.46889		
Lat83dd 1:	20.88306		
Gps:	0	Utm:	1
Owner user:	Ikeda R	Old number:	20-49
Well type:	ROT	Casing dia:	4
Ground el:	30	Well depth:	Not Reported
Solid case:	Not Reported	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	71		
Init water:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported	Minchl:	Not Reported
Maxchl yr:	Not Reported	Bot hole:	Not Reported
Minchl yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	Not Reported	Pump mgd:	Not Reported
Spec capac:	Not Reported	Aquifer:	60301
Draft mgd:	Not Reported	Old aqui:	Not Reported
Tmk:	3-8-019:029	Latest hd:	Not Reported
Aqui code:	60301	Cur cl:	Not Reported
Cur head:	Not Reported	Wcr:	01/01/1926
Cur temp:	Not Reported	Surveyor:	Not Reported
Pir:	Not Reported	Pump elev:	Not Reported
T:	Not Reported	Site id:	HI6000000001384
Pump depth:	Not Reported		

**38**  
**SSW**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001388**

Wid:	6-5328-011	Island:	6
Well no:	5328-11	Well name:	Tmk 3-8-19-44
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	PAUL SMITH	Quad map:	05
Longitude2:	1562821	Latitude27:	205312
Longitude8:	1562811	Latitude83:	205300
Lat83d:	20	Lat83m:	53
Lat83s:	00	Lon83d:	156
Lon83m:	28	Lon83s:	11
Lat83dd:	20.88333		
Lon83dd:	-156.46972	Utm:	1
Long83dd:	-156.46972	Old number:	20-44
Lat83dd 1:	20.88333	Casing dia:	4
Gps:	0	Well depth:	30
Owner user:	Moniz L	Perf case:	Not Reported
Well type:	ROT		
Ground el:	30		
Solid case:	Not Reported		
Use:	IRR - Irrigation (non-domestic, non-agriculture)		
Use year:	71		
Init water:	Not Reported		
Init head:	Not Reported	Init cl:	0
Init chlor:	Not Reported	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Temp unit:	Not Reported
Test temp:	Not Reported	Draft mgy:	Not Reported
Pump gpm:	Not Reported	Max chlor:	Not Reported
Head feet:	Not Reported	Geology:	THO
Min chlor:	Not Reported	Draft yr:	Not Reported
Pump yr:	Not Reported	Maxchl:	Not Reported
Head yr:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Maxchl yr:	Not Reported	Minchl:	Not Reported
Minchl yr:	Not Reported	Bot hole:	0
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported	Pump mgd:	Not Reported
Draft mgd:	Not Reported	Aquifer:	60301
Tmk:	3-8-019:044	Old aqui:	Not Reported
Aqui code:	60301	Latest hd:	Not Reported
Cur head:	Not Reported	Cur cl:	Not Reported
Cur temp:	Not Reported	Wcr:	01/01/1926
Pir:	Not Reported	Surveyor:	Not Reported
T:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Site id:	HI6000000001388

**39**  
**South**  
**1/2 - 1 Mile**  
**Higher**

**HI WELLS      HI6000000001360**

Wid:	6-5328-023	Island:	6
Well no:	5328-23	Well name:	Kahiki St
Old name:	Not Reported	Yr drilled:	Not Reported
Driller:	Not Reported	Quad map:	05
Longitude2:	1562801	Latitude27:	205305
Longitude8:	1562751	Latitude83:	205253
Lat83d:	20	Lat83m:	52
Lat83s:	53	Lon83d:	156
Lon83m:	27	Lon83s:	51
Lat83dd:	20.88139		
Lon83dd:	-156.46417	Utm:	1
Long83dd:	-156.46417	Old number:	20-100
Lat83dd 1:	20.88139	Casing dia:	6
Gps:	0	Well depth:	120
Owner user:	Maui County	Perf case:	Not Reported
Well type:	Not Reported		
Ground el:	31	Init cl:	0
Solid case:	81	Test gpm:	Not Reported
Use:	Other	Test chlor:	Not Reported
Use year:	71	Temp unit:	Not Reported
Init water:	Not Reported	Draft mgy:	Not Reported
Init head:	Not Reported	Max chlor:	Not Reported
Init chlor:	Not Reported	Geology:	THO
Test date:	Not Reported	Draft yr:	Not Reported
Test ddown:	Not Reported	Maxchl:	Not Reported
Test temp:	Not Reported	Minchl:	Not Reported
Pump gpm:	Not Reported	Bot hole:	-89
Head feet:	Not Reported	Bot perf:	Not Reported
Min chlor:	Not Reported	Pump mgd:	Not Reported
Pump yr:	Not Reported	Aquifer:	60301
Head yr:	Not Reported	Old aqui:	Not Reported
Maxchl yr:	0	Latest hd:	Not Reported
Minchl yr:	0	Cur cl:	Not Reported
Bot solid:	-50	Wcr:	01/01/1926
Spec capac:	Not Reported	Surveyor:	Not Reported
Draft mgd:	Not Reported		
Tmk:	Not Reported		
Aqui code:	60301		
Cur head:	Not Reported		
Cur temp:	Not Reported		
Pir:	Not Reported		

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

T:  
Pump depth:

Not Reported  
Not Reported

Pump elev:  
Site id:

Not Reported  
HI600000001360

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

### AREA RADON INFORMATION

Federal EPA Radon Zone for MAUI 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: 96732

Number of sites tested: 17

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.271 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.200 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.

#### Scanned Digital USGS 7.5' Topographic Map (DRG)

Source: United States Geologic Survey

A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

### HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

### HYDROGEOLOGIC INFORMATION

#### AQUIFLOW<sup>R</sup> 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 Services

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 Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, 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

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STREET AND ADDRESS INFORMATION

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**A&B Parcel B**  
180 Hobron Ave.  
Kahului, HI 96732

Inquiry Number: 3218291.9  
December 05, 2011

# EDR Building Permit Report

Target Property and Adjoining Properties

## TABLE OF CONTENTS

### SECTION

About This Report

Executive Summary

Findings

Glossary

***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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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 1527-05), 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 1527-05 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.



## EXECUTIVE SUMMARY: SEARCH DOCUMENTATION

A search of building department records was conducted by Environmental Data Resources, Inc (EDR) on behalf of Kevin S. Kennedy Consulting, LLC on Dec 05, 2011.

### TARGET PROPERTY

180 Hobron Ave.  
Kahului, HI 96732

### SEARCH METHODS

EDR searches available lists for both the Target Property and Surrounding Properties.

### RESEARCH SUMMARY

Building permits identified: **NO PERMITS IDENTIFIED**

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

### BUILDING DEPARTMENT RECORDS SEARCHED

Name: Maui County  
Years: 1978-2008  
Source: Maui County, Planning Department, Wailuku, HI  
Phone: (808) 270-7735

## TARGET PROPERTY FINDINGS

### TARGET PROPERTY DETAIL

180 Hobron Ave.  
Kahului, HI 96732

No Permits Found

## ADJOINING PROPERTY FINDINGS

### ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

No Permits Found

## GLOSSARY

### General Building Department concepts

- **ICC:** The International Code Council. The governing body for the building/development codes used by all jurisdictions who've adopted the ICC guidelines. MOST of the US has done this. Canada, Mexico, and other countries use ICC codes books and guides as well. There are a few states who have added guidelines to the ICC codes to better fit their needs. For example, California has added seismic retrofit requirements for most commercial structures.
- **Building Department (Permitting Authority, Building Codes, Inspections Department, Building and Inspections):** This is the department in a jurisdiction where an owner or contractor goes to obtain permits and inspections for building, tearing down, remodeling, adding to, re-roofing, moving or otherwise making changes to any structure, Residential or Commercial.
- **Jurisdiction:** This is the geographic area representing the properties over which a Permitting Authority has responsibility.
- **GC:** General Contractor. Usually the primary contractor hired for any Residential or Commercial construction work.
- **Sub:** Subordinate contracting companies or subcontractors. Usually a "trades" contractor working for the GC. These contractors generally have an area of expertise in which they are licensed like Plumbing, Electrical, Heating and Air systems, Gas Systems, Pools etc. (called "trades").
- **Journeyman:** Sub contractors who have their own personal licenses in one or more trades and work for different contracting companies, wherever they are needed or there is work.
- **HVAC (Mechanical, Heating & Air companies):** HVAC = Heating, Ventilation, and Air Conditioning.
- **ELEC (Electrical, TempPole, TPole, TPower, Temporary Power, Panel, AMP Change, Power Release):** Electrical permits can be pulled for many reasons. The most common reason is to increase the AMPs of power in an electrical power panel. This requires a permit in almost every jurisdiction. Other common reason for Electrical permits is to insert a temporary power pole at a new construction site. Construction requires electricity, and in a new development, power has yet to be run to the lot. The temporary power pole is usually the very first permit pulled for new development. The power is released to the home owner when construction is complete and this sometimes takes the form of a Power Release permit or inspection.
- **"Pull" a permit:** To obtain and pay for a building permit.
- **CBO:** Chief Building Official
- **Planning Department:** The department in the development process where the building /structural plans are reviewed for their completeness and compliance with building codes
- **Zoning Department:** The department in the development process where the site plans are reviewed for their compliance with the regulations associated with the zoning district in which they are situated.
- **Zoning District:** A pre-determined geographic boundary within a jurisdiction where certain types of structures are permitted / prohibited. Examples are Residential structure, Commercial/Retail structures, Industrial/Manufacturing structures etc. Each zoning district has regulations associated with it like the sizes of the lots, the density of the structures on the lots, the number of parking spaces required for certain types of structures on the lots etc.
- **PIN (TMS, GIS ID, Parcel#):** Property Identification Number and Tax Map System number.
- **State Card (Business license):** A license card issued to a contractor to conduct business.
- **Building Inspector (Inspector):** The inspector is a building department employee that inspects building construction for compliance to codes.
- **C.O.:** Certificate of Occupancy. This is the end of the construction process and designates that the owners now have permission to occupy a structure after its building is complete. Sometimes also referred to as a Certificate of Compliance.

## GLOSSARY

### Permit Content Definitions

- **Permit Number:** The alphanumeric designation assigned to a permit for tracking within the building department system. Sometimes the permit number gives clues to its role, e.g. a "PL" prefix may designate a plumbing permit.
- **Description:** A field on the permit form that allows the building department to give a brief description of the work being done. More often than not, this is the most important field for EP's to find clues to the prior use(s) of the property.
- **Permit Type:** Generally a brief designation of the type of job being done. For example BLDG-RES, BLDG-COM, ELEC, MECH etc.

### Sample Building Permit Data

Date: Nov 09, 2000  
Permit Type: Bldg -  
New Permit Number: 101000000405  
Status: Valuation: \$1,000,000.00  
Contractor Company: OWNER-BUILDER  
Contractor Name:

Description: New one store retail (SAV-ON) with drive-thru pharmacy. Certificate of Occupancy.



**A&B Parcel B**

180 Hobron Ave.

Kahului, HI 96732

Inquiry Number: 3218291.5

December 06, 2011



## The EDR Aerial Photo Decade Package

## EDR Aerial Photo Decade Package

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.

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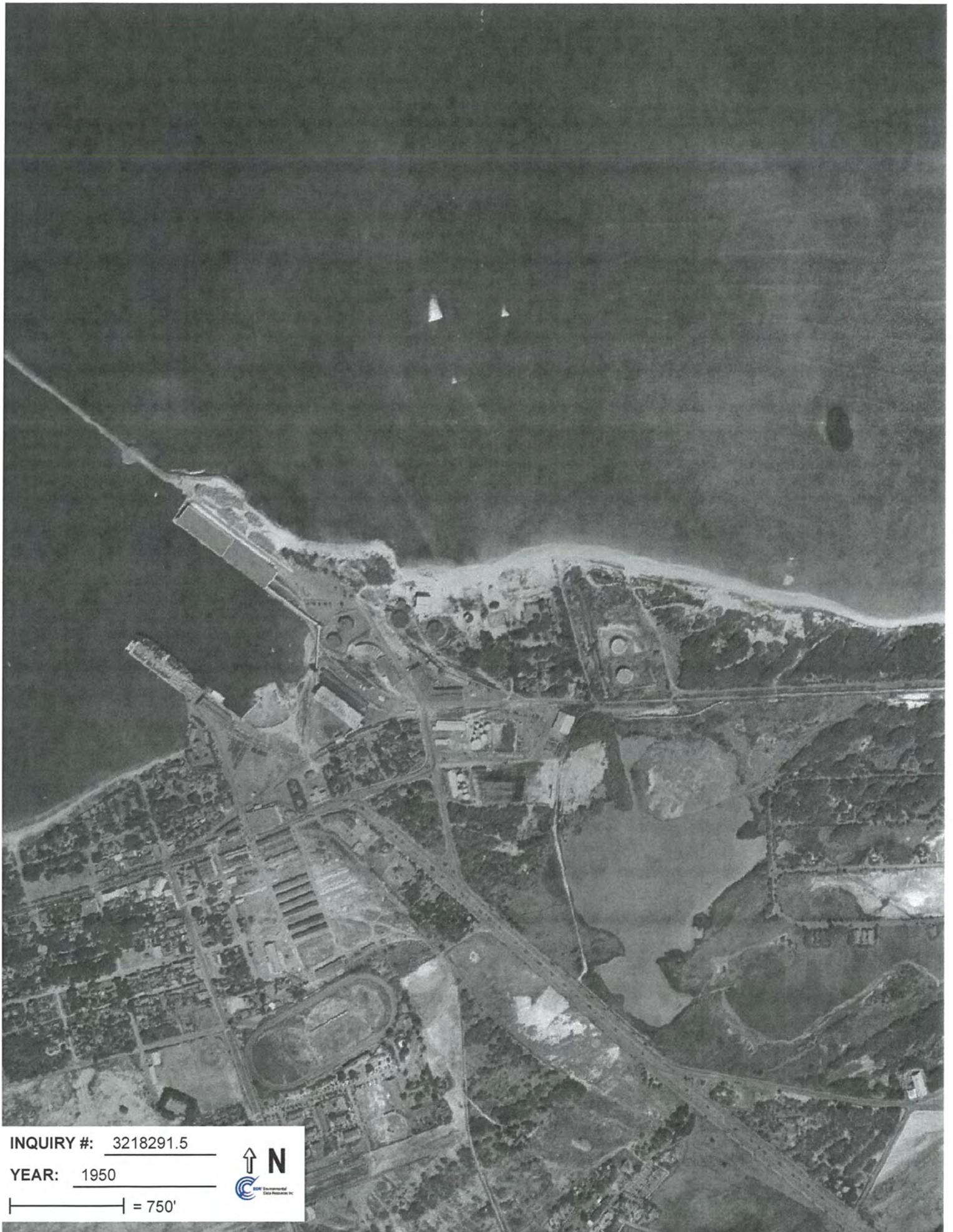
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INQUIRY #: 3218291.5

YEAR: 1950

| = 750'



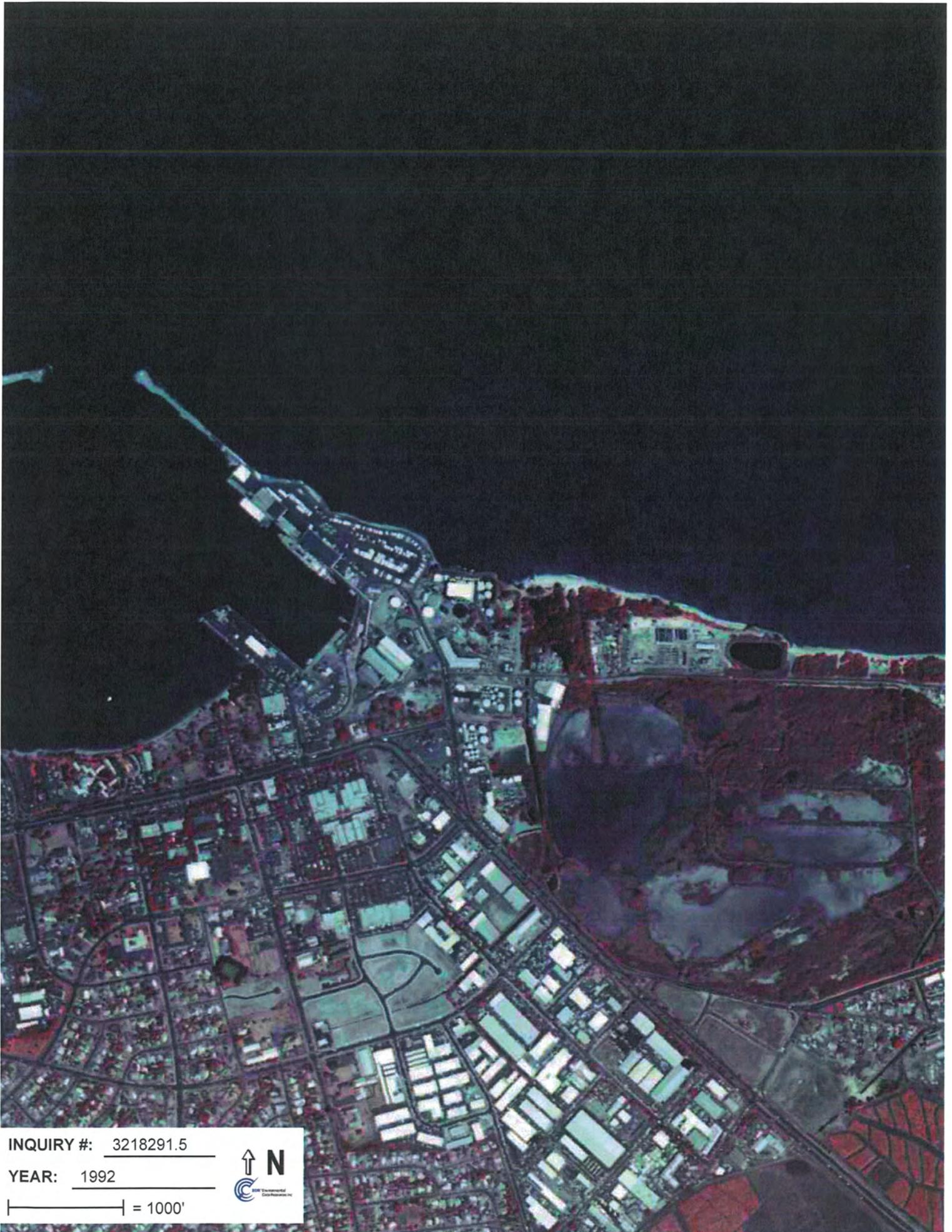


INQUIRY #: 3218291.5

YEAR: 1975

 = 1000'





INQUIRY #: 3218291.5

YEAR: 1992

| = 1000'





**A&B Parcel B**

180 Hobron Ave.

Kahului, HI 96732

Inquiry Number: 3218291.3

December 06, 2011



**Certified Sanborn® Map Report**

## Certified Sanborn® Map Report

12/06/11

**Site Name:**

A&B Parcel B  
180 Hobron Ave.  
Kahului, HI 96732

**Client Name:**

Kevin S. Kennedy Consulting,  
25 Kaneole Bay Drive  
Kailua, HI 96734



EDR Inquiry # 3218291.3

Contact: Kevin Kennedy

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Kevin S. Kennedy Consulting, LLC were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting [www.edrnet.com/sanborn](http://www.edrnet.com/sanborn) and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

### Certified Sanborn Results:

**Site Name:** A&B Parcel B  
**Address:** 180 Hobron Ave.  
**City, State, Zip:** Kahului, HI 96732  
**Cross Street:**  
**P.O. #** NA  
**Project:** KSK-2008-029  
**Certification #** A3AF-4412-A56E



Sanborn® Library search results  
Certification # A3AF-4412-A56E

**Maps Provided:**

1990  
1980  
1975  
1945  
1927  
1914

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, 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 Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



### 1990 Source Sheets



Volume 1, Sheet 4

### 1980 Source Sheets



Volume 1, Sheet 4

### 1975 Source Sheets



Volume 1, Sheet 4

### 1945 Source Sheets



Volume 1, Sheet 4

**1927 Source Sheets**



Volume 1, Sheet 4

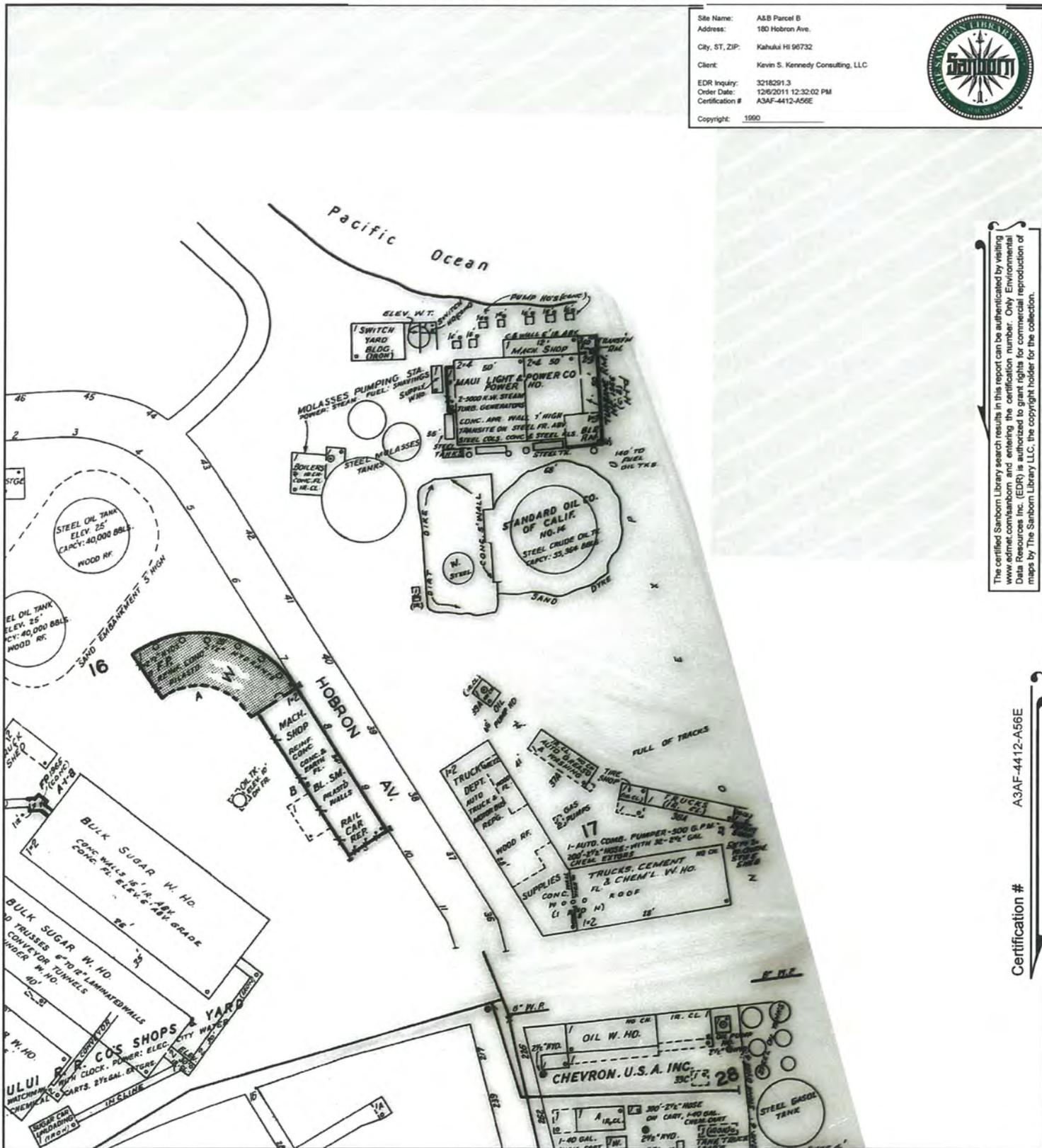
**1914 Source Sheets**



Volume 1, Sheet 3

# 1990 Certified Sanborn Map

Site Name: A&B Parcel B  
 Address: 180 Hobron Ave.  
 City, ST, ZIP: Kahului HI 96732  
 Client: Kevin S. Kennedy Consulting, LLC  
 EDR Inquiry: 3218291.3  
 Order Date: 12/6/2011 12:32:02 PM  
 Certification #: A3AF-4412-A56E  
 Copyright: 1990

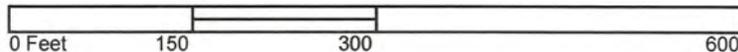


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Certification # A3AF-4412-A56E

Certification #

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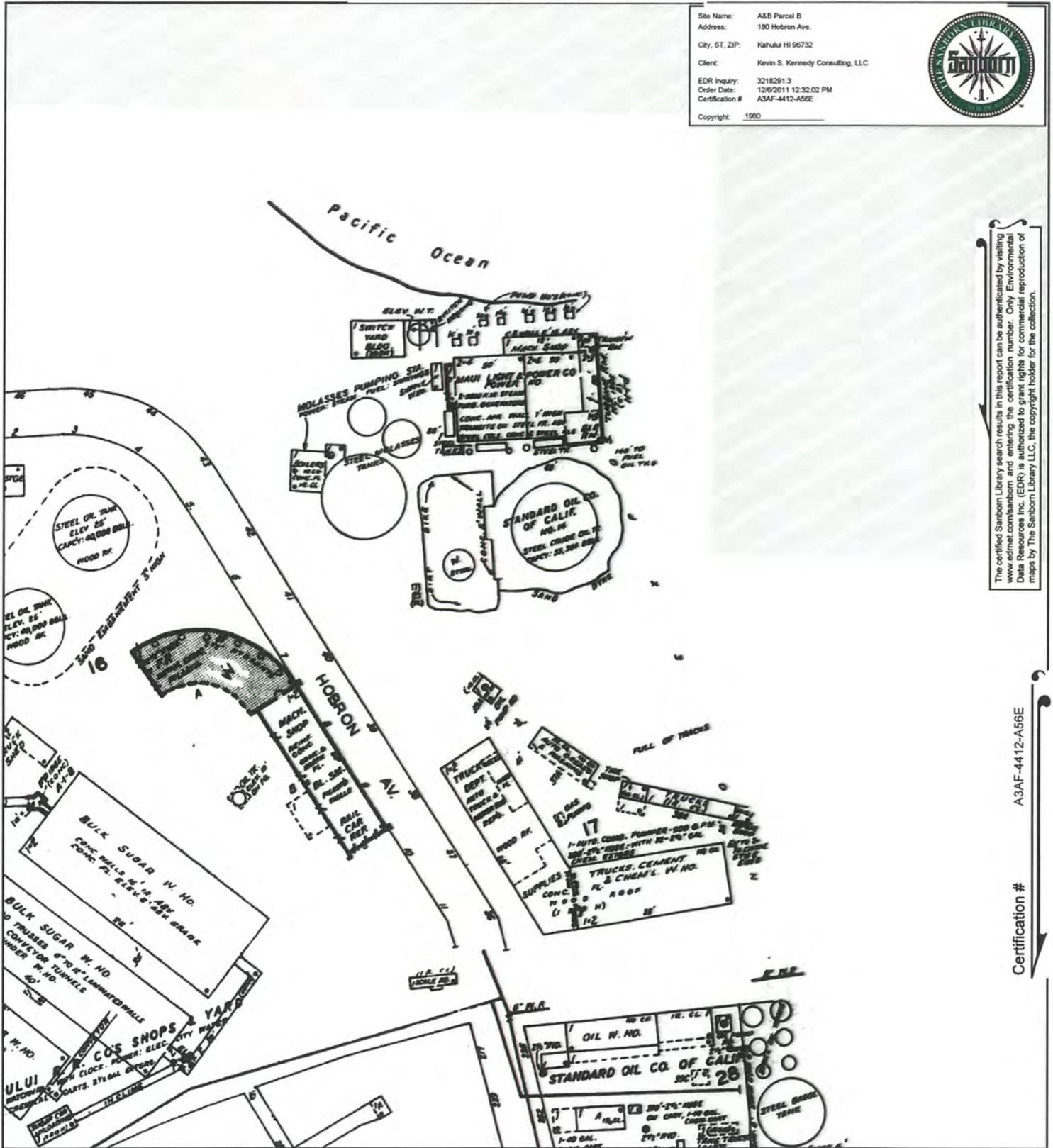


Volume 1, Sheet 4



# 1980 Certified Sanborn Map

Site Name: A&B Parcel B  
 Address: 180 Hobron Ave.  
 City, ST, ZIP: Kahului HI 96732  
 Client: Kevin S. Kennedy Consulting, LLC  
 EDR Inquiry: 3218291.3  
 Order Date: 12/6/2011 12:32:02 PM  
 Certification #: A3AF-4412-A56E  
 Copyright: 1980

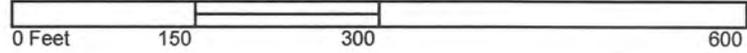


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Volume 1, Sheet 4



# 1975 Certified Sanborn Map

Site Name: A&B Parcel B  
 Address: 180 Hobron Ave.  
 City, ST, ZIP: Kahului HI 96732  
 Client: Kevin S. Kennedy Consulting, LLC  
 EDR Inquiry: 3218291.3  
 Order Date: 12/6/2011 12:32:02 PM  
 Certification #: A3AF-4412-A56E  
 Copyright: 1975

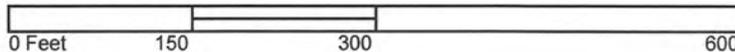


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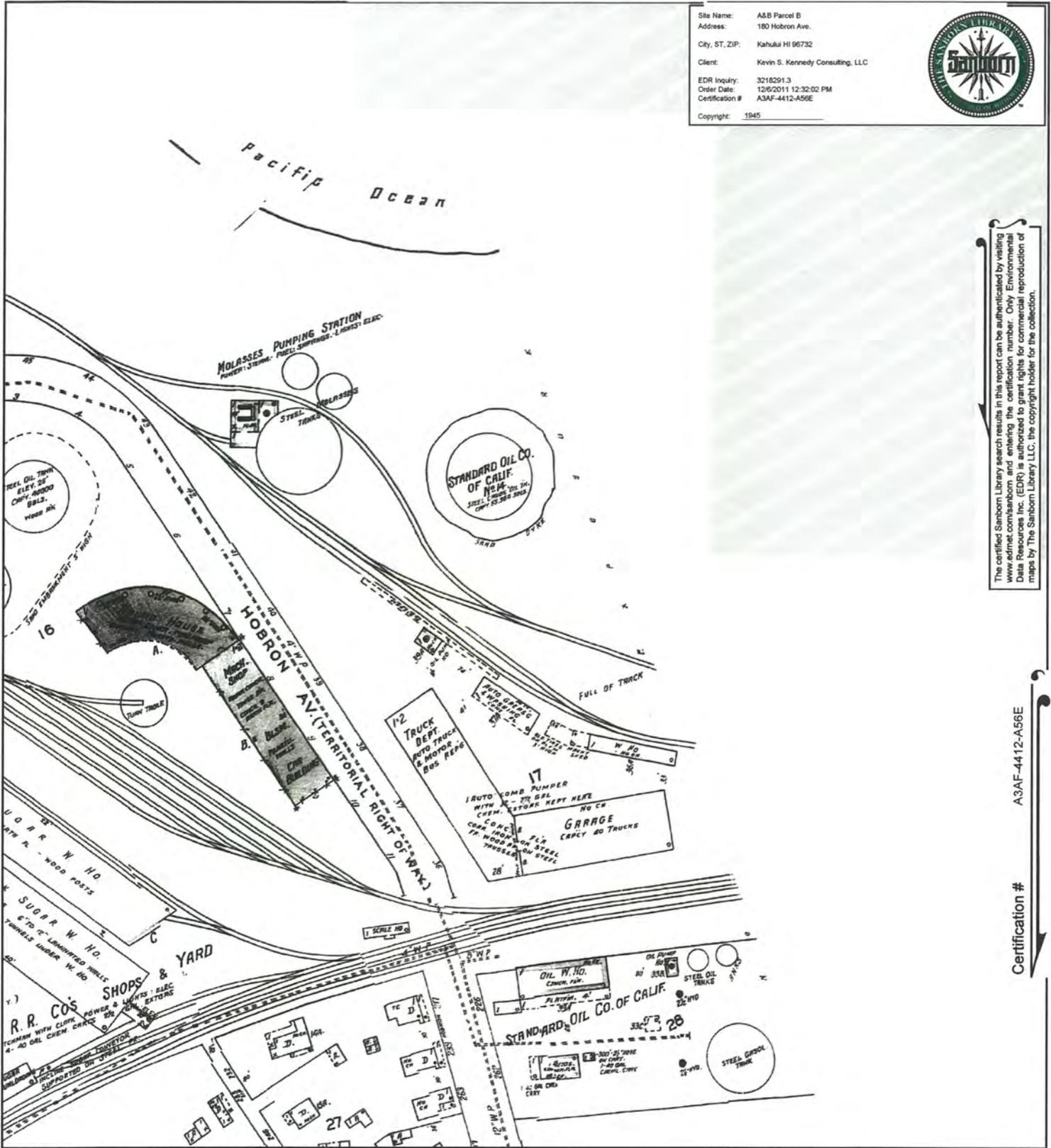


Volume 1, Sheet 4



# 1945 Certified Sanborn Map

Site Name: A&B Parcel B  
 Address: 180 Hobron Ave.  
 City, ST, ZIP: Kahului HI 96732  
 Client: Kevin S. Kennedy Consulting, LLC  
 EDR Inquiry: 3218291.3  
 Order Date: 12/6/2011 12:32:02 PM  
 Certification #: A3AF-4412-A56E  
 Copyright: 1945

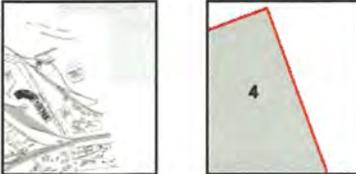


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Certification #

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Volume 1, Sheet 4

# 1927 Certified Sanborn Map

Site Name: A&B Parcel B  
 Address: 180 Hobron Ave.  
 City, ST, ZIP: Kahuku HI 96732  
 Client: Kevin S. Kennedy Consulting, LLC  
 EDR Inquiry: 3218291.3  
 Order Date: 12/6/2011 12:32:02 PM  
 Certification #: A3AF-4412-A56E  
 Copyright: 1927

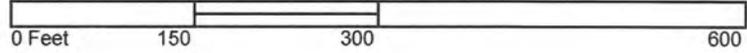


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A3AF-4412-A56E

Certification #

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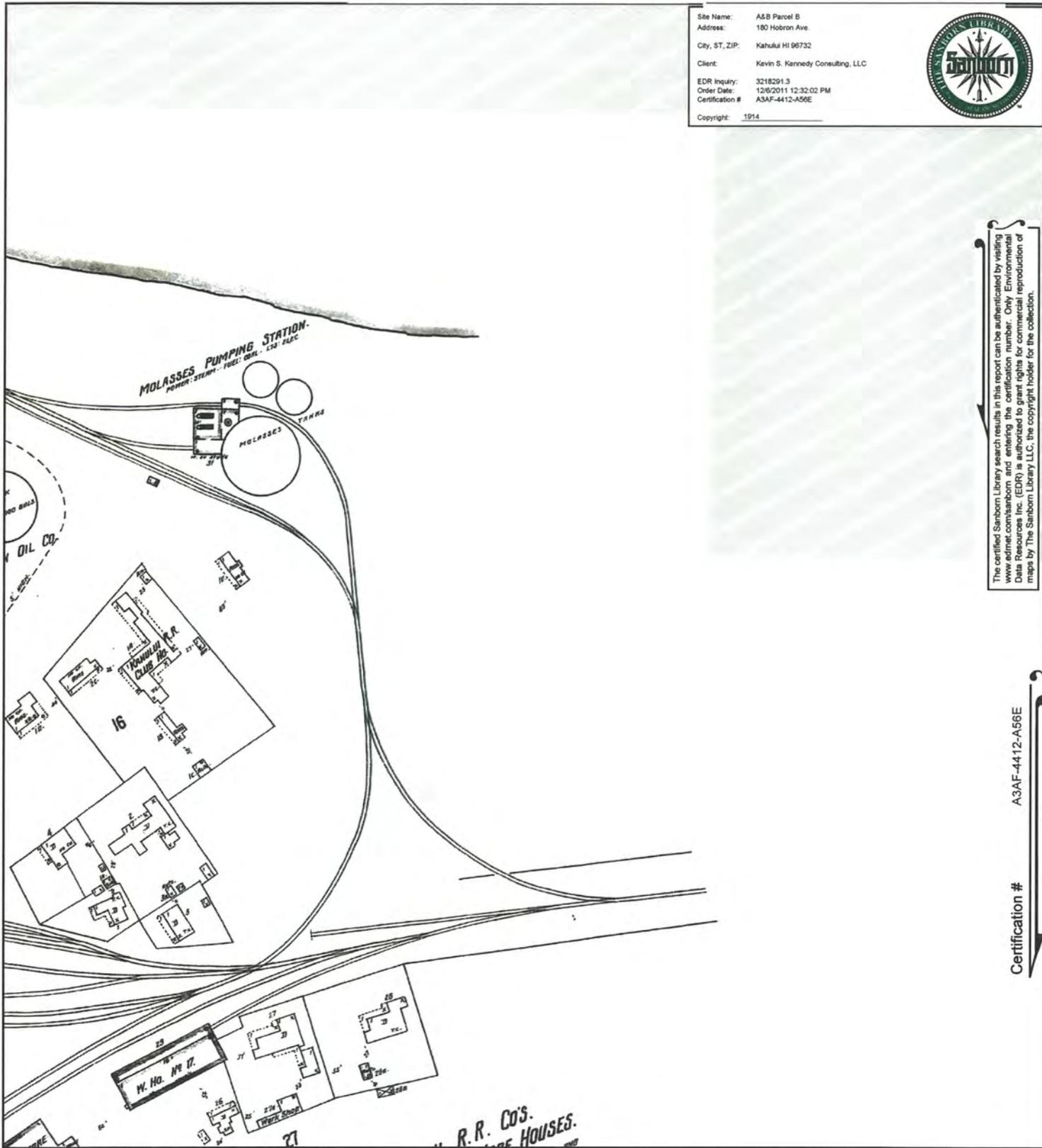


Volume 1, Sheet 4



# 1914 Certified Sanborn Map

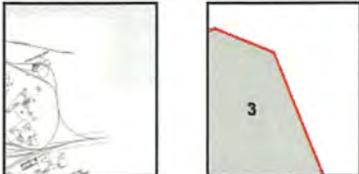
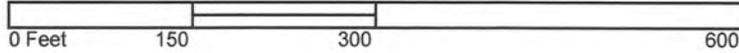
Site Name: A&B Parcel B  
 Address: 180 Hobron Ave.  
 City, ST, ZIP: Kahului HI 96732  
 Client: Kevin S. Kennedy Consulting, LLC  
 EDR Inquiry: 3218291.3  
 Order Date: 12/6/2011 12:32:02 PM  
 Certification #: A3AF-4412-A56E  
 Copyright: 1914



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Volume 1, Sheet 3





**A&B Parcel B**

180 Hobron Ave.

Kahului, HI 96732

Inquiry Number: 3218291.4

December 05, 2011

## EDR Historical Topographic Map Report

# EDR Historical Topographic Map Report

Environmental Data Resources, Inc.'s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

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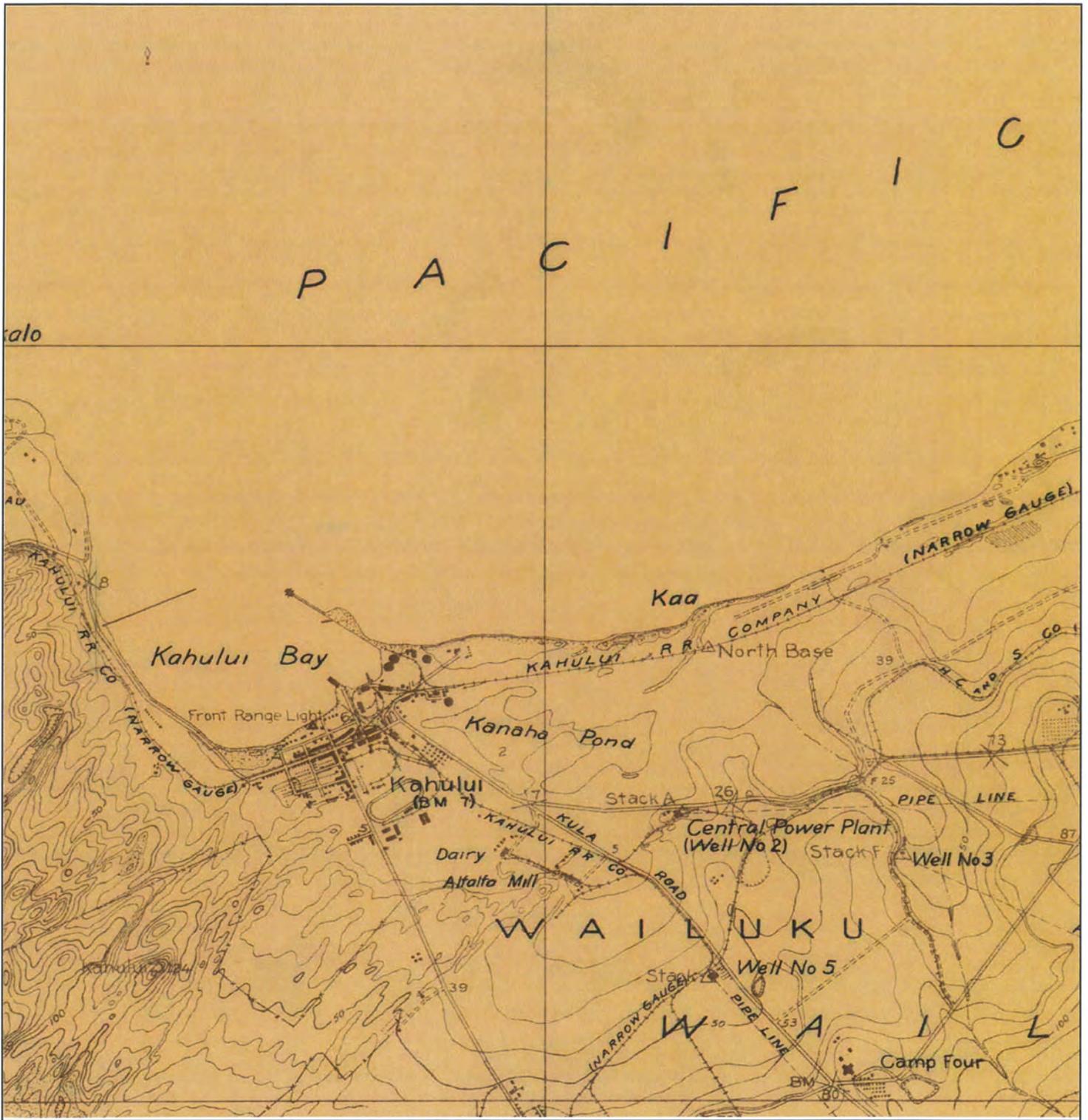
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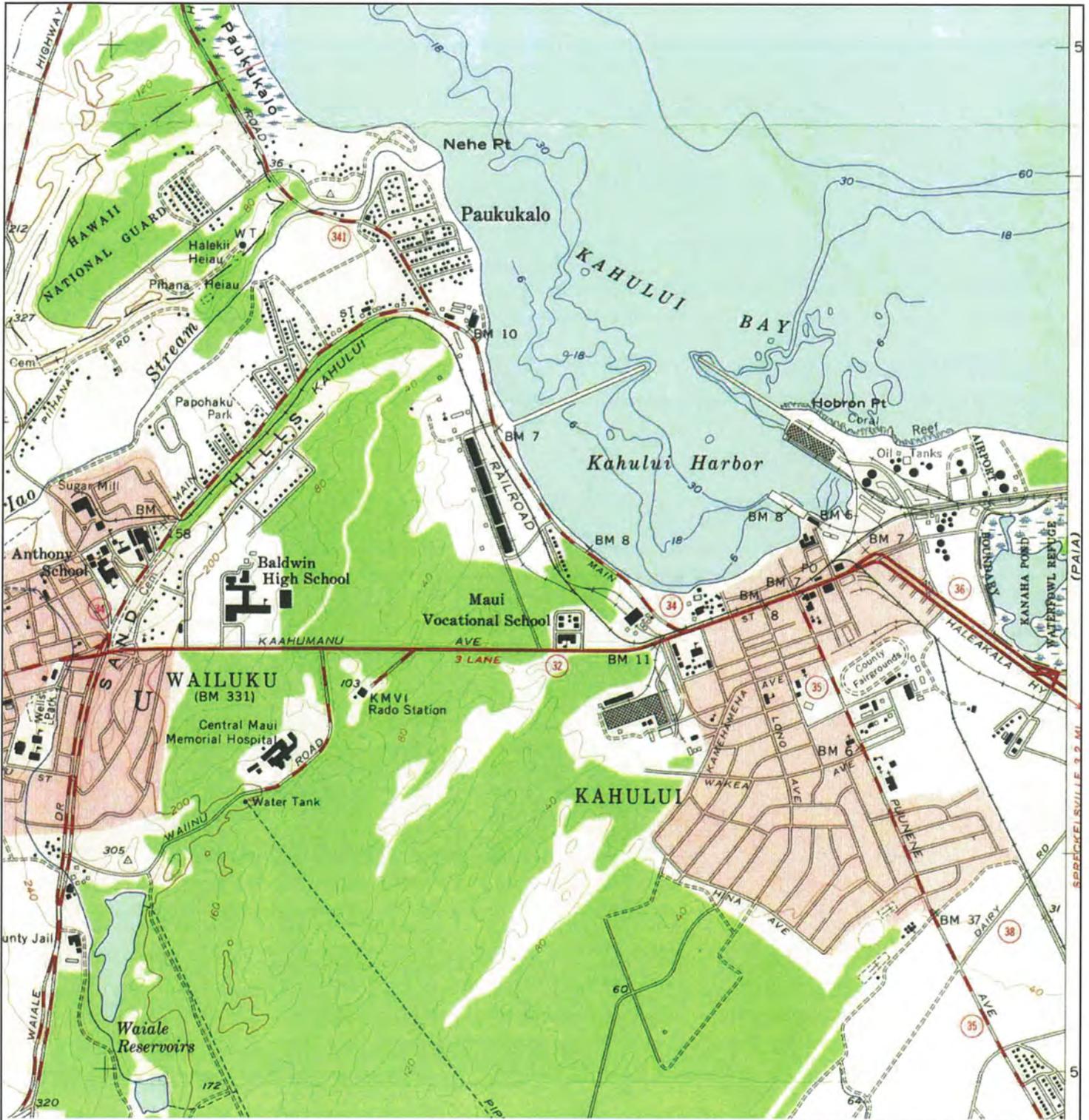
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# Historical Topographic Map



<p>N</p>	TARGET QUAD	SITE NAME: A&B Parcel B	CLIENT: Kevin S. Kennedy Consulting, LLC
	NAME: PAIA	ADDRESS: 180 Hobron Ave.	CONTACT: Kevin Kennedy
	MAP YEAR: 1922	Kahului, HI 96732	INQUIRY#: 3218291.4
	SERIES: 7.5	LAT/LONG: 20.8956 / -156.4621	RESEARCH DATE: 12/05/2011
	SCALE: 1:31680		

# Historical Topographic Map



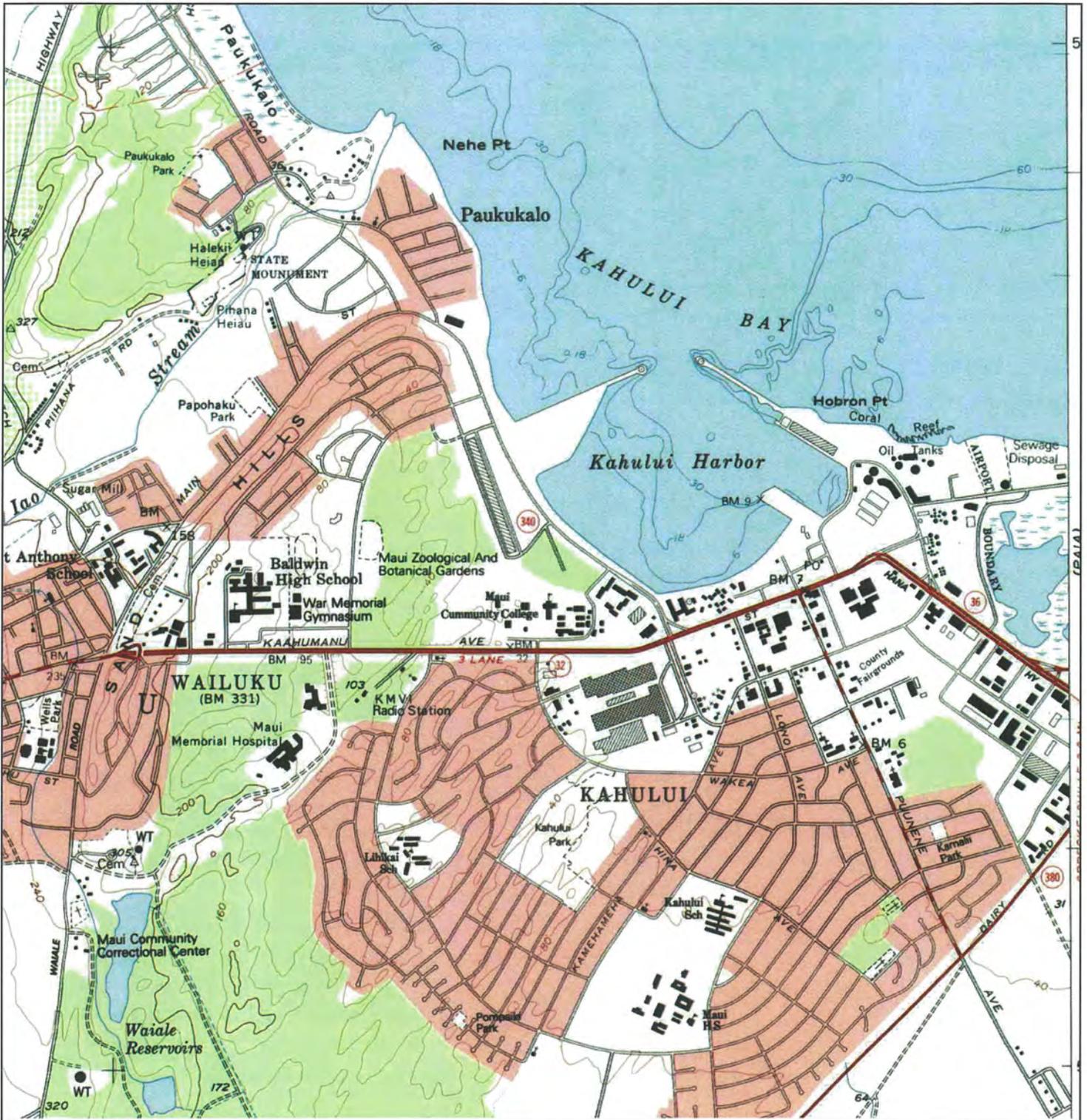
<p>N ↑</p>	TARGET QUAD	SITE NAME:	A&B Parcel B	CLIENT:	Kevin S. Kennedy Consulting, LLC
	NAME: WAILUKU	ADDRESS:	180 Hobron Ave.	CONTACT:	Kevin Kennedy
	MAP YEAR: 1955	LAT/LONG:	Kahului, HI 96732	INQUIRY#:	3218291.4
	SERIES: 7.5		20.8956 / -156.4621	RESEARCH DATE:	12/05/2011
	SCALE: 1:24000				

# Historical Topographic Map



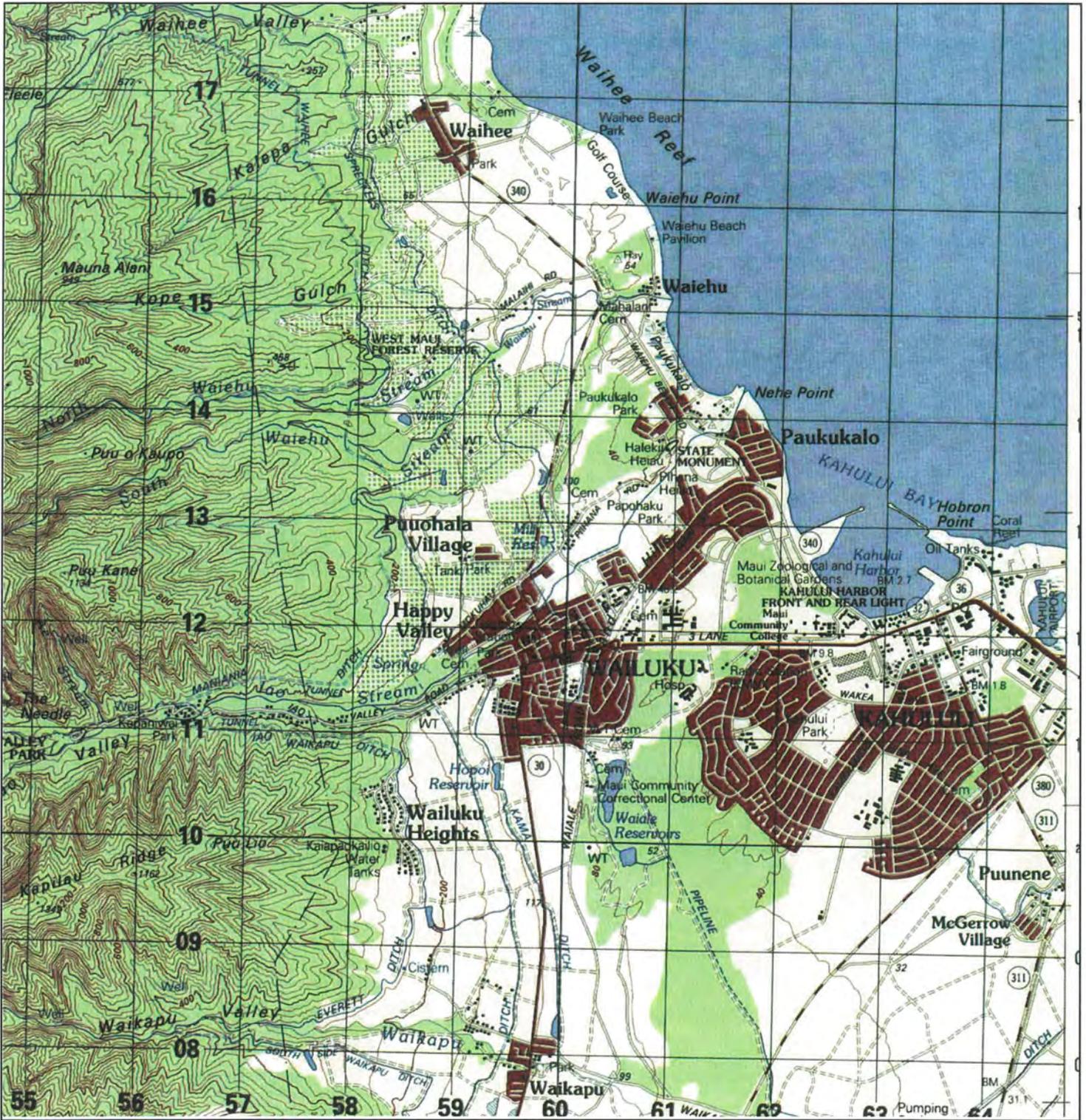
<p>N ↑</p>	TARGET QUAD	SITE NAME: A&B Parcel B	CLIENT: Kevin S. Kennedy Consulting, LLC
	NAME: MAUI	ADDRESS: 180 Hobron Ave.	CONTACT: Kevin Kennedy
	MAP YEAR: 1961	Kahului, HI 96732	INQUIRY#: 3218291.4
	REVISED: 1957	LAT/LONG: 20.8956 / -156.4621	RESEARCH DATE: 12/05/2011
	SERIES: 15		
	SCALE: 1:62500		

# Historical Topographic Map



<p>N ↑</p>	TARGET QUAD	SITE NAME:	A&B Parcel B	CLIENT:	Kevin S. Kennedy Consulting, LLC
	NAME: WAILUKU	ADDRESS:	180 Hobron Ave.	CONTACT:	Kevin Kennedy
	MAP YEAR: 1983	LAT/LONG:	Kahului, HI 96732	INQUIRY#:	3218291.4
	SERIES: 7.5			RESEARCH DATE:	12/05/2011
	SCALE: 1:24000				

# Historical Topographic Map



<p>N ↑</p>	TARGET QUAD	SITE NAME:	A&B Parcel B	CLIENT:	Kevin S. Kennedy Consulting, LLC	
	NAME:	WAILUKU	ADDRESS:	180 Hobron Ave.	CONTACT:	Kevin Kennedy
	MAP YEAR:	1983	LAT/LONG:	20.8956 / -156.4621	INQUIRY#:	3218291.4
	SERIES:	15			RESEARCH DATE:	12/05/2011
	SCALE:	1:50000				

# Historical Topographic Map



<p>N ↑</p>	TARGET QUAD	SITE NAME:	A&B Parcel B	CLIENT:	Kevin S. Kennedy Consulting, LLC
	NAME: WAILUKU	ADDRESS:	180 Hobron Ave.	CONTACT:	Kevin Kennedy
	MAP YEAR: 1997	LAT/LONG:	20.8956 / -156.4621	INQUIRY#:	3218291.4
	SERIES: 7.5			RESEARCH DATE:	12/05/2011
	SCALE: 1:24000				

# Historical Topographic Map



<p>N</p>	ADJOINING QUAD	SITE NAME:	CLIENT:
	NAME: PAIA	A&B Parcel B	Kevin S. Kennedy Consulting, LLC
	MAP YEAR: 1954	ADDRESS: 180 Hobron Ave. Kahului, HI 96732	CONTACT: Kevin Kennedy
	SERIES: 7.5	LAT/LONG: 20.8956 / -156.4621	INQUIRY#: 3218291.4
SCALE: 1:24000		RESEARCH DATE: 12/05/2011	

# Historical Topographic Map



<p>N ↑</p>	ADJOINING QUAD	SITE NAME:	CLIENT:
	NAME: PAIA	A&B Parcel B	Kevin S. Kennedy Consulting, LLC
	MAP YEAR: 1983	ADDRESS: 180 Hobron Ave. Kahului, HI 96732	CONTACT: Kevin Kennedy
	SERIES: 7.5	LAT/LONG: 20.8956 / -156.4621	INQUIRY#: 3218291.4
SCALE: 1:24000		RESEARCH DATE: 12/05/2011	

# Historical Topographic Map



<p>N ↑</p>	ADJOINING QUAD	SITE NAME:	CLIENT:
	NAME: PAIA	A&B Parcel B	Kevin S. Kennedy Consulting, LLC
	MAP YEAR: 1997	ADDRESS: 180 Hobron Ave. Kahului, HI 96732	CONTACT: Kevin Kennedy
SERIES: 7.5	LAT/LONG: 20.8956 / -156.4621	INQUIRY#: 3218291.4	RESEARCH DATE: 12/05/2011
SCALE: 1:24000			

**A&B Parcel B**  
180 Hobron Ave.  
Kahului, HI 96732

Inquiry Number: 3218291.6  
December 09, 2011

## The EDR-City Directory Abstract

## TABLE OF CONTENTS

### SECTION

Executive Summary

Findings

*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 Abstract 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 Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

### RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>IP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2011	Polk's City Directory	-	X	X	-
2006	Polk's City Directory	-	X	X	-
2002	Polk's City Directory	-	X	X	-
1995	Polk's City Directory	-	X	X	-

## FINDINGS

### TARGET PROPERTY INFORMATION

#### ADDRESS

180 Hobron Ave.  
Kahului, HI 96732

#### FINDINGS DETAIL

Target Property research detail.

No Addresses Found

## FINDINGS

### ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

#### Hobron Ave.

##### Hobron Ave.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	No address listings beyond 200 Hobron Ave	Polk's City Directory
2006	No address listings beyond 140 Hobron Ave	Polk's City Directory
2002	No address listings beyond 140 Hobron Ave	Polk's City Directory
1995	No address listings beyond 140 Hobron Ave	Polk's City Directory

##### 100 Hobron Ave.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2006	Chevron USA Inc (petroleum)	Polk's City Directory
2002	Chevron USA Inc (petroleum)	Polk's City Directory
1995	Chevron USA Inc (petroleum)	Polk's City Directory

##### 140 Hobron Ave.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	Office Plaza (8 occupants)	Polk's City Directory
2006	Auto Plaza (11 occupants)	Polk's City Directory
2002	Auto Plaza (11 occupants)	Polk's City Directory
1995	Auto Plaza (7 occupants)	Polk's City Directory

##### 200 Hobron Ave.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	Maui Electric Co Ltd	Polk's City Directory

##### 69 Hobron Ave.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	Merced Benz of Maui	Polk's City Directory

##### 74 Hobron Ave.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2011	VIP Food Service	Polk's City Directory
2006	VIP Food Service	Polk's City Directory

## FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2002	VIP Food Service	Polk's City Directory

76 Hobron Ave.

<u>Year</u>	<u>Uses</u>	<u>Source</u>
1995	Mau PEtroleum Inc	Polk's City Directory

## FINDINGS

### TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

#### Address Researched

180 Hobron Ave.

#### Address Not Identified in Research Source

2011, 2006, 2002, 1995

### ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

#### Address Researched

Hobron Ave.

100 Hobron Ave.

140 Hobron Ave.

200 Hobron Ave.

69 Hobron Ave.

74 Hobron Ave.

76 Hobron Ave.

#### Address Not Identified in Research Source

No Years Found

No Years Found

No Years Found

2006, 2002, 1995

2006, 2002, 1995

1995

No Years Found

**APPENDIX C**

**Environmental Questionnaires**

**Kevin S. Kennedy Consulting, LLC**

## QUESTIONNAIRE

### ENVIRONMENTAL SITE ASSESSMENT

Facility/Property: Parcel B Date 1/5/2012

Address: 170 Hobron Ave., Kahului, HI Proj. No. KSK-2008-029

Owner: A&B Propeties, Inc.

Person Interviewed: Sean O'Keefe (by telephone 1/5/2012)

Interviewee Title/Contact Info: 877-2959

Years familiar with the site and in what capacity: 18 years with A&B, currently Director of Environmental Affairs for A&B

#### QUESTIONS

**1. Are there any documents, such as the following, about the property available, and if so, are copies available? Relevant Documents:**

- Environmental Assessment or Compliance/Audit Reports
- Environmental Permits (e.g. hazardous waste, NPDES, UIC)
- Registration of Underground Storage Tanks
- Safety Plans, Spill Prevention plans
- Geotechnical studies
- Hydrogeologic studies
- Risk assessments
- Notices or correspondence from any regulatory agency relating to past environmental laws, liens etc.
- Other

Yes. Documents provided to KSK [see Sec 2.4 for document discussion]

**2. General Site Info. Age of facility/property, purpose, nature of operations, occupancy, tenants?**

Mr. O'Keefe was not sure of the exact age of the facilities at the parcel but suspected that the KTS building was built after 1941. He was not aware of the age of the molasses tanks

3. Are there any city, county, state or federal environmental permits for the property or for any operation on the property?

No

4. What is the sewer system for the property (municipal sewer, cesspool, septic)?

Septic tank at the KTS Truck Repair & Maintenance Shop, Cess pool at the Molasses Pump House.

5. What is the water source for the property (well, municipal supply, catchment)?

Water on site, municipal county water

6. Is waste water or storm water discharged from the property? Any discharge (storm water, waste water) permits for the property?

No

7. Are there any floor drains and/or sumps on the property? If so, what and where do they drain?

No

8. Are there any aboveground or underground storage tanks on the property? If so, what type, size and content?

There are no USTs at the Parcel. Four molasses tanks (two not in use), the Tosco Black Oil AST (just off-Parcel), the former oil/molasses tank at the Olekoi Area, two former ASTs (one no longer present, one partially demolished) associated with the former Hawaiian Bitumel asphalt plant (SE of Olekoi Area), fertilizer ASTs at BEI Hawaii fertilizer tank farm (SE corner of Parcel).

9. Are there any oil water separators or sumps on the property?

One oil water separator at the KTS Truck Wash, water drains to soil, oil recovered and drummed. No other O/W separators on the Parcel

10. Are there electrical transformers on the property? If so, have they been tested for PCB content?

No. There may be pole-mounted transformers but electricity probably brought to the Parcel from Parcel A (KTS Bulk Sugar Storage Site) across Hobron Avenue.

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**11. Is there or was there in the past any mechanical maintenance/repair/construction shop on the property? If so, what types of activities were conducted there?**

Truck Maintenance and Repair Shop does truck repair/maintenance. Maui Crane does truck repair at their portion of Parcel B. Not sure but DeCoite may also work on their equipment at their area of Parcel B.

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**12. Is there, or was there in the past, any gas station, auto repair shop, junk yard, photo lab, commercial printing operation, dry cleaner, landfill, waste disposal or receiving facility on the property? If so, when and what activities were conducted?**

No gas station currently, or historically on Parcel B. Olekoi Area was a junk yard until cleaned up by A&B. Formerly truck repair work at open KTS work area next to Truck Wash. See question 11 above.

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**13. Are there any hydraulic lifts on the property?**

No sub-grade hydraulic lifts on the Parcel. KTS uses electric hoists, no sub-grade hydraulics.

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**14. Are there any pipelines (petroleum, natural gas, oil, other) on or adjacent to the property?**

Chevron pipeline runs along Hobron Ave.(probably within easement); pipelines associated with Tosco Black Oil AST (off-Parcel) and associated loading rack (on-Parcel). One pipeline was pigged and cleaned but others still present there. Pipelines ran to Olekoi tank and are probably still present than run towards the harbor.

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**15. Are there any ponds, lagoons, wetlands, or pits on the property?**

No, but there is asphalt present in/on the soil in a depressed area in the former Hawaiian Bitumuls area (SE of Olekoi Area)

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**16. Is there any stockpiled soil/debris/waste on the property?**

Yes, one oil-impacted soil pile stockpiled by the molasses tanks and two drums (not a soil pile) of oil-impacted soil still on-Parcel in the Olekoi AST area.

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**17. Are any of the following materials used on the property, or were used in the past? If so, how were they stored, used, disposed of and in what quantities?**

- Solvents/cleaners
- Oils/petroleum products/lubricants
- Pesticides, herbicides or fertilizers
- Asbestos
- Heavy metals (lead, chromium, cadmium, mercury, arsenic, silver)
- Ignitable or reactive materials
- Radioactive materials
- PCBs

Paints, solvents, used oil and lubricants are stored within the KTS Truck Repair & Maintenance Shop. Oil and fuel formerly stored at the Olekoi Area, tar/asphalt at the former Hawaiian Bitumuls asphalt plant. Fertilizers at the BEI Hawaii tank farm, resins at the canoe shop in the molasses pump house

**18. Are you aware of any leaks or spills of any of the above materials?**

Yes – asphalt tar release at former Hawaiian Bitumuls area; two spills at Tosco Black Oil tank loading rack (near molasses tanks); releases at Tosco Black Oil tank/pipeline (off-Parcel)

**19. Are there any Material Safety Data Sheets (MSDSs) for any hazardous materials used or stored on site?**

Yes at KTS Truck Maintenance and Repair Shop.

**20. Is there a Spill Prevention Countermeasures and Control (SPCC) plan for the property?**

Not required but had one in the past and we may update that.

**21. Is there any runoff from adjacent properties onto the property?**

No

**22. Are you aware of any areas of contamination or waste disposal on or adjacent to the property?**

Releases at the Chevron tank farm south of Parcel B, across Amala Place, black oil-impacted soil encountered during installation of Tesoro loading rack (NE of Parcel B) over ten years ago.

Old injection well at the KTS Sugar Storage facility across Hobron Avenue to the west of Parcel B that received sugar warehouse wash water and has a methane issue.

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**23. Are you aware of any current or past environmental violations or lawsuits related to the property or any environmental removal or remediation activities?**

No

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**24. Has there been any other environmental investigations, assessments, clean ups or removal actions conducted at the property? If so are reports available for review?**

Not other than those discussed above and the documents provided.

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**25. Any other comments?**

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## QUESTIONNAIRE

### ENVIRONMENTAL SITE ASSESSMENT

Facility/Property BEI Tank Farm Date 12/14/2011

Address: SE corner of Parcel B Proj. No. KSK-2008-029

Owner: BEI Hawaii

Person Interviewed: Shirley Zhai

Interviewee Title/Contact Info Regulatory Compliance officer

Years familiar with the site and in what capacity. 10 years

(Shirley Zhai's response apply to the BEI Tank Farm area of Parcel B only)

#### QUESTIONS

**1. Are there any documents, such as the following, about the property available, and if so, are copies available? Relevant Documents:**

- Environmental Assessment or Compliance/Audit Reports
- Environmental Permits (e.g. hazardous waste, NPDES, UIC)
- Registration of Underground Storage Tanks
- Safety Plans, Spill Prevention plans
- Geotechnical studies
- Hydrogeologic studies
- Risk assessments
- Notices or correspondence from any regulatory agency relating to past environmental laws, liens etc.
- Other

No permits, but annual report filed with HDOH on what we store – EPCRA

**2. General Site Info. Age of facility/property, purpose, nature of operations, occupancy, tenants?**

Bulk fertilizer storage above ground storage tanks, (steel) built in 1982

3. Are there any city, county, state or federal environmental permits for the property or for any operation on the property?

no

4. What is the sewer system for the property (municipal sewer, cesspool, septic)?

Not at tank farm

5. What is the water source for the property (well, municipal supply, catchment)?

Yes, municipal

6. Is waste water or storm water discharged from the property? Any discharge (storm water, waste water) permits for the property?

All storm water runoff contained by berm, so no run off or discharge

7. Are there any floor drains and/or sumps on the property? If so, what and where do they drain?

No, but possible drain valve on berm to drain rain water

8. Are there any aboveground or underground storage tanks on the property? If so, what type, size and content?

Yes, 3 x 15,000-gallons, 1 x 17,000-gallon and 3 x 110,000-gallon ASTs (but only two ASTs in use, one 15,000-gallon (but only 10,000 gallons with 10-34-0, an ammonium phosphate fertilizer). Only one of the 110,000-gallon ASTs is in use and stores 25,000 gallons of UAN 32, an ammonium nitrate and urea fertilizer.

9. Are there any oil water separators or sumps on the property?

No

**10. Are there electrical transformers on the property? If so, have they been tested for PCB content?**

No

**11. Is there or was there in the past any mechanical maintenance/repair/construction shop on the property? If so, what types of activities were conducted there?**

Not to my knowledge

**12. Is there, or was there in the past, any gas station, auto repair shop, junk yard, photo lab, commercial printing operation, dry cleaner, landfill, waste disposal or receiving facility on the property? If so, when and what activities were conducted?**

No

**13. Are there any hydraulic lifts on the property?**

No

**14. Are there any pipelines (petroleum, natural gas, oil, other) on or adjacent to the property?**

Not that I know of

**15. Are there any ponds, lagoons, wetlands, or pits on the property?**

No

**16. Is there any stockpiled soil/debris/waste on the property?**

No

**17. Are any of the following materials used on the property, or were used in the past? If so, how were they stored, used, disposed of and in what quantities?**

- Solvents/cleaners
- Oils/petroleum products/lubricants
- Pesticides, herbicides or fertilizers
- Asbestos
- Heavy metals (lead, chromium, cadmium, mercury, arsenic, silver)
- Ignitable or reactive materials
- Radioactive materials
- PCBs

Fertilizers only

**18. Are you aware of any leaks or spills of any of the above materials?**

Not to my knowledge

**19. Are there any Material Safety Data Sheets (MSDSs) for any hazardous materials used or stored on site?**

Yes. Stored at the tank farm and at BEI offices

**20. Is there a Spill Prevention Countermeasures and Control (SPCC) plan for the property?**

NO, not required because only fertilizer (no petroleum) stored

**21. Is there any runoff from adjacent properties onto the property?**

No because tank farm is bermed

**22. Are you aware of any areas of contamination or waste disposal on or adjacent to the property?**

not to my knowledge

**23. Are you aware of any current or past environmental violations or lawsuits related to the property or any environmental removal or remediation activities?**

not to my knowledge

**24. Has there been any other environmental investigations, assessments, clean ups or removal actions conducted at the property? If so are reports available for review?**

No

**25. Any other comments?**

## QUESTIONNAIRE

### ENVIRONMENTAL SITE ASSESSMENT

Facility/Property: DeCoite Trucking Date 12/14/2011  
Address: SE end of Parcel B Proj. No. KSK-2008-029  
Owner: DeCoite Trucking  
Person Interviewed: Richard DeCoite  
Interviewee Title/Contact Info: 870-3750  
Years familiar with the site and in what capacity. 10 years

Mr. DeCoite's responses apply to the DeCoite Trucking portion of Parcel B only.

#### QUESTIONS

**1. Are there any documents, such as the following, about the property available, and if so, are copies available? Relevant Documents:**

- Environmental Assessment or Compliance/Audit Reports
- Environmental Permits (e.g. hazardous waste, NPDES, UIC)
- Registration of Underground Storage Tanks
- Safety Plans, Spill Prevention plans
- Geotechnical studies
- Hydrogeologic studies
- Risk assessments
- Notices or correspondence from any regulatory agency relating to past environmental laws, liens etc.
- Other

No

**2. General Site Info. Age of facility/property, purpose, nature of operations, occupancy, tenants?**

DeCoite uses the area to store trucks, loaders and shipping containers used to store truck parts. DeCoite does some minor truck repair/maintenance on its on trucks. Some concrete working equipment:

3. Are there any city, county, state or federal environmental permits for the property or for any operation on the property?

No

4. What is the sewer system for the property (municipal sewer, cesspool, septic)?

Not at the DeCoite area. DeCoite uses porta-potties at their area

5. What is the water source for the property (well, municipal supply, catchment)?

Municipal water supply

6. Is waste water or storm water discharged from the property? Any discharge (storm water, waste water) permits for the property?

Just rainwater runoff

7. Are there any floor drains and/or sumps on the property? If so, what and where do they drain?

No

8. Are there any aboveground or underground storage tanks on the property? If so, what type, size and content?

No gasoline stored at the DeCoite area, but DeCoite has an approximately 200-gallon above ground oil storage container; and a 200- to 300-gallon used oil tank. Both are reportedly contained in drip boxes

9. Are there any oil water separators or sumps on the property?

No

10. Are there electrical transformers on the property? If so, have they been tested for PCB content?

No

**11. Is there or was there in the past any mechanical maintenance/repair/construction shop on the property? If so, what types of activities were conducted there?**

DeCoite conducts minor truck repair and servicing of its own equipment at the site.

**12. Is there, or was there in the past, any gas station, auto repair shop, junk yard, photo lab, commercial printing operation, dry cleaner, landfill, waste disposal or receiving facility on the property? If so, when and what activities were conducted?**

Not to my knowledge

**13. Are there any hydraulic lifts on the property?**

No

**14. Are there any pipelines (petroleum, natural gas, oil, other) on or adjacent to the property?**

No

**15. Are there any ponds, lagoons, wetlands, or pits on the property?**

No

**16. Is there any stockpiled soil/debris/waste on the property?**

No

**17. Are any of the following materials used on the property, or were used in the past? If so, how were they stored, used, disposed of and in what quantities?**

- Solvents/cleaners
- Oils/petroleum products/lubricants
- Pesticides, herbicides or fertilizers
- Asbestos
- Heavy metals (lead, chromium, cadmium, mercury, arsenic, silver)
- Ignitable or reactive materials
- Radioactive materials
- PCBs

200- to 300-gallons each of oil and used oil for use in DeCoite trucks and loaders

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**18. Are you aware of any leaks or spills of any of the above materials?**

There have been no leaks or spills of the oil or used oil DeCoite uses at the Site. A&B does environmental inspections of the DeCoite area once a year.

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**19. Are there any Material Safety Data Sheets (MSDSs) for any hazardous materials used or stored on site?**

No

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**20. Is there a Spill Prevention Countermeasures and Control (SPCC) plan for the property?**

No

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**21. Is there any runoff from adjacent properties onto the property?**

No

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**22. Are you aware of any areas of contamination or waste disposal on or adjacent to the property?**

Not that I am aware of

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**23. Are you aware of any current or past environmental violations or lawsuits related to the property or any environmental removal or remediation activities?**

No

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**24. Has there been any other environmental investigations, assessments, clean ups or removal actions conducted at the property? If so are reports available for review?**

Not that I am aware of

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**25. Any other comments?**

No other comments

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Fed Ex

**Kevin S. Kennedy Consulting, LLC**

## QUESTIONNAIRE

### ENVIRONMENTAL SITE ASSESSMENT

Facility/Property FEDEx GROUND Date 12/16/11

Address: 140 HOBSON AVE, KAHULUI 96732 Proj. No. \_\_\_\_\_

Owner: FEDEx GROUND

Person Interviewed: STEVEN OKADA

Interviewee Title/Contact Info STATION MANAGER, 873-2195 steven.okada@fedex.com

Years familiar with the site and in what capacity. 1 YR, LEASING SPACE TO

RUN FEDEx GROUND OPERATIONS - ONLY FAMILIAR W/ SPACE LEASED

#### QUESTIONS

1. Are there any documents, such as the following, about the property available, and if so, are copies available? **Relevant Documents:**

- Environmental Assessment or Compliance/Audit Reports
- Environmental Permits (e.g. hazardous waste, NPDES, UIC)
- Registration of Underground Storage Tanks
- Safety Plans, Spill Prevention plans
- Geotechnical studies
- Hydrogeologic studies
- Risk assessments
- Notices or correspondence from any regulatory agency relating to past environmental laws, liens etc.
- Other

DO NOT KNOW

2. General Site Info. Age of facility/property, purpose, nature of operations, occupancy, tenants?

~~DO NOT KNOW~~ AGE OF FACILITY DO NOT KNOW. SPACE LEASED FROM KTS TO RUN FEDEx OPERATIONS

3. Are there any city, county, state or federal environmental permits for the property or for any operation on the property?

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4. What is the sewer system for the property (municipal sewer, cesspool, septic)?

NOT KNOWN

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5. What is the water source for the property (well, municipal supply, catchment)?

NOT KNOWN

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6. Is waste water or storm water discharged from the property? Any discharge (storm water, waste water) permits for the property?

NOT TO MY KNOWLEDGE

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7. Are there any floor drains and/or sumps on the property? If so, what and where do they drain?

NO DRAINS IN FEDER LEASED SPACE - FLOOR DRAIN FILLED W/  
CONCRETE.

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8. Are there any aboveground or underground storage tanks on the property? If so, what type, size and content?

NOT TO MY KNOWLEDGE

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9. Are there any oil water separators or sumps on the property?

NOT TO MY KNOWLEDGE

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10. Are there electrical transformers on the property? If so, have they been tested for PCB content?

NOT TO MY KNOWLEDGE

11. Is there or was there in the past any mechanical maintenance/repair/construction shop on the property? If so, what types of activities were conducted there?

NOT TO MY KNOWLEDGE

12. Is there, or was there in the past, any gas station, auto repair shop, junk yard, photo lab, commercial printing operation, dry cleaner, landfill, waste disposal or receiving facility on the property? If so, when and what activities were conducted?

NOT TO MY KNOWLEDGE

13. Are there any hydraulic lifts on the property?

NOT TO MY KNOWLEDGE

14. Are there any pipelines (petroleum, natural gas, oil, other) on or adjacent to the property?

NOT TO MY KNOWLEDGE

15. Are there any ponds, lagoons, wetlands, or pits on the property?

NONE THAT I HAVE SEEN

16. Is there any stockpiled soil/debris/waste on the property?

NONE THAT I KNOW OF

17. Are any of the following materials used on the property, or were used in the past? If so, how were they stored, used, disposed of and in what quantities?

- Solvents/cleaners
- Oils/petroleum products/lubricants
- Pesticides, herbicides or fertilizers
- Asbestos
- Heavy metals (lead, chromium, cadmium, mercury, arsenic, silver)
- Ignitable or reactive materials
- Radioactive materials
- PCBs

NONE FOR PEDEX

18. Are you aware of any leaks or spills of any of the above materials?

NOT TO MY KNOWLEDGE

19. Are there any Material Safety Data Sheets (MSDSs) for any hazardous materials used or stored on site?

FOR PEDEX OPERATIONS THAT I KNOW OF

20. Is there a Spill Prevention Countermeasures and Control (SPCC) plan for the property?

YES, FOR PEDEX PROTOCOL

21. Is there any runoff from adjacent properties onto the property?

NOT TO MY KNOWLEDGE

22. Are you aware of any areas of contamination or waste disposal on or adjacent to the property?

NOT TO MY KNOWLEDGE

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23. Are you aware of any current or past environmental violations or lawsuits related to the property or any environmental removal or remediation activities?

NOT TO MY KNOWLEDGE

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24. Has there been any other environmental investigations, assessments, clean ups or removal actions conducted at the property? If so are reports available for review?

NOT TO MY KNOWLEDGE

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25. Any other comments?

NONE

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## QUESTIONNAIRE

### ENVIRONMENTAL SITE ASSESSMENT

Facility/Property: Hale Nanea Community Center Date 12/14/2011  
Address: Northeast corner of Parcel B Proj. No. KSK-2008-029  
Owner: (Tenant) Royal Order of Kamehameha I  
Person Interviewed: Clifford Alakai'i  
Interviewee Title/Contact Info: President, Royal Order of Kamehameha I - 283-0443  
Years familiar with the site and in what capacity: 15 years, President of Royal Order of Kamehameha I

#### QUESTIONS

**1. Are there any documents, such as the following, about the property available, and if so, are copies available? Relevant Documents:**

- Environmental Assessment or Compliance/Audit Reports
- Environmental Permits (e.g. hazardous waste, NPDES, UIC)
- Registration of Underground Storage Tanks
- Safety Plans, Spill Prevention plans
- Geotechnical studies
- Hydrogeologic studies
- Risk assessments
- Notices or correspondence from any regulatory agency relating to past environmental laws, liens etc.
- Other

No

**2. General Site Info. Age of facility/property, purpose, nature of operations, occupancy, tenants?**

Community center, hula halau classes, mens groups, Hawaiian culture classes, group meetings – former WWII officers club – building present before WWII

3. Are there any city, county, state or federal environmental permits for the property or for any operation on the property?

No

4. What is the sewer system for the property (municipal sewer, cesspool, septic)?

Septic sytem on site

5. What is the water source for the property (well, municipal supply, catchment)?

Municipal county water supply

6. Is waste water or storm water discharged from the property? Any discharge (storm water, waste water) permits for the property?

No but drainage ditch on adjacent property to east

7. Are there any floor drains and/or sumps on the property? If so, what and where do they drain?

No

8. Are there any aboveground or underground storage tanks on the property? If so, what type, size and content?

Not that I am aware of

9. Are there any oil water separators or sumps on the property?

Not that I am aware of

10. Are there electrical transformers on the property? If so, have they been tested for PCB content?

No

**11. Is there or was there in the past any mechanical maintenance/repair/construction shop on the property? If so, what types of activities were conducted there?**

Not to my knowledge

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**12. Is there, or was there in the past, any gas station, auto repair shop, junk yard, photo lab, commercial printing operation, dry cleaner, landfill, waste disposal or receiving facility on the property? If so, when and what activities were conducted?**

Not that I am aware of.

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**13. Are there any hydraulic lifts on the property?**

No

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**14. Are there any pipelines (petroleum, natural gas, oil, other) on or adjacent to the property?**

Not that I know of

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**15. Are there any ponds, lagoons, wetlands, or pits on the property?**

Not on site but next on adjacent lot

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**16. Is there any stockpiled soil/debris/waste on the property?**

No - but possibly old construction debris buried at the site (fill material)

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**17. Are any of the following materials used on the property, or were used in the past? If so, how were they stored, used, disposed of and in what quantities?**

- Solvents/cleaners
- Oils/petroleum products/lubricants
- Pesticides, herbicides or fertilizers
- Asbestos
- Heavy metals (lead, chromium, cadmium, mercury, arsenic, silver)
- Ignitable or reactive materials
- Radioactive materials

- PCBs

Possible lead based paint on building walls and possible asbestos in building materials because of age– but has not been confirmed with testing

**18. Are you aware of any leaks or spills of any of the above materials?**

No

**19. Are there any Material Safety Data Sheets (MSDSs) for any hazardous materials used or stored on site?**

No – N/A

**20. Is there a Spill Prevention Countermeasures and Control (SPCC) plan for the property?**

No

**21. Is there any runoff from adjacent properties onto the property?**

Occasional minor flooding after heavy rains

**22. Are you aware of any areas of contamination or waste disposal on or adjacent to the property?**

Not on the site, possibly adjacent to.

**23. Are you aware of any current or past environmental violations or lawsuits related to the property or any environmental removal or remediation activities?**

No

**24. Has there been any other environmental investigations, assessments, clean ups or removal actions conducted at the property? If so are reports available for review?**

No

**25. Any other comments?**

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## QUESTIONNAIRE

### ENVIRONMENTAL SITE ASSESSMENT

Facility/Property: Kahului Trucking & Storage (KTS) Date 12/16/2011

Address: 180 Hobron Avenue, Kahului (Parcel B) Proj. No. KSK-2008-029

Owner: KTS (tenant) – A& B Properties land owner

Person Interviewed: Glenn Wilbourn

Interviewee Title/Contact Info: EVP & General Manager, KTS – 877-5011

Years familiar with the site and in what capacity: 6 years

Mr. Wilbourn's responses apply to the KTS area of Parcel B (SW corner and entire western half of Parcel B) only.

#### QUESTIONS

**1. Are there any documents, such as the following, about the property available, and if so, are copies available? Relevant Documents:**

- Environmental Assessment or Compliance/Audit Reports
- Environmental Permits (e.g. hazardous waste, NPDES, UIC)
- Registration of Underground Storage Tanks
- Safety Plans, Spill Prevention plans
- Geotechnical studies
- Hydrogeologic studies
- Risk assessments
- Notices or correspondence from any regulatory agency relating to past environmental laws, liens etc.
- Other

Environmental permits for waste oil and other petroleum storage and use in the truck repair garage.

**2. General Site Info. Age of facility/property, purpose, nature of operations, occupancy, tenants?**

KTS occupies the southwest corner and entire western half of Parcel B. KTS is a trucking and storage company and primarily trucks and stores bulk molasses for HC&S. KTS also has a truck

maintenance/repair shop for its own trucks and commercial truck repair too. The shop has been in operation for over 100 years and used to repair trains for the Kahului Railroad.

- 3. Are there any city, county, state or federal environmental permits for the property or for any operation on the property?**

Not other than petroleum permits discussed above.

- 4. What is the sewer system for the property (municipal sewer, cesspool, septic)?**

Cess pool, located by molasses plant and septic system by service shop

- 5. What is the water source for the property (well, municipal supply, catchment)?**

Water on site, municipal county water supply

- 6. Is waste water or storm water discharged from the property? Any discharge (storm water, waste water) permits for the property?**

No

- 7. Are there any floor drains and/or sumps on the property? If so, what and where do they drain?**

No

- 8. Are there any aboveground or underground storage tanks on the property? If so, what type, size and content?**

Mollases ASTs only.

- 9. Are there any oil water separators or sumps on the property?**

Yes in truck wash area to catch oil washed from trucks

**10. Are there electrical transformers on the property? If so, have they been tested for PCB content?**

Yes – PCB content unknown.

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**11. Is there or was there in the past any mechanical maintenance/repair/construction shop on the property? If so, what types of activities were conducted there?**

KTS operates a truck repair shop currently at the shop and operated one there fo the last 100 years.

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**12. Is there, or was there in the past, any gas station, auto repair shop, junk yard, photo lab, commercial printing operation, dry cleaner, landfill, waste disposal or receiving facility on the property? If so, when and what activities were conducted?**

Current KTS truck repair shop – over 100 years (formerly repaired trains for Kahului rail road).

---

---

**13. Are there any hydraulic lifts on the property?**

Yes – in truck shop, but not sub-grade lifts. Above grade electric lifts only.

---

No visible or knowledge of former sub-grade lifts

---

---

**14. Are there any pipelines (petroleum, natural gas, oil, other) on or adjacent to the property?**

Chevron fuel line along Hobron lane. And 12-icch molasses line up by molasses storage tank

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**15. Are there any ponds, lagoons, wetlands, or pits on the property?**

No

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**16. Is there any stockpiled soil/debris/waste on the property?**

No

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---

**17. Are any of the following materials used on the property, or were used in the past? If so, how were they stored, used, disposed of and in what quantities?**

- Solvents/cleaners
- Oils/petroleum products/lubricants
- Pesticides, herbicides or fertilizers

- Asbestos
- Heavy metals (lead, chromium, cadmium, mercury, arsenic, silver)
- Ignitable or reactive materials
- Radioactive materials
- PCBs

Petroleum products and lubricants in the truck shop (for oil changes and lube work). Two solvent parts washers in shop (contract with Unitek to manage waste solvent, no solvent disposal on site).

**18. Are you aware of any leaks or spills of any of the above materials?**

No

**19. Are there any Material Safety Data Sheets (MSDSs) for any hazardous materials used or stored on site?**

Yes

**20. Is there a Spill Prevention Countermeasures and Control (SPCC) plan for the property?**

Yes

**21. Is there any runoff from adjacent properties onto the property?**

No

**22. Are you aware of any areas of contamination or waste disposal on or adjacent to the property?**

No

**23. Are you aware of any current or past environmental violations or lawsuits related to the property or any environmental removal or remediation activities?**

No

**24. Has there been any other environmental investigations, assessments, clean ups or removal actins conducted at the property? If so are reports available for review?**

Not that I am aware of.

**25. Any other comments?**

## QUESTIONNAIRE

### ENVIRONMENTAL SITE ASSESSMENT

Facility/Property: Lengo Construction Date 12/14/2011

Address: Center of eastern side of Parcel B Proj. No. KSK-2008-029

Owner: Lengo Cosntruction (tenant)

Person Interviewed: Len Gomes

Interviewee Title/Contact Info: 344-5111

Years familiar with the site and in what capacity: President Lengo Construction; since 1997

Mr. Gomes's responses apply to the Lengo Conststruction, Cruiser Phil, Maui Tropix, Aloha Limousine and Bio Beetle/Maui Recycling – Center of eastern side of Parcel B only.

#### QUESTIONS

**1. Are there any documents, such as the following, about the property available, and if so, are copies available? Relevant Documents:**

- Environmental Assessment or Compliance/Audit Reports
- Environmental Permits (e.g. hazardous waste, NPDES, UIC)
- Registration of Underground Storage Tanks
- Safety Plans, Spill Prevention plans
- Geotechnical studies
- Hydrogeologic studies
- Risk assessments
- Notices or correspondence from any regulatory agency relating to past environmental laws, liens etc.
- Other

No

**2. General Site Info. Age of facility/property, purpose, nature of operations, occupancy, tenants?**

Mr. Gomes has been on his leased portion of Parcel B since 1997. Lengo Construction operates an for office for accounting and drafting. Minor construction material stored inside a shipping container stored on site. Gomes subleases portions of his area of Parcel B to Cruiser Phil – a

down hill bicycle rental with associated bicycle repairs of bike. p: Maui Tropix – Maui built custom surfboards and sail boards manufacturing on site; Aloha limousine – limousine and taxi service, no auto repair or maintenance, just park cars. Bio Beetle – rents biofuel operated volkswagons – no repair or servicing. Recycle plastic and glass, paper.

3. Are there any city, county, state or federal environmental permits for the property or for any operation on the property?

No

4. What is the sewer system for the property (municipal sewer, cesspool, septic)?

Cess pool

5. What is the water source for the property (well, municipal supply, catchment)?

Water on site, municipal county water

6. Is waste water or storm water discharged from the property? Any discharge (storm water, waste water) permits for the property?

No

7. Are there any floor drains and/or sumps on the property? If so, what and where do they drain?

No

8. Are there any aboveground or underground storage tanks on the property? If so, what type, size and content?

No

9. Are there any oil water separators or sumps on the property?

No

10. Are there electrical transformers on the property? If so, have they been tested for PCB content?

No

---

**11. Is there or was there in the past any mechanical maintenance/repair/construction shop on the property? If so, what types of activities were conducted there?**

Not to my knowledge

---

**12. Is there, or was there in the past, any gas station, auto repair shop, junk yard, photo lab, commercial printing operation, dry cleaner, landfill, waste disposal or receiving facility on the property? If so, when and what activities were conducted?**

In the past area was an area for illegal dumping junk cars - Mr. Gomes personally hauled off over 200 junk cars.

---

**13. Are there any hydraulic lifts on the property?**

No

---

**14. Are there any pipelines (petroleum, natural gas, oil, other) on or adjacent to the property?**

Not that I know of

---

**15. Are there any ponds, lagoons, wetlands, or pits on the property?**

No

---

**16. Is there any stockpiled soil/debris/waste on the property?**

No

---

**17. Are any of the following materials used on the property, or were used in the past? If so, how were they stored, used, disposed of and in what quantities?**

- Solvents/cleaners
- Oils/petroleum products/lubricants
- Pesticides, herbicides or fertilizers
- Asbestos
- Heavy metals (lead, chromium, cadmium, mercury, arsenic, silver)
- Ignitable or reactive materials
- Radioactive materials

- PCBs

Not that I know of

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---

**18. Are you aware of any leaks or spills of any of the above materials?**

No

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---

**19. Are there any Material Safety Data Sheets (MSDSs) for any hazardous materials used or stored on site?**

N/A

---

---

**20. Is there a Spill Prevention Countermeasures and Control (SPCC) plan for the property?**

No – N/A

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**21. Is there any runoff from adjacent properties onto the property?**

No

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**22. Are you aware of any areas of contamination or waste disposal on or adjacent to the property?**

Not to my knowledge

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**23. Are you aware of any current or past environmental violations or lawsuits related to the property or any environmental removal or remediation activities?**

No

---

---

**24. Has there been any other environmental investigations, assessments, clean ups or removal actions conducted at the property? If so are reports available for review?**

No – other than removal of junk cars randomly dumped in the site area

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**25. Any other comments?**

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**Kevin S. Kennedy Consulting, LLC**

## QUESTIONNAIRE

### ENVIRONMENTAL SITE ASSESSMENT

Facility/Property REYNOLDS RECYCLING INC. Date 12/16/11

Address: 140 HOBSON AVE. Proj. No. \_\_\_\_\_

Owner: \_\_\_\_\_

Person Interviewed: GEORGIE JUAN

Interviewee Title/Contact Info BUYER

Years familiar with the site and in what capacity. \_\_\_\_\_

#### QUESTIONS

1. Are there any documents, such as the following, about the property available, and if so, are copies available? **Relevant Documents:**

- Environmental Assessment or Compliance/Audit Reports
- Environmental Permits (e.g. hazardous waste, NPDES, UIC)
- Registration of Underground Storage Tanks
- Safety Plans, Spill Prevention plans
- Geotechnical studies
- Hydrogeologic studies
- Risk assessments
- Notices or correspondence from any regulatory agency relating to past environmental laws, liens etc.
- Other

I DONT KNOW

2. General Site Info. Age of facility/property, purpose, nature of operations, occupancy, tenants?

REYNOLDS RECYCLING INC.

3. Are there any city, county, state or federal environmental permits for the property or for any operation on the property?

(I.D.K.)

4. What is the sewer system for the property (municipal sewer, cesspool, septic)?

(I.D.K.)

5. What is the water source for the property (well, municipal supply, catchment)?

(I.D.K.)

6. Is waste water or storm water discharged from the property? Any discharge (storm water, waste water) permits for the property?

NOT TO MY KNOWLEDGE

7. Are there any floor drains and/or sumps on the property? If so, what and where do they drain?

NO

8. Are there any aboveground or underground storage tanks on the property? If so, what type, size and content?

NO

9. Are there any oil water separators or sumps on the property?

NO

10. Are there electrical transformers on the property? If so, have they been tested for PCB content?

I.D.K.

11. Is there or was there in the past any mechanical maintenance/repair/construction shop on the property? If so, what types of activities were conducted there?

NO

12. Is there, or was there in the past, any gas station, auto repair shop, junk yard, photo lab, commercial printing operation, dry cleaner, landfill, waste disposal or receiving facility on the property? If so, when and what activities were conducted?

NO

13. Are there any hydraulic lifts on the property?

NO

14. Are there any pipelines (petroleum, natural gas, oil, other) on or adjacent to the property?

NO

15. Are there any ponds, lagoons, wetlands, or pits on the property?

NO

16. Is there any stockpiled soil/debris/waste on the property?

NO

17. Are any of the following materials used on the property, or were used in the past? If so, how were they stored, used, disposed of and in what quantities?

- Solvents/cleaners
- Oils/petroleum products/lubricants
- Pesticides, herbicides or fertilizers
- Asbestos
- Heavy metals (lead, chromium, cadmium, mercury, arsenic, silver)
- Ignitable or reactive materials
- Radioactive materials
- PCBs

NO

18. Are you aware of any leaks or spills of any of the above materials?

NOT TO MY KNOWLEDGE

19. Are there any Material Safety Data Sheets (MSDSs) for any hazardous materials used or stored on site?

(I.D.K.)

20. Is there a Spill Prevention Countermeasures and Control (SPCC) plan for the property?

NOT TO MY KNOWLEDGE

21. Is there any runoff from adjacent properties onto the property?

NOT TO MY KNOWLEDGE

22. Are you aware of any areas of contamination or waste disposal on or adjacent to the property?

NOT TO MY KNOWLEDGE

23. Are you aware of any current or past environmental violations or lawsuits related to the property or any environmental removal or remediation activities?

NOT TO MY KNOWLEDGE

24. Has there been any other environmental investigations, assessments, clean ups or removal actions conducted at the property? If so are reports available for review?

NOT TO MY KNOWLEDGE

25. Any other comments?

NO

**APPENDIX D**

**Qualifications of Kevin S. Kennedy**

## Resume

### Kevin S. Kennedy

(January 2011)

808-286-5786

25 Kaneohe Bay Dr., Suite 208, Kailua, HI 96734

Kevin@kskconsultingllc.com

www.kevinskennedyconsultingllc.com

Kevin Kennedy is an environmental consultant specializing in environmental litigation and regulatory matters with over 25 years experience in Hawaii, California, Oregon, Guam and many other locations throughout the Pacific. Kevin has conducted and managed hundreds of environmental assessments and investigations and remedial actions and has worked closely in all these projects with State and Federal regulators at all levels.

Kevin has conducted, overseen, and managed projects ranging from Phase I Site Assessments at hundreds of commercial/industrial sites ranging from auto repair shops to entire naval air stations. He has conducted hazardous waste clean up and removal actions at dozens of industrial sites and has conducted Phase II Site Investigations at sites ranging from gas stations and dry cleaners to entire sugarcane plantations, resort hotels and military installations. Kevin has worked on several Brownfields/VRP sites and has designed, installed and operated a variety of soil, soil vapor and groundwater remediation systems.

From his in-depth field experience and countless consultations and negotiations with clients, stake-holders and State and Federal regulators, Kevin has developed a reputation as an experienced and highly competent environmental professional. He is a recognized expert in the environmental field who is regularly retained as an expert witness, litigation expert, public speaker and regulatory specialist. Kevin's reputation for thoroughness, professionalism and his can-do attitude makes him a highly sought-after environmental specialist and gives him direct and immediate access to regulators and a wide variety of specialty subcontractors.

Kevin's clients include attorneys, developers, commercial property owners and managers, realtors, lenders, oil companies and dozens of small businesses as well as State and Federal agencies.

### RELEVANT EXPERIENCE

**July 2007 to Present Kevin S. Kennedy Consulting, LLC; President/Owner/Managing Member**

Environmental and regulatory compliance consultant for a variety of Hawaii commercial businesses. Regulatory liaison and expert consultant for a variety of projects and clients on Oahu, Maui and Kauai. Recent projects include dioxin-contaminated soil investigation and remedial system design and installation; transformer spill site investigation and remediation; diesel fuel-contaminated groundwater recovery system design, installation and operation; groundwater monitoring; cesspool closure and removal; MIS soil sampling investigations; hazardous waste characterization, categorization and removal/disposal;

transformer oil draining and removal; waste permitting and disposal; general consulting and litigation expert.

**12/2005 - 7/2007 Environet, Inc. Honolulu, Hawaii, Vice President/President**

Vice Present/President - Oversight of staff and projects. Client and market development. Overall project quality control of project and all business operations. Leadership and mentorship. P/L, business development. Project involvement at the senior level for select clients. Public presentations, expert witness, litigation expert, regulatory liaison.

**9/1995 - 10/2005 Brewer Environmental Services/BEI, Honolulu, Hawaii; Commercial Group Manager/Vice President/ President**

Commercial Group Manager/Vice Present/President – Initially, oversight of commercial client staff and projects and client and market development, followed by promotion to VP - President - Owner (via LBO). Overall project quality control of project and all business operations. Leadership and mentorship. P/L, business development. Project involvement at the senior level for select clients. Public presentations, expert witness, litigation expert, regulatory liaison. In December 2005 I sold/merged BEI with Environet, Inc. (see above).

**2/1994 - 9/1995 EA Engineering Science and Technology, Inc. Honolulu, Hawaii; Business Group Leader**

Set up, established and staffed EA's Honolulu office for the implementation of AFCEE contract work at Hickam AFB and other Oahu USAF sites and Wake Island. Built core staff to 17 and managed multiple contract delivery orders involving development of management action plans, work plans and site investigations for POL sites throughout Oahu and Wake.

**9/1991 - 12/1993 RZA AGRA (Now AMEC Earth & Environmental) Honolulu, Hawaii; Principal**

Hired to establish RZA AGRA's Honolulu office. Business development, staff recruitment, project oversight, P/L. Remedial system design, construction and operation.

**5/1990 - 9/1991 ERCE (Ogden Environmental) Honolulu, Hawaii Sr. Hydrogeologist**

Hydrogeologist for site investigation projects under US Navy contract in Hawaii and Guam. Project field and office work relating to soil and groundwater investigations (soil sample, groundwater monitoring well installation and sampling) at current and former military oil/fuel-contaminated sites including Environmental Assessment of entire Midway Naval Air Station.

**11/1988 - 5/1990 EA Engineering Science and Technology, Inc. Lafayette, California Sr. Hydrogeologist**

Project Manager for site soil and groundwater investigations primarily at Exxon and Chevron existing and former gas station sites. Soil and groundwater sample collection, contaminant fate and transport computer modeling and mapping, project reporting and client contact and follow-up.

**8/1986 - 10/1988 McKesson Environmental/Clayton Environmental Services; Pleasanton, California Hydrogeologist**

Field hydrogeologist. Soil and groundwater investigation, UST closure and follow-up investigations. Groundwater monitoring well installation. Soil vapor surveys and petroleum product recovery projects.

**8/1985 - 7/1986 Dames & Moore Portland, Oregon; Hydrogeologist**

Field site investigations at a variety of sites. Construction site dewatering modeling and testing, soil and groundwater sample collection. Project hydrogeologist on installation of large-scale groundwater monitoring system for Class I Hazardous Waste disposal site in Arlington, Oregon.

**EDUCATION**

**1995 - Chaminade University of Honolulu, Honolulu, Hawaii - MBA Information Systems**

**1985 - University of Hawaii, Honolulu, Hawaii - M.S. Groundwater Hydrology**

**1979 - University of Idaho, Moscow, Idaho - B.S. Geology**

**TRAINING**

- Hazardous Waste Operations & Emergency Response – 40-hr & 8-hr annual refresher – Current
- Hazardous Waste Operations & Emergency Response – Supervisors Training

**MEMBERSHIP**

- Pacific Islands Environmental Professionals
- Environmental Consulting Professionals
- Association of Environmental Professionals
- Environmental Remediation Specialists

**ARTICLES & POSTINGS**

[www.kskenviroblog.blogspot.com](http://www.kskenviroblog.blogspot.com)

808-286-5786  
25 Kaneohe Bay Dr., Suite 208, Kailua, HI 96734

Kevin@kskconsultingllc.com  
[www.kevinskennedyconsultingllc.com](http://www.kevinskennedyconsultingllc.com)

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**APPENDIX I**  
**Environmental Hazard Management Plan – Kahului**  
**Harbor, Parcel B**

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**ENVIRONMENTAL HAZARD EVALUATION AND  
ENVIRONMENTAL HAZARD MANAGEMENT PLAN**

Kahului Harbor Parcel B  
Kahului, Oahu, Hawaii  
TMK [2] 3-7-11: Parcels 17, 19 (portion), and 23

**Prepared For:**

**ALEXANDER & BALDWIN, LLC**  
822 Bishop Street  
Honolulu, Hawaii 96813

**Prepared By:**



**ENVIROSERVICES & TRAINING CENTER, LLC**

505 Ward Avenue, Suite 202  
Honolulu, Hawaii 96814  
tel: (808) 839-7222

ETC Project No. 14-2003

November 2018

## TABLE OF CONTENTS

<b>1.0 CERTIFICATIONS AND LIMITATIONS.....</b>	<b>11</b>
<b>2.0 INTRODUCTION AND PURPOSE.....</b>	<b>12</b>
<b>3.0 BACKGROUND .....</b>	<b>13</b>
3.1 SITE DESCRIPTION AND LAND AREA.....	13
3.2 SITE GEOLOGY .....	13
3.3 SITE HYDROGEOLOGY.....	13
3.4 SURFACE WATER BODIES/DRINKING WATER WELLS/ECOLOGICAL HABITATS .....	14
3.5 HISTORICAL LAND USE .....	14
3.6 CURRENT AND FUTURE LAND USE.....	14
3.7 CONCEPTUAL SITE MODEL .....	15
3.7.1 <i>Receptors of Concern</i> .....	15
3.7.2 <i>Exposure Pathways</i> .....	16
A. Soil Exposure Pathway .....	16
B. Air Exposure Pathway .....	16
C. Sediment Exposure Pathway .....	16
<b>4.0 SUMMARY OF INVESTIGATION HISTORY .....</b>	<b>17</b>
<b>5.0 ENVIRONMENTAL HAZARD EVALUATION .....</b>	<b>19</b>
5.1 CONTAMINANTS OF POTENTIAL CONCERN.....	19
5.2 APPLICABLE ENVIRONMENTAL ACTION LEVELS.....	19
5.3 ADDITIONAL POTENTIAL HAZARDS .....	19
5.4 COMPARISON OF SITE DATA TO DOH EALS.....	19
<b>6.0 SUMMARY OF ENVIRONMENTAL HAZARDS .....</b>	<b>22</b>
<b>7.0 SHORT-TERM INSTITUTIONAL AND ENGINEERING CONTROLS.....</b>	<b>24</b>
<b>8.0 LONG-TERM MONITORING AND INSTITUTIONAL CONTROL REQUIREMENTS.....</b>	<b>25</b>
<b>9.0 SOIL MANAGEMENT FOR FUTURE SITE ACTIVITIES AFFECTING ONSITE CONTAMINATION .....</b>	<b>26</b>
9.1 CONSULTATION WITH HEER OFFICE .....	26
9.2 EROSION CONTROL MEASURES.....	26
9.3 DUST CONTROL .....	27
9.4 HISTORIC PIPELINES.....	27
9.5 SOIL EXCAVATION AND HANDLING .....	27
9.6 SOIL STOCKPILING AND STORAGE.....	28
9.7 SOIL DISPOSAL.....	28
9.7.1 <i>Other Soil</i> .....	28
9.8 SOIL VAPOR.....	28
9.9 GROUNDWATER HANDLING AND DISPOSAL .....	29
<b>10.0 EXPOSURE MANAGEMENT.....</b>	<b>30</b>
10.1 AWARENESS/TRAINING FOR CONTAMINATION MANAGED ON-SITE.....	30
10.2 CONSTRUCTION WORKER NOTIFICATIONS AND PROTECTIONS.....	30
10.3 PROTECTIONS FOR SITE WORKERS AND VISITORS.....	30
10.3.1 <i>Use Restrictions to Protect Site Workers and Visitors</i> .....	30
10.3.2 <i>Personal Protective Equipment (PPE)</i> .....	31
10.3.3 <i>Contaminant Detection and Monitoring (Air Monitoring Program)</i> .....	31
10.4 EMERGENCY RESPONSE ACTIONS FOR CHEMICAL EXPOSURE.....	31
10.4.1 <i>Eye Exposure to Chemicals</i> .....	31
10.4.2 <i>Skin Exposure to Chemicals</i> .....	32
10.4.3 <i>Inhalation Exposure to Chemicals</i> .....	32
10.4.4 <i>Internal Exposure to Chemicals</i> .....	32
<b>11.0 REFERENCES.....</b>	<b>33</b>

## **ATTACHMENTS**

APPENDIX I: FIGURES

APPENDIX II: DATA TABLES

APPENDIX III: LABORATORY RESULTS

## 1.0 CERTIFICATIONS AND LIMITATIONS

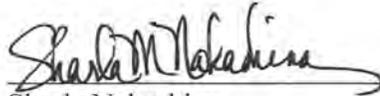
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EnviroServices & Training Center (ETC), LLC has completed this Environmental Hazard Evaluation (EHE) and Environmental Hazard Management Plan (EHMP) for the project site. ETC's findings and conclusions presented in this plan are professional opinions based solely upon visual observations of the project site, government regulations, and upon interpretation of the laboratory data and field measurements available at the time and location of the study.

This document is intended for the sole use of ETC's Client, exclusively for the project site indicated. The scope of services performed in execution of this project may not be appropriate for satisfying the needs of other users, and any use or reuse of this document or the findings and conclusions presented herein is unauthorized and at the sole risk of said user.

ETC makes no guarantee or warranty; either expressed or implied, except that our services are consistent with good commercial or customary practices designed to conform to acceptable industry standards and governmental regulations. No warranty or representation, expressed or implied, is included or intended in its proposal, contracts, or plan. Opinions stated in this plan apply only to the site as outlined and apply to the conditions present at the time of preparation. Moreover, these opinions do not apply to site changes that occur after the project has been completed.

Prepared By:



Sharla Nakashima  
Project Manager

Date:

November 2018

## 2.0 INTRODUCTION AND PURPOSE

---

EnviroServices & Training Center (ETC), LLC was contracted by the A&B Properties Inc. (A&B) to prepare this Environmental Hazard Evaluation (EHE) and Environmental Hazard Management Plan (EHMP) for the project site located at the Kahului Harbor and identified as Tax Map Key (TMK) (2) 3-7-011: Parcels 017, 019 (portion), and 023, herein referred to as the Property.

This EHE-EHMP is based on environmental data and information documented in the *Limited Phase II Environmental Site Assessment, Kahului Harbor Parcel B, Kahului, Maui, Hawaii, TMK [2] 3-7-011: Parcels 017, 019 (portion), and 023*; dated July 2018; prepared by EnviroServices & Training Center, LLC for A&B Properties Inc. Additional environmental data collected from various previous environmental investigations and cleanup were reviewed and included in this EHE-EHMP.

The purpose of this EHE-EHMP is to document contaminants in the soil and groundwater within the Property, identify potential environmental hazards associated with these contaminants, and describe appropriate measures to be used to mitigate these hazards.

### **3.0 BACKGROUND**

---

#### **3.1 Site Description and Land Area**

The Property is currently owned by A&B and consists of TMK: (2) 3-7-11: Parcels 17, 19 (portion), and 23. The Property is located at 140 Hobron Avenue, bound by Hobron Avenue to the west, Alahao Street to the south, and Amala Road to the east. The Property consists of approximately 11.04 acres of land. The Royal Order of Kamehameha property, which occupies approximately 1.2 acres of the Property, was excluded from this investigation due to the fact that this area was reportedly not used for industrial purposes; and current plans indicated that this area will be subdivided from the remainder of the Property.

Currently, there are tenants operating various businesses on the Property. These businesses' use of the Property include trucking, recycling, vehicle and heavy equipment maintenance operations, offices, parking, and storage.

Ground surface at the Property does not exhibit a discernible gradient. The Property is situated at an elevation of approximately 5 feet above mean sea level (msl). The nearest surface water body is the Kahului Harbor located approximately 200-feet north of the Property.

#### **3.2 Site Geology**

The island of Maui is the second largest of the Hawaiian Islands. Maui consists of two shield volcanoes with a connecting isthmus. The volcanic rocks of the West Maui Mountains (West Maui Volcano) are divided into three series. The oldest is the Wailuku Volcanic Series, followed by the Honolua and Lahaina Volcanic Series. The Wailuku Series built the major shield volcano comprised of basaltic lava flows and associated pyroclastic deposits. The Lahaina Series then covered the western slopes of the West Maui Volcano.

The Haleakala Volcano last erupted around 1790 and is presently dormant. The shield of the volcano is composed of a`a and pahoehoe lava flows of theoliite, theoleiitic olivine basalt, and oceanite known as the Honomanu Volcano Series. The Kula Volcanic Series overlays the Honomanu Series and is comprised of hawaiiite, alkalic olivine basalt, and ankaramite. Lava flows from the Haleakala volcano formed the Maui Isthmus and are made up of permeable basalt and erosional deposits (Macdonald, et al., 1983).

The soil at the Subject Property is mapped as Fill land (Fd). Fd consists of areas filled with bagasse and slurry from sugar mills. A few areas are filled with material from dredging and from soil excavations. These materials are generally dumped and spread over marshes, low-lying areas along the coastal flats, coral limestone, or areas shallow to bedrock. This land type is mostly used for the production of sugarcane (USDA, 1972).

#### **3.3 Site Hydrogeology**

The primary drinking water in the Hawaiian Islands is drawn from basal groundwater. Basal groundwater is formed by rainwater percolating down through the residual soils and permeable volcanic rock. The portion of the island situated below sea level, except within rift zones of the volcanoes, is saturated with ocean salt water and thus forms a basal lens called the "Ghyben-Herzberg" lens. A zone of transition between the fresh groundwater and the ocean salt

water occurs due to the constant movement of the interface as a result of tidal fluctuations, seasonal fluctuations in recharge and discharge and aquifer development (Macdonald, et al., 1983).

Downward percolation of rainwater may be stopped by impermeable layers such as dense lava flows, alluvial clay layers and volcanic ash. The groundwater then forms a perched or high level aquifer, which is not in contact with salt water. Recharge of the aquifer occurs in areas of high rainfall, which are the interior mountainous areas. The groundwater flows from the recharge areas to the areas of discharge along the shoreline. Frictional resistance to groundwater flow causes it to pile up within the island until it attains sufficient hydraulic head to overcome friction. Thus, basal groundwater tends to slope toward the shoreline.

The Property is underlain by the Kahului Aquifer System, which is part of the Central Aquifer Sector on the island of Maui. The aquifer is classified by Mink and Lau, 1990, with the system identification number 60301116 (12211). This system includes an unconfined basal aquifer in sedimentary (nonvolcanic) lithology. The aquifer is described as a currently used, ecologically important water source, containing groundwater with a low salinity (250 to 1,000 mg/l Cl<sup>-</sup>). It is also described as irreplaceable with a high vulnerability to contamination.

The Property is further underlain by a second aquifer of the same system. The aquifer is an unconfined, basal aquifer in flank compartments, and is classified with the system identification number 60301111 (12212). The aquifer is described as a currently used, ecologically important water source, containing groundwater with a low salinity (250 to 1,000 mg/l Cl<sup>-</sup>). It is also described as irreplaceable with a moderate vulnerability to contamination (Mink and Lau, 1990).

### **3.4 Surface Water Bodies/Drinking Water Wells/Ecological Habitats**

The nearest surface water body is the Kahului Harbor located approximately 200-feet north of the Property. The Property is located below the Underground Injection Control (UIC) line and therefore, groundwater is not considered a drinking water resource. There are no drinking water wells located within a 1-mile radius of the property.

### **3.5 Historical Land Use**

The Property has been used for commercial and light industrial operations since the early 1900s.

### **3.6 Current and Future Land Use**

Current use of the Property remains the same as past use (i.e. commercial and light industrial operations). Currently, there are tenants operating various businesses on the Property. These businesses' use of the Property include trucking, recycling, vehicle and heavy equipment maintenance operations, offices, parking, and storage. There are no definitive plans to change site usage in the future. A&B anticipates similar light industrial activities will continue. Potential future use of the Property includes the redevelopment of the Property as an asphalt paved storage yard.

### 3.7 Conceptual Site Model

A conceptual site model (CSM) provides a generalized framework regarding site-specific conditions relevant to potential contaminants, contaminant sources, migration pathways, routes of exposure, potential receptors, and environmental hazards (i.e., leaching to groundwater/discharge to surface waters, ecological toxicity) that may be affected by the contaminants. Establishment of this framework is essential for assessing environmental hazards associated with the contaminants, determining what receptors are at risk, determining appropriate remedial strategies, and addressing unacceptable hazards.

The following environmental hazards were initially considered:

#### Soil

- Direct exposure threats to human health;
- Intrusion of subsurface vapors into buildings;
- Leaching and subsequent threats to groundwater resources;
- Threats to terrestrial habitats; and
- Gross contamination and general resource degradation concerns.

#### Groundwater

- Drinking water toxicity;
- Vapor emissions to indoor air;
- Aquatic ecotoxicity; and
- Gross contamination.

#### 3.7.1 Receptors of Concern

When identifying potential receptors, plausible exposure under both current and future land use was evaluated. Accordingly, potential receptors were identified for both current and future use scenarios.

**Future Site Users:** Short-term and long-term plans identify continued commercial/light industrial use of the Property. Potential receptors may include future facility workers.

**Site Construction Workers:** Short-term plans include continued commercial/industrial use. Although no definitive plans have been developed; one or more of the existing site structures may be demolished. In addition, future potential site development activities include the redevelopment of the Property as asphalt-paved storage yard. As such, it is assumed that demolition and/or construction workers may be exposed to impacted soil and/or groundwater at the site during potential site demolition and construction activities associated with future site demolition and redevelopment

**Off-Site Receptors:** Other off-site receptors can be impacted if contaminant-impacted media are not managed appropriately. As an example, for sites with contaminated soil, re-use of such soil at other sites for fill without implementing appropriate handling and management practices can create potential environmental hazards at the receiving facility.

### 3.7.2 Exposure Pathways

Exposure is defined as the contact of an organism with a chemical or physical agent. An exposure pathway is defined as “the course a chemical or physical agent takes from a source to an exposed organism.” It describes “a unique mechanism by which an individual or population is exposed to chemicals or physical agents at or originating from a site (USEPA, 1989).” In order for an exposure pathway to be considered potentially complete, four elements must exist: 1) a source or release from a source; 2) a transport/exposure media; 3) an exposure point (point of contact with the contaminated medium); and 4) an exposure route. The potential exposure pathways present at the Property are described below.

#### A. Soil Exposure Pathway

Direct contact with soil may result in incidental oral ingestion and/or dermal absorption of contaminants of potential concern (COPC). Although generally associated with surface soil, direct contact may also occur with subsurface soil during trenching and excavation work.

#### B. Air Exposure Pathway

Air exposure pathways become potential routes of exposure when COPC enter the air via volatilization or via adsorption to fugitive dust particles. Volatilization occurs when COPC partition to the air. Such volatilization may occur from surface soil, subsurface soil, and/or groundwater. When considering volatilization from subsurface soil or groundwater, transport of COPC occurs through void spaces in unsaturated soils, asphalt, and concrete to the outdoor air or to indoor air through foundation cracks.

Generation of fugitive dust may occur through disturbance of affected soil, such as wind or construction activities. Dust particles may be inhaled, may settle on human skin and be ingested (hand to mouth), and/or may settle on vegetation that may be ingested by humans.

#### C. Sediment Exposure Pathway

Receptors may be exposed to COPC in sediment from the Property as a result of surface runoff during storm events to nearby drainageways, which may eventually discharge to the ocean. Sediment may accumulate in the marine environment and be available for contact with various receptors. Recreational users of the marine environment (swimmers, surfers, fishermen) may come into direct contact with sediment and be exposed through oral ingestion and/or dermal absorption. Ecological receptors may live directly in the impacted sediment and may be exposed to COPC through feeding within the sediment. As a secondary transport mechanism, COPC may accumulate in ecological receptors (i.e., fish, shellfish), then be ingested by human receptors.

#### 4.0 SUMMARY OF INVESTIGATION HISTORY

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Walker Consultants, Ltd. (WCL) prepared a *Site Assessment Report* in October 2000 to document the investigation of Tosco's black oil AST located on Parcel 23. A total of fifty-three soil samples and three caprock groundwater samples were collected from twenty-eight soil borings/sampling points. The sampling points were situated within and surrounding the former AST; and in the vicinity of the loading rack. Analytical results indicated that petroleum related constituents were detected in several soil samples and one caprock groundwater grab sample. Elevated concentrations of petroleum related constituents were generally located on the southeast portion of the former AST site and the loading rack area. Investigation maps indicated that there were several underground pipelines traversing the south portion of the former AST site and the loading rack area. Based on the analytical results, WCL suspected that the identified petroleum impacts were likely due to leakage from the abandoned pipelines in the vicinity of the former AST (WCL, 2000). WCL's investigation included both near surface and subsurface soil samples. A limited volume of impacted surface soils were excavated; however, WCL concluded that the impacted soils likely remain at the bottom of these limited excavations (WCL, 2000). Based on ETC's review of WCL's site maps, boring B24 of ETC's investigation was situated east and adjacent to the former AST site and located in close proximity to the historic pipelines noted by WCL. Investigative reports indicate that TPH as fuel oil (FO) was detected within the vicinity of the former black oil tank at concentrations as high as 120,000 mg/kg. While there are no visible apparent surficial impacts in this area, the interim measures to address the remaining petroleum impacts are included in this document. Note that as part of the current planned future use of the Property, asphalt paving of the Property is likely. In addition, interim measures are described in the following section to address any grossly contaminated soils encountered during future soil disturbing activities (e.g. demolition activities, improvements, etc.).

Two former molasses ASTs; and a former fuel oil/molasses AST are located on the Property. A hazardous materials inspection identified deteriorated lead and asbestos-containing coatings on each of the three tanks. Potential impacts to surrounding soils from these coatings will reportedly be investigated and/or addressed in conjunction with future demolition activities.

Two ASTs containing liquid asphalt/bitumen (bitumuls) were reportedly abandoned on the Property by a former tenant, Hawaiian Bitumuls and Paving Company (HBPC). In November 1998, one of the tanks reportedly failed, releasing residual contents to the surrounding soil. The release was reported to the DOH HEER Office by A&B, and HBPC reportedly cleaned up the spill and removed the failed tank. Analysis of the spilled bitumuls indicated the presence of elevated levels of TPH but no detectable PAHs were reported. In 2006, A&B requested a no further action (NFA) determination for the 1998 release, but noted that a second bitumuls AST remained on the site and was planned for removal. These plans were delayed when no on-island disposal site could be identified for the remaining bitumuls; as a consequence, remnants of the tank and its contents are still on the Property and the NFA request remains pending. While the disposition of the former bitumuls AST and any remaining surficial bitumuls will be addressed in future demolition/cleanup activities; such activities will be completed in accordance with the interim measures described in the following sections and/or a separate Construction EHMP.

A *Phase I Environmental Site Assessment Report*, dated January 13, 2012, was performed by Kevin S. Kennedy Consulting, LLC (KSK). KSK's Phase I ESA identified numerous RECs in connection with the Property (KSK, 2012). The RECs generally pertained to current and

historic operations on the Property as well as adjacent and nearby properties; and observed storage practices and conditions. Although Parcel 23 (former Tosco AST site) was not included in KSK's January 2012 Phase I ESA, KSK's *Additional Parcel Inclusion* addendum letter, dated March 16, 2012 indicated that the 'same conclusions' would have been reported (KSK, 2012).

In January 2014, Bureau Veritas North America, Inc. (BV) completed a *Historical Research Report* for the Property. The purpose of the historical research was to identify and document parties whose current or historical operations may have caused or contributed to the suspect petroleum impacts on the Property (BV, 2014). Based on ETC's review of BV's *Historical Research Report*, the following potential sources of petroleum impacts were identified: 1) former UST and dispensers; 2) seepage pit (former cesspool); 3) former oil pump house; 4) former bitumuls ASTs; and 5) potential for contaminant migration from off-site bulk petroleum storage facilities located south of the Property. The historical pipelines were also identified as a source of potential petroleum contamination.

ETC conducted a *Limited Phase II Environmental Site Assessment* (ESA) activities for the Property in 2014. Multi-increment samples were collected from fifteen surface soil decision units established based on the potential impacts associated with the historical Property usage; and analyzed for TPH-D, TPH-O, PAHs, organochlorine pesticides, and RCRA 8 metals. A total of thirty-four soil borings were advanced in biased locations throughout the Property. Eight groundwater monitoring wells were installed on the Property. Discrete subsurface soil and groundwater samples were selectively analyzed for TPH-G, TPH-D, TPH-O, MBTEX, PCBs, PAHs, RCRA 8 Metals, and organochlorine pesticides. According to A&B, KT&S (Property tenant) was advised of the elevated TPH concentrations in the initial results. KT&S subsequently excavated stained surface soils from DU12. The excavated soils were subsequently profiled and disposed at the Maalaea Demolition and Construction Landfill. As a result, the field replicates collected from DU12 in 2018 confirmed that the previously detected contaminants (i.e. TPH-D, TPH-O, arsenic, and lead) were sufficiently removed. Based on the future commercial/industrial land use, analytical results indicated that TPH-G, MBTEX, PAHs, PCBs, and organochlorine pesticides were either not detected above method detection limits or below their corresponding EAL for all soil and groundwater samples. TPH-D and/or TPH-O were detected in one or more surface soil decision units (DU2, DU3, DU6, DU8, DU9, and DU11) at elevated concentrations exceeded the default commercial/industrial EAL. Lead was detected at 1,400 mg/kg (DU11), which exceeds the corresponding default commercial/industrial EAL. TPH-D and/or TPH-O were detected above the default commercial/industrial EALs in B5, B16, and B24. Groundwater sampling results indicated that, with the exception of the TPH-D, arsenic, and silver; all COPCs were either not detected above method detection limits or were below all applicable EALs. Specifically, TPH-D was detected in B19; arsenic was detected in B2 and B9; and silver was detected in B9 and B30 at elevated concentrations exceeding their corresponding default EALs.

## 5.0 ENVIRONMENTAL HAZARD EVALUATION

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### 5.1 Contaminants of Potential Concern

The contaminants of potential concern (COPC) identified for the project site are based on review of existing data available to date. A chemical was considered an initial COPC if data indicated that the chemical was detected at a concentration exceeding the default (lowest) Hawaii Department of Health (DOH) Environmental Action Level (EAL). Based on previous investigations, the retained COPC for the project site are TPH-D, TPH-O, arsenic, cadmium, lead, silver, and selenium.

### 5.2 Applicable Environmental Action Levels

DOH Tier 1 Environmental Action Levels (EALs) as described in the *Evaluation of Environmental Hazards at Sites with Contaminated Soil and Groundwater* (Fall 2017, updated January 2018), herein referred to as the "EHE Document" and the current DOH HEER Office *Technical Guidance Manual for Implementation of the Hawaii State Contingency Plan, Interim Final*, herein referred to as the "HEER TGM," were considered. Given the current and potential usage of the Property, the DOH EALs applicable to this site and considered in this EHE are the EALs associated with commercial/industrial land use for areas where groundwater is not a current or potential drinking water source and where the nearest surface water body is less than 150 meters from the site.

### 5.3 Additional Potential Hazards

Direct exposure human health hazards and gross contamination are the primary concerns for this EHMP. Additional potential hazards include leaching to groundwater and impacts to indoor air. Based on the analytical data, these additional hazards are considered to be minimal considering the likely low leaching potential and low volatility of the COPCs.

### 5.4 Comparison of Site Data to DOH EALs

A comparison of existing data for the Parcel 9 site to current default DOH EALs was initially performed to identify COPC. Table 1 and 2 below summarizes soil samples with constituent concentrations that exceed current, default DOH EALs. DOH EALs specific to the various environmental hazards are also shown in the Tables 1 and 2.

As shown in Table 1 below, the detected TPH-D and TPH-O concentrations in one or more samples exceeded the direct exposure, gross contamination, and leaching EALs for unrestricted land use and commercial/industrial land use. The detected arsenic and cadmium concentrations in one or more samples exceeded only the direct exposure EAL for unrestricted land use. The detected lead concentration exceeded the direct exposure and gross contamination EAL for unrestricted land use; and the direct exposure EAL for commercial/industrial land use. TPH-D, TPH-O, arsenic, silver and selenium concentrations in one or more groundwater samples exceeded the EAL pertaining to impacts aquatic habitats direct exposure. In addition, TPH-O concentrations in one or more groundwater samples exceeded EAL pertaining to gross contamination concerns.

**Table 1: Soil Sample Data Comparison**

Sample ID	Depth (ft bgs)	TPH-D	TPH-O	Arsenic	Cadmium	Lead
SB1-0.5	0.5	--	12,000 <sup>1</sup>	--	--	--
SB1-7.5	7.5	--	37,000 <sup>1</sup>	--	--	--
SB2-0.5	0.5	--	910 <sup>1</sup>	--	--	--
SB3-0.5	0.5	--	920 <sup>1</sup>	--	--	--
SB3-8.0	8.0	--	65,000 <sup>1</sup>	--	--	--
SB4-7.0	7.0	--	1,000 <sup>1</sup>	--	--	--
SB5-1.0	1.0	--	1,400 <sup>1</sup>	--	--	--
SB6-1.0	1.0	--	700 <sup>1</sup>	--	--	--
SB6-7.5	7.5	--	25,000 <sup>1</sup>	--	--	--
SB7-1.5	1.5	--	80,000 <sup>1</sup>	--	--	--
SB7A-7.5	7.5	--	1,400 <sup>1</sup>	--	--	--
SB9-7.5	7.5	--	1,400 <sup>1</sup>	--	--	--
SB13-0.5	0.5	--	1,100 <sup>1</sup>	--	--	--
SB14-0.5	0.5	--	550 <sup>1</sup>	--	--	--
SB14-8.0	8.0	--	81,000 <sup>1</sup>	--	--	--
SB15-8.0	8.0	--	19,000 <sup>1</sup>	--	--	--
SB16-0.5	0.5	--	720 <sup>1</sup>	--	--	--
SB19-6.5	6.5	--	120,000 <sup>1</sup>	--	--	--
SB19-8.0	8.0	--	48,000 <sup>1</sup>	--	--	--
SB21-8.0	8.0	--	21,000 <sup>1</sup>	--	--	--
SB24-2.5	2.5	--	9,700 <sup>1</sup>	--	--	--
P1-1.0	1.0	--	750 <sup>1</sup>	--	--	--
P2-1.0	1.0	--	640 <sup>1</sup>	--	--	--
P4-2.5	2.5	--	19,000 <sup>1</sup>	--	--	--
2003.SS1	Surface Soil	--	--	--	18.8	--
2003.SS2	Surface Soil	--	1,550	--	--	--
2003.SS3	Surface Soil	795	3,890	--	--	--
2003.SS5	Surface Soil	519	845	--	--	--
2003.SS6	Surface Soil	975	5,010	--	--	--
2003.SS7	Surface Soil	330	986	--	--	--
2003.SS8	Surface Soil	687	1,090	--	--	--
2003.SS9	Surface Soil	266 J	1,940	--	--	--
2003.SS10	Surface Soil	--	861	--	--	--
2003.SS11	Surface Soil	317	1,730	52.6	--	1,400
2003.SS13	Surface Soil	246	903	--	--	--
2003.SS14	Surface Soil	--	642	--	--	--
2003.SS15	Surface Soil	--	744	--	--	--
2003.B5.48-60	4.0-5.0	1,190	7,170	--	--	--
2003.B7.48-60	4.0-5.0	239	--	--	--	--
2003.B12.48-60	4.0-5.0	--	1,340	--	--	--

Sample ID	Depth (ft bgs)	TPH-D	TPH-O	Arsenic	Cadmium	Lead
2003.B16.48-60	4.0-5.0	2,350	3,440	--	--	--
2003.B20.48-60	4.0-5.0	--	1,400	--	--	--
2003.B24.48-60	4.0-5.0	1,790	9,380	--	--	--
Default EAL (Lowest)		220	500	23	14	200
Unrestricted– Direct Exposure		220	9,400	23	14	200
Unrestricted – Vapor Emissions		Use Soil Gas	NA	NA	NA	NA
Unrestricted – Terrestrial Ecotoxicity		Site Specific	Site Specific	Site Specific	Site Specific	Site Specific
Unrestricted – Gross Contamination		500	500	1,000	1,000	1,000
Unrestricted - Leaching		1,500	1,500	95	Use Batch Test	Use Batch Test
Commercial – Direct Exposure		680	120,000	95	72	800
Commercial – Vapor Emissions		Use Soil Gas	NA	NA	NA	NA
Commercial – Terrestrial Ecotoxicity		Site Specific	Site Specific	Site Specific	Site Specific	Site Specific
Commercial – Gross Contamination		680	2,500	2,500	2,500	2,500
Commercial - Leaching		1,500	1,500	95	Use Batch Test	Use Batch Test

All results in mg/kg

1 = Results for TPH as fuel oil, which is most appropriately comparable to TPH-O.

-- = not analyzed, not detected above laboratory detection limit, or below default (lowest) DOH EAL.

NA = not applicable

Site specific = site specific, ecological risk assessment recommended at sites where anthropogenic contamination identified and sensitive, terrestrial ecological habitats could be threatened.

Use Soil Gas = Collection of soil gas data is recommended for additional evaluation of potential vapor intrusion hazards at site with significant areas of VOC-impacted soil.

**Table 2: Groundwater Sample Data Comparison**

Sample ID	TPH-D	TPH-O	Benzo(a)pyrene	Arsenic	Silver	Selenium
SB3-1W	--	8.0 <sup>1</sup>	0.0012 <sup>2</sup>	--	--	--
SB6-1W	--	12.0 <sup>1</sup>	--	--	--	--
MW1	--	--	--	0.0766	--	--
MW2	--	--	--	0.0363	0.0052	--
MW3	0.828	--	--	--	--	--
MW4	--	--	--	--	0.0067	--
MW8	--	--	--	--	--	0.0079
Default EAL (Lowest)		0.640	0.640	0.00006	0.036	0.0001
Drinking Water Toxicity		NA	NA	NA	NA	NA
Gross Contamination		5.0	NA	0.0008	50	50
Impacts to Aquatic Habitats		0.640	0.640	0.00006	0.036	0.0001
Vapor Intrusion into Buildings		Use Soil Gas	NA	NA	NA	NA

All results in mg/L

1 = Results for TPH as fuel oil, which is most appropriately comparable to TPH-O.

2 = Sample collect using a peristaltic pump; therefore, results are considered qualitative.

-- = not analyzed, not detected above laboratory detection limits, or below default (lowest) DOH EAL.

NA = not applicable

Use Soil Gas = Collection of soil gas data is recommended for additional evaluation of potential vapor intrusion hazards at site with significant areas of VOC-impacted soil.

## 6.0 SUMMARY OF ENVIRONMENTAL HAZARDS

Considering that the Property will be used for commercial/industrial purposes for the foreseeable future, commercial/industrial land use EALs would be the most applicable for the Property. DOH recommends a site specific ecological risk assessment for sites with anthropogenic contamination where sensitive, terrestrial ecological habitats could be threatened. Since this particular site has been used for commercial/industrial purposes, sensitive ecological habitats are not anticipated. Similarly, sensitive terrestrial ecological habitats are not anticipated since planned future use will be commercial/industrial. Available investigation data was used to identify the extent and magnitude of existing environmental hazards within the Property. A summary of the existing environmental hazards within the Property is presented Tables 3 and 4. In addition to the hazards summarized in Tables 3 and 4, uninvestigated areas (i.e. beneath existing buildings, tanks, and pavement) will need to be either assumed to be contaminated (same as the adjacent open areas that were sampled) or investigated in the future.

**Table 3: Summary of Environmental Hazards in Soil for Commercial/Industrial Use Only**

Decision Unit or area	Depth	Direct Exposure	Gross Contamination	Leaching to Groundwater	Vapor Emissions to Indoor Air
<i>Former Tosco Black Oil AST</i> SB1, SB3, SB6, SB7, SB15, SB16, SB19, SB21, SB24, P4	0'-8.0'	TPH-O (SB19 at 6.5' bgs only)	TPH-O	TPH-O	
2003.B24.48-60	4'-5'	TPH-D	TPH-D, TPH-O	TPH-D, TPH-O	
DU2 (SS2)	0'-0.5'			TPH-O	
DU3 (SS3)	0'-0.5'			TPH-O	
2003.B5.48-60	4'-5'	TPH-D	TPH-D, TPH-O		
DU6 (SS6)	0'-0.5'	TPH-D	TPH-D, TPH-O	TPH-O	
DU8 (SS8)	0'-0.5'	TPH-D	TPH-D	TPH-O	
DU9 (SS9)	0'-0.5'			TPH-O	
2003.B16.48-60	4'-5'	TPH-D	TPH-D, TPH-O	TPH-D, TPH-O	
DU11 (SS11)	0'-0.5'	Lead		TPH-O	

**Table 4: Summary of Environmental Hazards in Groundwater**

<b>Monitoring Well</b>	<b>Impacts to Aquatic Habitats</b>	<b>Gross Contamination</b>	<b>Drinking Water Toxicity</b>	<b>Vapor Emissions to Indoor Air</b>
<i>Former Tosco Black Oil AST SB3-1W and SB6-1W</i>	TPH-O and Benzo(a)pyrene			TPH-O
MW1 (DU3)	Arsenic			
MW2 (DU6)	Arsenic, Silver			
MW3 (DU12)	TPH-D			
MW4 (DU11)	Silver			
MW8 (DU4)	Selenium			

## 7.0 SHORT-TERM INSTITUTIONAL AND ENGINEERING CONTROLS

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Engineering and institutional controls are often used to mitigate environmental hazards by separating the residual COPC in soil and/or groundwater at a site from potential receptors, thus breaking the exposure pathways. The COPC at the project site, assuming future commercial/industrial land use, were identified as TPH-D, TPH-O, and lead in soil; and TPH-D, TPH-O, benzo(a)pyrene, arsenic, silver, and selenium in the groundwater.

The DOH EAL for TPH-D stated in the EHE Document is 680 mg/kg, which is based on the soil saturation limit of diesel in soil. With the exception of DU9, no obvious indications of diesel or oil in the surface soils are present on the site (i.e. gross contamination). If the non-carcinogenic EAL based on a hazard quotient (HQ) of 1.0 is applied, the corresponding direct exposure EAL is 1,000 mg/kg for TPH-D. As an interim measure, based on evaluation of the analytical data compared to the non-carcinogenic (HQ=1.0) direct exposure EAL for TPH-D pertaining to commercial/industrial land use, the Property does not require additional engineering controls and would be considered suitable for commercial/industrial land use as is.

The lead impacted surface soils within DU11 are likely associated with the existing AST (empty) within this DU. In addition, residual bitumen is present within DU9 (known as Hale Nanea ASTs) and is considered a gross contamination concern. Restricted access to both DU9 and DU11 is currently in-place. Specifically, the area is secured with fencing and a locked gate. ETC understands that the ASTs will be demolished as part of the potential future redevelopment activities. The lead impacted soils (DU11) and the residual bitumen (DU9) will be addressed at that time.

The preferred alternative is to leave the contaminated soils in-place with administrative controls. During future demolition and/or redevelopment activities, all contaminated soils will need to be managed appropriately. Although a definitive redevelopment plan has not been established yet, the final remedy for contaminated soils generated should include either off-site disposal at a permitted solid waste facility or placement of contaminated soil beneath relatively impermeable groundcover (asphalt, concrete, structures, etc.). Placement of relatively impermeable groundcover will create a barrier between the contaminated soil and surface receptors, as well as prevent or minimize the infiltration of storm water.

## 8.0 LONG-TERM MONITORING AND INSTITUTIONAL CONTROL REQUIREMENTS

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Since potential future site land use includes the continued use of the Property for commercial purposes, the findings of this EHE-EHMP are based on commercial/industrial EALs. In order to maintain the integrity of the interim controls, a long-term monitoring and maintenance program will be implemented. The maintenance program will ensure that the interim institutional/administrative controls, engineering controls, and site-wide groundwater monitoring controls are maintained on the Property.

As part of the long-term monitoring requirements, semi-annual inspections of the site will be implemented and reported annually to the HEER Office. An inspection form is included in Appendix II. These routine inspections will ensure that unauthorized access to DU9 and DU11 does not occur. In addition, the fencing will be routinely inspected and repaired, as needed.

In addition to monitoring of access controls, a site-wide groundwater monitoring plan will be initiated for the Property. This groundwater monitoring plan includes semi-annual groundwater monitoring of the boundary groundwater monitoring wells. The groundwater monitoring will be semi-annual; however, it is anticipated that groundwater monitoring activities will be ongoing until 2020. At a minimum, TPH-D, TPH-O and metals will be included in the groundwater monitoring program.

## **9.0 SOIL MANAGEMENT FOR FUTURE SITE ACTIVITIES AFFECTING ONSITE CONTAMINATION**

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Elevated TPH-D and TPH-O concentrations have been identified in the surface and subsurface soils throughout the Property. The gross contamination hazards associated with the TPH-D and TPH-O concentrations and current land use are not considered a significant concern under current site conditions. However, if future redevelopment of the Property is conducted, construction activities occurring within the area of existing TPH-D and TPH-O contamination should follow the recommendations provided in the sections below to appropriately manage the contaminated soils at the site and to control exposure to contamination soil during construction.

### **9.1 Consultation with HEER Office**

Construction activities that may disturb contaminated soil will likely be limited to demolition activities, soil improvement activities, footing excavations, and/or foundation piling. Appropriate soil handling, stockpiling, and disposal procedures should be followed.

In addition to this EHE-EHMP, a Site-specific Safety and Health Plan (SSHP) should be prepared and implemented to account for potential hazards to construction workers during future site activities. The SSHP should comply with the applicable regulations and the most current version of the DOH HEER Office TGM.

ETC recommends that this EHE-EHMP be reviewed and approved by the DOH HEER Office prior to the start of work. The HEER Office is available for consultation and can be reached at the following address and telephone:

State of Hawaii  
Department of Health  
Hazard Evaluation and Emergency Response Office  
2385 Waimano Home Road  
Pearl City, Hawaii 96782  
Telephone: (808) 586-4249

### **9.2 Erosion Control Measures**

Erosion control measures should be established prior to commencement of any earthwork activities to prevent site soils from migrating via surface water runoff into adjacent roadways, drainage systems, and/or surface water bodies. Contractor(s) should be responsible for determining whether certain permits associated with site grading and/or stockpiling are appropriate (i.e., National Pollutant Discharge Elimination System [NPDES], County grading/stockpiling permits, etc.) and whether an erosion control plan is necessary. Typically, Best Management Practices (BMPs) associated with erosion control measures are designed to ensure that soils from a site are retained on site and prevented from ultimately entering surface water bodies. Such BMPs may include (but are not limited to) installation of a silt fence along the site perimeter, physically redirecting potential storm water runoff from leaving the site, and/or installation of controls to prevent tracking of dirt and debris off-site on vehicle tires.

### **9.3 Dust Control**

Standard procedures to minimize dusty conditions, such as spraying water on the soil, should be utilized at the site by the contractor. Dust barriers should be constructed along the perimeter of the site if extensive earthwork is anticipated. Controlled spraying of the area with water to suppress dust migration during any soil disturbance work should be conducted during any earthwork activities. The contractor should ensure that throughout the construction process, work at the site does not cause significant deterioration of existing air quality. Specifically, the Contractor should ensure compliance with ambient air quality standards established in Hawaii Administrative Rules (HAR) 11-59 and should comply with air pollution control requirements specified in HAR 11-60.1, at a minimum.

### **9.4 Historic Pipelines**

Historical pipelines were also identified as a source of potential petroleum contamination. And although not specifically targeted as part of previous investigative efforts, several borings were situated along or in the vicinity of the historic pipelines. The abandoned pipelines represent potential sources of petroleum contamination if they were not properly abandoned in past. If documentation of petroleum pipeline abandonment is not available, known or newly discovered abandoned pipelines should be evaluated (e.g. tapped to determine if petroleum remains in the pipeline(s), sampling for evidence of a release, etc). In addition, ground penetrating radar (GPR) studies or exploratory excavations should be considered prior to redevelopment. The historic pipelines are mapped in Figure \_\_\_\_.

### **9.5 Soil Excavation and Handling**

Construction activities should be structured to result in minimal soil disturbance and to minimize dust generation. When excavation of TPH-D, TPH-O, or metals contaminated site soils is necessary for development, activities should be sequenced to minimize the potential for exposure of site workers. As an example, all earthwork (trenching for utilities, site grading, etc.) should be performed prior to mobilization of other trade personnel to minimize the number of workers at the site that may be exposed to airborne particulates.

Another control that can be implemented to isolate contaminated soils during construction activities is to place a barrier on or along exposed surface soils, such as lining the walls of an open trench with polyethylene sheeting or placing a thin layer of clean, imported fill material immediately after completing foundation excavations.

If excavated soil needs to be transported, whether on-site or off-site, controls should be implemented to minimize the generation of fugitive dust. This may include spraying water on loads of excavated soil or covering truck loads with fabric.

## **9.6 Soil Stockpiling and Storage**

Any excavated soil that needs to be stockpiled on-site temporarily should be placed on a minimum 10-mil thick layer of polyethylene sheeting in a designated stockpile area. All stockpiles should then be covered using minimum 6-mil thick polyethylene sheeting. The covering should be secured with inert material (i.e., clean, imported fill; etc.) to anchor the polyethylene cover to the stockpile in order to prevent the cover from being blown off during high wind conditions. The edges of the stockpile should then be secured to prevent run-on of storm water or run-off of soil particles. This can be accomplished by rolling the edges of the polyethylene liner and the polyethylene cover together and securing the rolled ends with heavy, inert materials. Alternatively, a berm can be constructed around the soil stockpile using clean, imported fill material.

## **9.7 Soil Disposal**

Petroleum and metals contaminated soil excavated from the Property during construction should either be transported off-site for disposal at a government-permitted facility (e.g., landfill) or placed beneath structures or relatively impermeable surface (concrete foundations, asphalt paving). Any contaminated soil that will be disposed off-site should first be sufficiently characterized and the information should be presented to the permitted disposal facility in the form of a soil profile. The disposal facility will have the discretion of accepting or rejecting the overburden soil.

### **9.7.1 Other Soil**

Soil generated from previously uninvestigated areas (i.e. soil beneath existing buildings and pavement) should be sufficiently characterized prior to disposal, re-use and/or relocation. Additionally, if existing buildings, tanks, and pavement (i.e. uninvestigated areas) are removed in the future, these areas will need to be either assumed to be contaminated (same as the adjacent open areas that were sampled) and managed appropriately, or sampled independently to determine the extent and magnitude of contamination in the newly uncovered area(s).

If feasible and acceptable, excavated soils should be used onsite. If contaminant concentrations exceed unrestricted DOH EALs, analytical information will need to be provided to the government-permitted disposal facility. The disposal facility will have the discretion of accepting or rejecting the overburden soil. Soil that does not need to be disposed at a government-permitted disposal facility may be re-used on-site in accordance with this EHMP.

## **9.8 Soil Vapor**

If future development plans include the construction of enclosed building structures atop select areas of the Property, a soil vapor characterization is required to address emissions to indoor air. These select areas include the Former Tosco black oil AST area (includes DU13), DU2, DU3, DU6, DU8, and DU9.

## 9.9 Groundwater Handling and Disposal

Previous investigations indicate that the groundwater at the site is minimally impacted; therefore, if implementation plans require the disturbance of groundwater at the site, controls will be necessary to prevent the release of contaminated groundwater to surface water bodies.

If possible, groundwater should be retained on-site rather than being discharged or disposed off-site. This may be accomplished through construction of temporary settling basins, groundwater discharge trenches, or other means. If discharge of groundwater off-site is necessary, the contractor will need to obtain the appropriate permits (i.e., NPDES, discharge permits, etc.) prior to release. The contractor will ensure that the groundwater being discharged has been sufficiently characterized and that any contaminants in the groundwater meets applicable threshold criteria (e.g., surface water quality standards, etc.).

Groundwater generated during groundwater monitoring activities should be retained on-site rather than being discharged or disposed off-site. Specifically, the groundwater will be containerized and sufficiently characterized for disposal if necessary.

## **10.0 EXPOSURE MANAGEMENT**

---

Exposure to contaminated soils during construction can generally be controlled by isolating the contaminated media, eliminating routes of exposure and/or eliminating the exposure point. Exposure management can be accomplished by implementing controls during the construction phase. Examples of such exposure controls are provided below.

### **10.1 Awareness/Training for Contamination Managed On-Site**

All future workers and tenants of the site should be advised about the residual COPC present in the soils at the site and that any future earthwork should take this EHE-EHMP into consideration.

### **10.2 Construction Worker Notifications and Protections**

All construction workers who have contact with the contaminated soils should be educated on the site conditions and potential risks associated with contaminants found at the site. In particular, workers should be aware of the contamination at the site and the management protocols to address associated hazards. Although the COPC do not pose a significant hazard to human health, workers should be aware that routes of exposure to the contaminated soil are generally via inhalation of airborne particulates, ingestion of soil, and absorption through the skin and eyes.

The most common method of informing construction personnel of potential exposure risks is to prepare a SSHP. The SSHP should describe the contaminants of concern, routes of exposure, and potential symptoms of exposure. The plan should also describe personal protection measures, controls, and work practices to minimize the risk of exposure. Construction personnel should be required to review the SSHP and certify that they have reviewed the plan and understand the risks involved with the project.

In addition to understanding how to protect oneself, site construction workers should also be educated on how contaminated soils can impact the general public (through migration via air or surface water) and the environment. The importance of implementing controls that are protective of the general public should be emphasized.

### **10.3 Protections for Site Workers and Visitors**

To supplement the erosion control, dust control, and exposure prevention measures described in previous sections, possible strategies for ensuring that workers and guests are protected from environmental hazards associated with site contamination are provided below.

#### ***10.3.1 Use Restrictions to Protect Site Workers and Visitors***

Prior to commencing any activities that will potentially disturb contaminated soils, workers should be educated on the existing environmental hazards, the potential environmental hazards associated with disturbed soils, and appropriate management of these hazards. Only trained personnel should be permitted access to the site if contaminated soil is exposed.

### ***10.3.2 Personal Protective Equipment (PPE)***

The use of personal protective equipment (PPE) is a key measure used to eliminate the exposure point for site construction workers by placing a physical barrier between the worker and the contaminant. Workers should be provided with the opportunity to don PPE prior to the start of any work requiring disturbance of site soils. Once available, work area air monitoring data can be used to evaluate the adequacy of the selected level of worker protection. The SSHP typically details the specific PPE required during various earthwork activities.

Immediately after leaving the work area, workers should remove PPE and wash their hands and face with soap and water. At no time should workers be allowed to smoke, drink, or eat within the work zone and/or near contaminated soil.

### ***10.3.3 Contaminant Detection and Monitoring (Air Monitoring Program)***

An air monitoring program may be implemented as the primary contaminant detection and monitoring system. The contractor should be responsible for determining whether air monitoring is prudent and which analyses are to be performed to satisfy U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) requirements and such information should be included in the SSHP. The data obtained from work area air samples can then be used to evaluate the effectiveness of control measures and to determine the appropriate level of personal protection.

In addition, area air monitoring at the project site perimeter may be conducted. Prior to start of earthwork activities, background air samples can be collected at the site to identify baseline air quality data. During project activities occurring within the petroleum contaminated area, air samples may be collected as specified in the SSHP to monitor for contaminant migration through fugitive dust. Data from perimeter monitoring should be used to evaluate the effectiveness of control measures implemented on-site.

## **10.4 Emergency Response Actions for Chemical Exposure**

A general emergency response protocol for petroleum exposure is provided below. These recommendations are based on guidance found in the National Institute of Occupational Safety and Health (NIOSH) Pocket Guide to Chemical Hazards (NIOSH, 2005).

### ***10.4.1 Eye Exposure to Chemicals***

In the event that contaminated soil comes into contact with the eyes or skin, the recommended courses of action are to:

- Immediately wash (irrigate) the eyes with large amounts of water, occasionally lifting the lower and upper lids.
- Seek immediate medical attention if irritation persists after washing.

An eye wash station should be available on site during any activities involving the disturbance of contaminated surface soils.

#### ***10.4.2 Skin Exposure to Chemicals***

In the event that contaminated soil comes into contact with the skin, the recommended course of action is to:

- Promptly flush the contaminated skin with soap and water.
- Promptly remove the clothing and flush the skin with water if contaminants penetrate any clothing.
- Seek medical attention if irritation persists after washing.

Soap and water should be made available for the purpose of washing skin during any activities involving the disturbance of contaminated surface soils.

#### ***10.4.3 Inhalation Exposure to Chemicals***

Should contaminated soil be inhaled over the course of work leading to breathing difficulty, the recommended course of action is to:

- Immediately move the exposed person to fresh air.
- Perform artificial respiration if breathing has stopped.
- Keep the affected person warm and at rest.
- Seek medical treatment as soon as possible.

#### ***10.4.4 Internal Exposure to Chemicals***

Should contaminated soil be ingested in sufficient quantities over the course of work, the recommended course of action is to seek immediate medical treatment.

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**APPENDIX I**  
**FIGURES**

**APPENDIX II**  
**EXAMPLE INSPECTION FORM**

**Kahului Harbor Parcel B  
Annual Inspection Report**

Inspector's Name & Title:			Date & Time of Inspection:		
Inspector's Affiliation:			Inspector's Contact:		
Weather Conditions: <input type="checkbox"/> Raining <input type="checkbox"/> Cloudy <input type="checkbox"/> Sunny			Maintenance conducted since previous inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>Item Being Evaluated</b>		<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Comments</b>
<b>DU11 (Molasses/Bitumuls AST) and DU9 (Hale Nanea ASTs)</b>					
1.	Is the chain-link fence surrounding this area intact and secured (i.e. locked)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Is the fenced area free of any permanent occupants or tenants (i.e. vacant)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Are there any signs of trespassers or unauthorized occupants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Is the area free of any 'new' development?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Are there any visible releases from the existing Hale Nanea AST located within DU9?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>All Other Areas of the Site</b>					
1.	Is the significant staining or evidence of gross petroleum contamination within the remaining areas (outside the fenced area of DU9 and DU11) of the Property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Are the activity and use of these other areas limited to commercial/industrial use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Is the area free of any 'new' development?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Are there any signs of trespassers or unauthorized occupants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Description of Maintenance or Corrective Action and Dates of Implementation:</b>					

*page intentionally left blank*

## APPENDIX J

Interim Final Area-Wide EHE/EHMP Document  
Kahului Harbor Area

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**Interim Final Area-Wide  
EHE/EHMP Document  
Kahului Harbor Area  
Kahului, Maui**

**June 2018  
Version 1.0**

Prepared by:



**State of Hawai'i Department of Health (HDOH)  
Hazard Evaluation and Emergency Response Office (HEER Office)**

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## CONTENTS

SECTION	PAGE
ACRONYMS .....	iv
<b>1.0 INTRODUCTION .....</b>	<b>9</b>
1.1 Regulatory Framework .....	10
<b>2.0 PURPOSE .....</b>	<b>11</b>
<b>3.0 AREA COVERED .....</b>	<b>12</b>
3.1 History and Background .....	12
<b>4.0 HOW TO USE THIS DOCUMENT .....</b>	<b>13</b>
<b>5.0 AREA GEOLOGY &amp; HYDROGEOLOGY .....</b>	<b>16</b>
<b>6.0 ENVIRONMENTAL HAZARD EVALUATION .....</b>	<b>16</b>
6.1 Contaminants of Potential Concern .....	16
6.2 Gross Contamination .....	17
6.3 Direct Exposure .....	18
6.4 Soil Vapor Intrusion .....	18
6.5 Leaching .....	18
6.6 Ecotoxicity .....	19
6.6.1 Terrestrial Ecotoxicity .....	19
6.6.2 Aquatic Ecotoxicity .....	19
<b>7.0 EXPOSURE PATHWAYS .....</b>	<b>19</b>
7.1 Ingestion .....	19
7.2 Inhalation .....	19
7.3 Dermal Contact .....	20
<b>8.0 ENVIRONMENTAL HAZARD MANAGEMENT PLAN .....</b>	<b>21</b>
<b>9.0 RELEASE REPORTING PLAN .....</b>	<b>21</b>
9.1 Immediate Verbal Notification .....	22
9.2 Written Follow-Up Notification Contents .....	23
9.3 Recordkeeping Requirements for Encountered Contamination .....	23
<b>10.0 HEALTH AND SAFETY PLAN (HSP) .....</b>	<b>23</b>
<b>11.0 CONSTRUCTION ACTIVITIES RELEASE RESPONSE PLAN .....</b>	<b>24</b>

<b>12.0</b>	<b>INACTIVE PETROLEUM PIPELINE AND UST MANAGEMENT PLAN .....</b>	<b>24</b>
12.1	Preparatory Work .....	24
12.2	General .....	24
12.3	Pipeline Tapping, Draining, and Removal.....	25
12.4	Removed UST and Pipe Handling.....	25
12.5	Other Sub-Surface Utilities.....	25
12.6	Record Keeping .....	26
<b>13.0</b>	<b>SOIL MANAGEMENT PLAN.....</b>	<b>26</b>
13.2	Soil Sampling and Testing for Reuse or Disposal.....	28
13.3	Soil Contingency Plan .....	30
13.3.1	Open Excavations .....	30
13.3.2	Soil Stockpiles .....	31
13.4	Engineering and Administrative Controls .....	31
13.5	Periodic Inspections and Preventive Maintenance .....	31
13.6	Record Keeping and Reporting .....	31
<b>14.0</b>	<b>GROUNDWATER MANAGEMENT PLAN .....</b>	<b>32</b>
14.1	Groundwater Management .....	32
14.2	Vapor Control.....	33
14.3	Vector Control.....	33
14.4	Groundwater Contingency Plan .....	33
14.4.1	Open Excavations .....	33
14.4.2	Dewatering Pits.....	33
14.5	Periodic Inspections and Preventive Maintenance .....	34
14.6	Record Keeping and Reporting .....	34
<b>15.0</b>	<b>FREE PRODUCT MANAGEMENT PLAN .....</b>	<b>34</b>
15.1	Free Product Management .....	34
15.2	Engineering and Administrative Controls .....	35
15.3	Periodic Inspections and Preventive Maintenance .....	35
15.4	Record Keeping and Reporting .....	35
15.5	Free Product Contingency Plan .....	36
15.5.1	Open Excavations .....	36
15.5.2	Dewatering Pits.....	36

<b>16.0</b>	<b>VAPOR MANAGEMENT PLAN</b> .....	<b>37</b>
16.1	Vapor Management.....	37
16.2	Vapor Contingency Plan – Exposure Monitoring.....	38
16.3	Engineering and Administrative Controls.....	39
16.4	Periodic Inspections and Preventive Maintenance.....	39
16.5	Record Keeping and Reporting.....	40
<b>17.0</b>	<b>STORMWATER MANAGEMENT PLAN</b> .....	<b>40</b>
17.1	Stormwater Management.....	40
17.2	Engineering and Administrative Controls Open Excavations.....	41
17.3	Stormwater Contingency.....	42
17.4	Inspection and Preventive Maintenance.....	43
17.5	Record Keeping and Reporting.....	44

## FIGURES

Figure 1	Harbor Location
Figure 2	Harbor Features
Figure 3	Harbor Parcels and EHMP Applicability
Figure 4	Potential Areas of Termiticides, Lead, and/or Arsenic Contamination Based on 1988 Building Configuration
Figure 5	Potential Areas of Petroleum Contamination
Figure 6	Soil Types Within KHID

## APPENDICES

Appendix A	Guidelines for Landowners, Tenants, Utilities Companies, and Construction Contractors
Appendix B	Reporting Forms
	B.1 Written Follow-Up Notification Form
	B.2 Health and Safety Plan

- B.3 Construction Activities Release Response Plan
- B.4 Inactive Pipeline Removal Plan
- B.5 Soil Management Plan
- B.6 Groundwater Management Plan
- B.7 Free Product Management Plan
- B.8 Vapor Management Plan
- B.9 Stormwater Management Plan

## ACRONYMS

bgs	Below ground surface
BMP	Best management practice
BTEX	Benzene, toluene, ethylbenzene, and xylenes
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	<i>Code of Federal Regulations</i>
COPC	Contaminant of potential concern
COC	Contaminant of concern
CPR	Cardiopulmonary resuscitation
cy	Cubic yard
DCS	Debris-contaminated soil
EAL	Environmental action level
EC	Engineering Control
EHE	Environmental Hazard Evaluation
EHMP	Environmental Hazard Management Plan
EPA	U.S. Environmental Protection Agency
eV	Electron volt
GPS	Global Positioning System
HAR	<i>Hawaii Administrative Rules</i>
HAZWOPER	Hazardous Waste Operations and Emergency Response
HDOH	Hawaii Department of Health
HDOT	Hawaii Department of Transportation
HEER Office	Hazard Evaluation and Emergency Response Office
HIOSH	Hawaii Occupational Safety and Health Division
HRS	<i>Hawaii Revised Statutes</i>
HSERC	Hawaii State Emergency Response Commission
HSP	Health and Safety Plan
HVOC	Halogenated volatile organic compound
IAP	Incident Action Plan
IC	Institutional control
kg	Kilogram
KHID	Kahului Industrial District
LEL	Lower explosive limit
LEPC	Local Emergency Planning Committee
LNAPL	Light non-aqueous phase liquid

mg	Milligram
ml	Milliliter
MTBE	Methyl tertiary butyl ether
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OPA	Oil Pollution Act
OSHA	Occupational Safety and Health Administration
PAH	Polycyclic aromatic hydrocarbon
PCS	Petroleum-contaminated soil
PEL	Permissible exposure limit
PID	Photoionization detector
PPE	Personal protective equipment
ppm	Parts per million
ppmv	Parts per million by volume
PRP	Potentially responsible party
RP	Responsible party
RQ	Reportable quantity
SOSC	State On-scene Coordinator
STEL	Short-term exposure limit
TCLP	Toxicity Characteristic Leaching Procedure
TGM	Technical Guidance Manual
TPH	Total petroleum hydrocarbons
TPH-d	Total petroleum hydrocarbons as diesel fuel
TPH-g	Total petroleum hydrocarbons as gasoline
TPH-o	Total petroleum hydrocarbons as oil
TWA	Time-weighted average
UGP	Underground pipeline
UIC	Underground injection control
USDA	United States Department of Agriculture
UST	Underground storage tank
VOC	Volatile organic compound

## 1.0 INTRODUCTION

Kahului Harbor is located in Kahului Bay on the north shore of the isthmus connecting east and west Maui (Figure 1). Kahului Harbor is one of ten commercial harbors in the State of Hawaii and the only deep-draft commercial harbor that services ocean shipping for the Island of Maui. Three harbor piers are located on the east and west side of the harbor, where cargo ships, barges and passenger ships dock.

Historical and current land uses are primarily industrial and commercial—docking and unloading of ships and trains (Figure 2), an auto storage yard, a power plant, warehousing, container, molasses, and cement storage, bulk petroleum storage with associated pipelines, and sugar processing and storage. Between the east and west breakwaters is a strip of land that is currently occupied by restaurants, hotels, and other commercial facilities. The main industrial area is located on the eastern side of the harbor. This main industrial area is the focus of this Environmental Hazard Evaluation/Environmental Hazard Management Plan (EHE/EHMP) and will be referred to as Kahului Harbor Industrial District (KHID) EHE/EHMP.

The KHID encompasses approximately 1,300 acres of land (see Figures 1 & 2). The State of Hawaii is a large landowner in the KHID and these state lands are principally managed by the Hawaii Department of Transportation (HDOT) Harbors Division. Other portions of the KHID are privately owned.

The Hazard Evaluation and Emergency Response Office (HEER Office) of the Hawaii Department of Health (HDOH) is overseeing assessment and cleanup of historical impacts in the KHID associated with 1) petroleum handling activities that have resulted in petroleum hydrocarbon releases from storage tanks and underground pipelines (UGP), (2) impacts by metals (e.g. lead or arsenic) resulting from past industrial or imported fill activities, and (3) historic soil contamination around the foundations of buildings or tank structures and on former railroad rights-of-way resulting from past use of lead paint, arsenic or pentachlorophenol mixtures for weed control, or use of termiticides (e.g. chlordane) for termite control at wooden structures.

Cleanup measures and long-term Institutional Controls (ICs) have been and continue to be implemented to prevent hazards to human health and the environment within the Kahului Harbor Area. Potentially hazardous contaminants of concern (COC) are present in soil, groundwater, and soil gas at various locations within the KHID. Some of these COCs, primarily oil compounds, have been removed, and removals or other cleanup options will continue. Management of potential hazards associated with any remaining (also referred to as residual) COCs is addressed by ICs, which are described in Environmental Hazard Management Plans (EHMPs). These plans—an HDOH requirement where contamination is managed on-site—are described in HDOH's Technical Guidance Manual (TGM, Section 19; [www.hawaiidoh.org](http://www.hawaiidoh.org)).

Site/parcel-specific EHMPs have been implemented or are currently being prepared within the KHID, developed by parties HDOH considers responsible for residual COCs on specific parcels. Site-specific EHMPs are developed after completion of site assessments and implementation of any cleanup actions. Site-specific EHMPs include those developed by potentially responsible parties such as petroleum companies, HDOT, or other parcel/site operators/owners. EHMPs for large operating facilities such as petroleum distribution terminals may have an "Interim" status due to limited (and on-going) environmental assessments as a result of site access constraints from existing structures or work activities. Figure 3 shows the areas for which site-specific EHMPs have been established and for which this Area-Wide

EHMP applies. Copies of site-specific EHMPs are available at the HEER Office in Honolulu. As environmental impacts are identified at other sites within the KHID, HDOH may require preparations of additional site-specific EHMPs in the future.

Under current conditions, which include existing (extensive) soil cover by gravel, asphalt, cement, or building structures, and any administrative or engineering controls utilized for parcel-specific EHMPs, the COCs within the KHID are not believed to pose hazards to human health and the environment. However, exposures to residual COCs could occur during (1) future subsurface activities—including belowground constructions of utility trenches (for water, natural gas, electricity, telephone, cable), box culverts and storm drain laterals, sanitary sewers, street lights, traffic lights, grease traps, and septic tanks; (2) construction activities within roadways and common areas, and (3) surface soil disturbance activities around (or under) the foundation areas of current or former buildings or large tank structures, and on former railroad rights-of-way. This Area-Wide EHE/EHMP and the existing parcel-specific EHMPs specify requirements, procedures, and guidelines intended to prevent occurrences of potential exposures to or re-location of soils that could pose hazards to human health and the environment.

Area-Wide EHE/EHMPs address sites of known or suspected presence of COCs where no previous site investigations have occurred and for which no parcel-specific EHMPs have been established. These sites are shown on Figure 3 as “Area Covered by the KHID Area-Wide EHMP.” HDOH may update the extent of this area periodically. Importantly, pursuant to the Environmental Response Law (*Hawaii Revised Statutes* [HRS] 128-D) and the State Contingency Plan (*Hawaii Administrative Rules* [HAR] 11-451), affected parties are expected to know about and comply with this Area-Wide EHE/EHMP to the extent feasible.

Parties may utilize this Area-Wide EHE/EHMP as is, and HDOH expects this for small-scale projects involving soil excavation on public and private sites, public and private roadways, and common areas. Construction projects involving soil excavations within utility rights-of-way, roadways, and common areas may encounter COCs that must be properly managed by the construction and/or environmental contractors.

Alternatively, parties can refine or modify the details of this Area-Wide EHE/EHMP in order to better address site-specific requirements. So in effect, parties have the option to create their own site-specific construction EHMPs provided the site is properly characterized based on the Area-Wide EHE/EHMP.

### **1.1 Regulatory Framework**

Under state laws and regulations, entities and individuals involved with surface or subsurface excavations are ultimately responsible for proper handling of contaminated materials and environmental media, reporting releases where encountered, preventing migration of existing contamination, and ensuring compliance with the law (owners, operators, generators, and transporter are liable). Entities conducting subsurface excavations are also responsible for training of contractors and subcontractors on the requirements presented in this EHE-EHMP. This EHE-EHMP is not intended to address chemicals and hazards introduced by contractors during the course of their work. Additional environmental hazards not identified in this plan may exist. During construction, each contractor remains responsible for protecting the environment and the health and safety of its employees, workers, and the general public. Before construction, the contractors should review applicable Hawai'i Occupational Safety and Health Division (HIOSH), U.S. Environmental Protection Agency (USEPA), and State of Hawaii Department of Health (HDOH) regulations and guidance.

This EHE-EHMP is not intended to identify all agencies and environmental statutes and

regulations that may be required during construction but instead focuses on the relevant requirements for managing contamination or potential contaminated soil or groundwater encountered in the field.

Statutory requirements for identification, reporting, and responding to releases are described in Hawaii laws and regulations that are administered by the HDOH Hazard Evaluation and Emergency Response (HEER) Office, and include the following:

Hawaii Revised Statutes – (HRS)

- HRS 128-D, Hawaii Environmental Response Law (HERL)
- Hawaii Administrative Rules – (HAR)
  - HAR 11-451, Hawaii State Contingency Plan (Hawaii SCP)

Statutory requirements for managing waste are described in Hawaii laws and regulations administered by the HDOH, Solid and Hazardous Waste Branch (SHWB).

## **2.0 PURPOSE**

The purpose of this Area-Wide EHE/EHMP is to specify consistent and effective practices for managing the following COCs if these are encountered during subsurface excavation activities within the KHID: petroleum-contaminated soil (PCS), debris- or sewage-contaminated soil (DCS), and metal or pesticide contaminated surface soil located adjacent to building or tank foundations, or on former railroad rights-of-way that commonly contain high levels of petroleum compounds, metals, and sometimes organochlorine pesticides, petroleum- or dissolved metals-contaminated groundwater, or elevated soil vapors from petroleum compounds or their degradation products. Petroleum contamination, metals, and pesticides are emphasized because these are the most common contaminants found within harbor industrial areas. The scope of this EHE/EHMP includes all sites within the KHID for which a site-specific EHE has not been carried out and a site-specific EHMP has not been established (see Figures 2 and 3). Activities covered by this document include: (1) subsurface work within utility trenches (for water, natural gas, electricity, telephone, cable), box culverts and storm drain laterals, sanitary sewers, street lights, traffic lights, grease traps, and septic tanks; (2) subsurface construction activities within roadways or common areas, and (3) excavations of exposed surface soils around (within about 3 feet surrounding) or under the foundation areas of older (or former) buildings and storage tanks as well as on former railroad rights-of-way. Note that large projects involving extensive amounts of subsurface work within the KHID area will need to develop a project-specific construction EHMP and the HEER Office should be consulted in these cases.

If unsure whether this Area-Wide EHE/EHMP is detailed enough to provide appropriate guidance for planned subsurface construction activities, contact HDOH prior to commencing the project.

***Under the present conditions (e.g. the amount of existing soil covered with gravel, asphalt, cement, or buildings, and parcel-specific controls, contamination within the KHID is not known to pose a threat to human health or the environment.*** This KHID Area-wide EHE/EHMP does not supersede existing site/parcel-specific EHE/EHMPs or replace the need to develop site-specific construction EHMP documents for land development on specific parcels or for large construction projects.

HDOH recognizes that developing independent, site-specific EHE/EHMPs for smaller-scale projects within public and private sites, roadways, and common areas can lead to delays in construction because of the requirement that HDOH approve new plans prior to construction. In

addition, construction within roadways and common areas may encounter contamination that must be properly managed by construction and/or environmental contractors. This Area-wide EHE/EHMP can be used to deal with these contingencies. The Area-Wide EHE/EHMP can also be used by landowners, tenants, and utility companies to assist in developing individual EHE/EHMPs for large construction activities. The EHE/EHMP is therefore a vehicle to avoid costly delay in construction due to the discovery or suspicion of contaminated soil or groundwater.

Important: Complete site characterization must precede full-scale redevelopment (including construction of additional buildings or major building alterations) within areas of known or suspected contamination. If contamination is encountered, a release must be reported in accordance with HRS 128D and HAR 11-451 (see Section 9), and preparation of a site-specific construction EHE/EHMP must be carried out to address contamination within the site boundary.

Where responsibility for COC releases are clearly determined, the identified responsible party(s) (RPs) must conduct the site assessment and necessary cleanup actions.

This Area-wide EHE-EHMP presents guidance for surface or subsurface excavation work for utility construction/repair projects on sites that do not have an EHE/EHMP, and for work within roadways and common areas owned by Maui County, the State., or other public or private organizations.

### **3.0 AREA COVERED**

The area covered by this document is the KHID. The KHID lies north of Kaahumanu Avenue, north and east of Hana Highway, east of N. Puunene Avenue, north and west of Kanaha Pond, and includes the Wailuku-Kahului sewage treatment plant on the northwest border (see Figures 1 to 3). Kanaha Pond is a State Wildlife (Bird) Sanctuary, and protected wetland with endangered species (Hawaiian coot and Hawaiian stilt).

Technical approaches presented in this document can also be applied to other areas of Maui with similar COCs and lithology, and with non-drinking water utility.

#### **3.1 History and Background**

In 1863, the first warehouses were constructed in Kahului Bay and in 1879 the first landing was constructed. Intensive harbor development occurred during the early 1900s in response to the growing sugar industry and construction of the breakwater on the east side of the harbor. Kahului Railroad was built in 1879 to haul sugar cane from the fields to the mills and finished sugar to the harbor. A network of railroad tracks is documented for the KHID (USGS, 1954; Figure 2). Piers 1 and 2 were constructed in stages between 1921 and 1963. Pier 3 was constructed in 1979. Petroleum storage and distribution in the KHID has been documented since at least the 1920s. Evolution of Kahului Bay into a full-scale commercial harbor coincided with rebuilding of Kahului town after the Chinatown area was burnt to ground in 1900 to rid the town of plague carrying rats (Ikeda, 1985). The first bulk-sugar storage plant of the Hawaiian Islands started operating at the harbor in 1942. The Kahului power plant was built in 1948 and expanded in 1954 (MECO, 2016). Harbor dredging was conducted in 1961 and earlier to widen and deepen the harbor. The upland area of Kahului Harbor was constructed on fill material. This includes areas filled with material from dredging, bagasse and slurry from sugar mills, and soil excavated and imported from other areas of the island (Foote et al., 1972). Debris from the Kahului town fire may have also been used or incorporated as fill material.

For the past 100 years, the KHID area has been dominated by Port activities, docking and unloading of ships, warehousing, bulk petroleum storage with associated pipelines, heavy industry, support industries, petroleum, and other commercial/industrial activities. The area remains dominated by heavy industry and Port activities. Numerous petroleum releases occurred over the years, and contaminated fill was used to raise the ground level in some areas. Because of numerous petroleum releases over the years and use of fill in the KHID, site redevelopment activities in the area often encounter both PCS and fill. In addition, past chemical use for weed or rat control adjacent to structures, termite control around (or under) wooden building structures, or weed control on railroad rights-of-way, as well as the use of lead-based paints for building exteriors/interiors and storage tanks for many years may have resulted in contaminated surface soils in areas of the KHID.

## **4.0 HOW TO USE THIS DOCUMENT**

The intent of this document is to provide guidance when subsurface excavations encounter contaminated soil and groundwater at properties for which site-specific EHE/EHMPs have not been established, most typically for repair or small construction projects on utility rights-of-way or public rights-of-way. An EHE assesses hazards to human health and the environment from contaminants in soil and groundwater that exceed HDOH environmental action levels (EALs). An EHMP details how contaminants are to be managed when encountered or suspected during surface soil excavation in specific areas, or during subsurface soil excavation. Properties, roadways, and common areas within the KHID may be contaminated by various chemical constituents that are presently in the subsurface under soil, gravel, or hard surfaces such as asphalt or cement, and do not present a significant hazard unless the subsurface material is exposed during excavation work. In addition, exposed surface soils adjacent to current or former building and tank foundations (e.g. within a 3-foot perimeter or under foundations) or on former railroad rights-of-way may be contaminated by metals or pesticides due to past practices for control of weeds, rodents, or termites. Use of an EHE to identify contamination is presented in Sections 6 and 7. Basic components of an EHMP to manage contamination is found in Sections 8 through 17. Appendices A and B provide guidelines and forms for landowners, tenants, utility companies, and construction contractors responsible for implementation of the EHMP and proper management of contaminated media and reporting.

Note: In this document, the terms "encounter" and "release" are synonymous where applied to contamination exposed within a medium during surface or subsurface construction/excavation activity.

Following procedures specified in this document will help minimize the need to stop work when contamination is encountered or suspected. An environmental consultant or a supervisor knowledgeable in dealing with contaminated soil and groundwater should be on site during construction activities at sites with known or suspected contamination. The first person to notice gross contamination (visual or odor signs) is typically the backhoe or heavy equipment operator. This machine operator relays the discovery of the contamination to the designated on-site environmental consultant or supervisor, who then reports this information to the project director or property owner. The project director or property owner, or at their direction the environmental consultant, are then required to report a "release" to HDOH (see Section 9 and Appendix B.1) and ensure that management of contaminated soil and/or groundwater is then carried out in accordance with the EHE and EHMP. When exposed surface soils are planned to be excavated adjacent to building or tank foundation areas, or on former railroad rights-of-way, soil can be presumed contaminated and handled appropriately, or analyzed, if feasible, to determine the need for special handling.

The EHMP provides a range of options for dealing with contaminated soil and groundwater. The Guidelines for Landowners, Tenants, Utilities Companies and Construction Contractors (Appendix A) provides graphic and photographic examples of how to deal with contaminated soil and groundwater, and includes a Project Implementation Form. This form is a checklist based on HDOH experience with a wide range of events that can occur during construction.

Use of the forms in Appendix B is required to document proper handling of gross contamination discovered, provide record keeping for the project, and fulfill reporting requirements for HDOH. The forms should detail deviations from standard practices in the text, and explain how those deviations were protective of human health and the environment.

If subsurface excavations or surface excavations of soils adjacent to building or tank foundations or on former railroad rights-of-way are planned within the KHID:

1. Review the EHMP and identify known or suspect areas of contamination;
2. Read the EHE section of this document to become familiar with the potential hazards associated with contaminated soil and groundwater;
3. Prepare a brief, project-specific EHMP to outline specific management requirements as needed (e.g., contacts for reporting gross contamination, stockpile area locations, stormwater management, reuse and disposal options, etc.; see sections 9-17 and associated appendices);
4. Develop a site-specific Health and Safety Plan (HSP) (Section 10 and Appendix B.2).

During subsurface construction work, if contaminated media, inactive pipelines, or underground storage tanks (USTs) are encountered, take the following necessary steps as applicable to ensure proper handling of contaminated media:

- Report any contaminated soil, groundwater, or surface water encountered to the HEER Office (Section 9 and Appendix B.1). Petroleum contaminated soil and sheen or petroleum product on groundwater are usually the most obvious indicators of contamination, but unusual odors can also be an indicator.
- Follow the Construction Activities Release Response Plan (Section 11 and Appendix B.3).
- If inactive pipelines or USTs are encountered, follow the Inactive Pipeline and UST Removal Plan (Section 12 and Appendix B.4).
- If contaminated soil is encountered, follow the Soil Management Plan (Section 13 and Appendix B.5).
- If contaminated groundwater is encountered, follow the Groundwater Management Plan (Section 14 and Appendix B.6).
- If free product is encountered, follow the Free Product Management Plan (Section 15 and Appendix B.7).
- If elevated soil vapor is encountered, follow the Soil Vapor Management Plan (Section 16 and Appendix B.8).
- If contaminated soil and/or groundwater is in or could be in contact with stormwater, follow the Stormwater Management Plan (Section 17 and Appendix B.9).

Fill out the individual plans in Appendix B by following approved practices in the EHMP sections of the document (Sections 9 through 17). Record actions taken on the appropriate form(s), keep a copy for your records, and submit a copy to the HEER Office to fulfill reporting

requirements.

If responsible parties elect not to adhere to guidance in this document, then the subsurface activities must be halted upon the discovery of gross contamination and the contamination reported to the HEER Office Emergency Preparedness and Response Section. Recommencement of work should not be initiated until the site has been inspected by an On- Scene Coordinator or otherwise directed by the HEER Office. Failure to report a release could lead to fines of up to \$10,000 per day. Failure to properly handle soil and groundwater could lead to fines from HDOH departments or other agencies, including the HDOH Solid and Hazardous Waste Branch and Clean Water Branch as well as the U.S. Coast Guard.

**Disclaimer:**

***The procedures, information, guidelines, and sample hazard management plans referred to herein are not intended to be a comprehensive description of all rules, regulations, laws, and other requirements applicable to a construction project. They are only intended to provide general information and should not be used in place of appropriately qualified personnel. Each landowner, tenant, and construction contractor is responsible for complying with all applicable rules, regulations, laws, and other requirements, and for preparing their own hazard management plans for their own site-specific project.***

## **5.0 AREA GEOLOGY & HYDROGEOLOGY**

The KHID is located on the isthmus between the two volcanoes, West Maui and Haleakala which formed the island of Maui. Surface geology on the isthmus is dominated by Holocene and Pleistocene Alluvium (Sherrod et al., 2007) that eroded from lava formations of the two volcanoes. The alluvium comprises unconsolidated deposits of silt, sand, and gravel along stream and valley bottoms. Other surficial deposits, specifically at the coastline are dominantly calcareous sand and coral gravel strand-line deposits worked by surf. Soil covering the deposits are silty loams on alluvial fans and beach deposits developed from basaltic substrate, coral and seashells. In the KHID surface soils are described as fill land. Fill land includes areas filled with material from dredging, bagasse and slurry from sugar mills, and soil excavations (Foote et al., 1972). These materials were dumped and spread over marshes and low-lying areas along coastal flats. Debris from the 1900 Kahului (Chinatown area) fire may have been used or incorporated as fill material as well.

No active drinking water wells are present within the KHID. The area is seaward (makai) of the underground injection control (UIC) line (HDOH, 1983). Due to the close location to the ocean, groundwater is likely to be encountered during shallow subsurface activities at the KHID. Shallow groundwater is situated in a sedimentary, unconfined aquifer (Mink and Lau, 1990) and is not a drinking water source. Deeper groundwater is situated in an unconfined basaltic flank aquifer. Both aquifers have low salinity and are ecologically important. Previous environmental investigations at the KHID reported groundwater tables at depths ranging from 2 to 7 feet depth below the ground surface (HIES, 1997a, EnviroServices, 2014). A tidal study conducted revealed water table elevation oscillations in response to inland tidal forcing with little landward attenuation (HIES, 1997b).

## **6.0 ENVIRONMENTAL HAZARD EVALUATION**

### **6.1 Contaminants of Potential Concern**

The EHE consists of Sections 6 and 7.

Based on the site history of the industrial area, the following contaminants of potential concern (COPC) may be encountered in soil and groundwater during subsurface construction projects in the KHID due to industrial activities.

The COPCs are further broken down to petroleum related contaminants and non-petroleum related contaminants.

Petroleum related contaminants:

- Total petroleum hydrocarbons (TPH) as gasoline (TPH-g), as diesel (TPH-d), and as oil (TPH-o)
- Benzene, toluene, ethylbenzene, and xylenes (BTEX)
- Methyl tertiary butyl ether (MTBE)
- Halogenated volatile organic compounds (HVOC)

- Polycyclic aromatic hydrocarbons (PAH)
- Lead, Cadmium
- PCBs
- Light non-aqueous phase liquid (LNAPL)/free product (e.g., gasoline, diesel fuel, fuel oils, lubricating oils, benzene, toluene, xylenes)
- Methane

The PAHs identified in this area include acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[b]fluoranthene, benzo[a]pyrene, benzo[g,h,i]perylene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, 2-methylnaphthalene, naphthalene, phenanthrene, and pyrene.

Petroleum products are likely to be encountered near fuel storage areas (Figure 4) and in the vicinity of current or historical pipelines. The latter cross/crossed and run/ran alongside and underneath roads in the KHID (Figure 5).

Non-Petroleum related contaminants:

Treated wood in railway tracks and weeds/brush lining railway tracks might have been treated with metals and organochlorine pesticides. Pesticides such as pentachlorophenol and 2,4,5-T and Silvex can be sources of dioxins and furans. Dioxin/Furan contamination is anticipated to be very localized along railway lines (see railway lines in Figure 2). Organochlorine pesticides and arsenic are likely to be more widespread due to their (former) use for termite, weed, and rodent control around structures (see Figure 4 for potential locations around above ground storage tanks (ASTs) and pre-1988 buildings) and railway tracks (Figure 2). Lead was a significant constituent of some paints used on structures until at least 1978 (Figure 4).

Pesticide related contaminants

- Organochlorine Pesticides
- Dioxins/Furans
- Copper, Chromium, Arsenic (treated wood, former railroad rights-of-way)
- Arsenic (herbicide, rodenticide)

Fill, sewage, or paint related contaminants

- Metals (arsenic, cadmium, chromium, and lead).

Metal contamination associated with fill, sewage, or paint may be impacting at least portions of the KHID as a result of historic activities. Fill can be encountered in the area labeled "Fd" in the USDA soil map in Figure 6. Metal COCs that may have impacted the area include arsenic, cadmium, chromium, lead.

## **6.2 Gross Contamination**

Gross contamination refers to physical conditions that present odor, nuisance, and general pollution concerns. It includes free product, sheen, objectionable odors and tastes (in drinking water), and general resource degradation. At high levels, certain types of gross contamination can become a physical hazard (e.g., presence of flammable vapors or liquids, such as those associated with gasoline). Methane gases can be produced in

petroleum contaminated areas under anaerobic conditions, if it is under pressure, and mixes with oxygen in the right proportions. These conditions may be encountered during utility trench excavations or in utility vaults or buildings and can lead to flashbacks or explosions.

Contaminants in areas considered grossly contaminated are typically relatively immobile and of low toxicity to humans, though they are considered a nuisance or other hazard due to characteristics noted above. In the absence of ICs and/or engineered controls, future human populations and ecological receptors at a property could be exposed to gross contamination (e.g., free product, objectionable odors).

### **6.3 Direct Exposure**

Direct exposure hazards involve human contact with contaminated soil, groundwater, or soil vapor, either directly or indirectly. Direct contact can occur via incidental ingestion or dermal contact, or inhalation of dust in outdoor air. Indirect contact can occur via inhalation of soil vapors in outdoor air. In general, contaminants in areas considered to present a direct exposure hazard are relatively immobile and are potentially toxic to humans.

In the absence of cleanup measures or ICs, direct exposures to contaminants exceeding HDOH EALs may result in current or future human populations at the property being exposed to contaminated soil (including contaminated dust), groundwater, or soil vapor..

### **6.4 Soil Vapor Intrusion**

Vapor intrusion involves exposure of human populations to volatile chemical compounds that have entered a building or other enclosed structure from contaminated subsurface soil or contaminated groundwater. In general, contaminants in areas considered to present a vapor intrusion hazard are volatile chemicals that are toxic to humans via inhalation of vapors. These volatile chemicals can either be directly from the source material or volatiles produced by degradation of source materials (e.g., methane).

In the absence of cleanup measures or ICs, soil vapors at levels exceeding applicable HDOH EALs may result in current or future human users of the property to be exposed to volatile organic compound (VOC) vapors.

### **6.5 Leaching**

Leaching is movement of contaminants from vadose zone soils into underlying groundwater through chemical and physical mechanisms. The principal chemical mechanism is dissolution of contaminants into water (e.g., percolating rainwater, irrigation water) moving downward through the vadose zone. Physical mechanisms include (1) entrainment of contaminants bound in a colloid phase by water moving through the vadose zone, and (2) mass movement of contaminants through the vadose zone by infiltrating water. Most contaminants in areas considered to present a leaching hazard typically are mobile, volatile chemicals that are toxic to humans and may threaten ecological receptors at sites close to surface water bodies (including Kahului Harbor).

In the absence of cleanup measures or ICs, groundwater could be contaminated via leaching of contaminants from vadose zone soils by infiltrating groundwater.

## **6.6 Ecotoxicity**

### **6.6.1 Terrestrial Ecotoxicity**

Ecotoxicity refers to the capability of a contaminant to damage an ecological population, ecological community, or ecosystem. The ecotoxicity of a contaminant typically is based on its toxicity to one or more species, its persistence in the environment, and its ability to bioaccumulate. Flora and/or fauna in terrestrial (i.e., land) habitats may be affected.

Impacts on terrestrial flora and fauna can occur through exposure of populations to contaminated soil or discharge into Kanaha Pond. Kanaha Pond is a State Wildlife (Bird) Sanctuary, and protected wetland with endangered species (Hawaiian coot and Hawaiian stilt). Therefore, protection of this area from contamination is essential.

Most contaminants in areas considered to present a terrestrial eco-toxicity hazard are typically relatively immobile, non-volatile chemicals that are toxic to ecological receptors. Because no current or future sensitive ecological receptors are or will be present within the KHID, terrestrial eco-toxicity is not considered a concern and will not be evaluated further. In the absence of concerns regarding terrestrial flora or fauna in the area, terrestrial eco-toxicity is not considered an environmental hazard.

### **6.6.2 Aquatic Ecotoxicity**

Impacts on aquatic (i.e., freshwater or marine) flora and fauna can occur through discharge of contaminated groundwater into surface waters or via surface runoff into aquatic habitats. Most contaminants in areas considered to present an aquatic eco-toxicity hazard are typically mobile, volatile chemicals that are toxic to ecological receptors. In the absence of control measures or ICs, sensitive populations could be exposed to groundwater contaminants or soil contaminants entering surface water bodies such as the ocean, streams, or wetlands via migration through the Harbor wall, surface runoff, or other preferential pathway (e.g., current and future storm drains).

## **7.0 EXPOSURE PATHWAYS**

Identified potential exposure pathways to human and ecological receptors within the KHID include ingestion, inhalation, and dermal contact. These are described briefly below.

### **7.1 Ingestion**

Ingestion is oral intake of a solid or liquid material. Ingestion of contaminated soil or groundwater is a human health risk, ecological risk and a direct exposure hazard. Accidental ingestion of contaminated soil or groundwater by human receptors will be of concern during construction when contaminated soil and groundwater are encountered. Ingestion of contaminated soil, sediment, and groundwater is a concern for sensitive receptors at Kanaha Pond and Kahului Bay if contaminants are flushed into these areas via groundwater, storm drain or other potential preferential pathways, or surface water flow and are ingested directly or via the food chain.

### **7.2 Inhalation**

Inhalation is the act of drawing air, other gases, vapors, fumes, smoke, dust, or mists into the lungs. Inhalation of contaminated soil (as dust) is a human health risk and a direct exposure hazard. VOC vapors released from surface soil potentially pose an indirect exposure hazard.

During excavation and construction activities, contaminated subsurface soils may be disturbed, thus increasing potential for release of dust into the work area.

### **7.3 Dermal Contact**

Dermal contact is direct exposure of skin to solids, liquids, or gases. Dermal contact with contaminated soil, groundwater, or soil vapor is a direct exposure hazard. During excavation and construction activities, contaminated subsurface soils and groundwater are likely to be encountered, thus increasing potential for dermal contact. Dermal contact with contaminated soil, groundwater, and soil vapor (and contact with free product) may be of concern during construction activities when contaminated soil and groundwater are encountered.

Dermal contact with petroleum, contaminated soil, sediment, and groundwater is a concern for sensitive receptors at Kanaha Pond and Kahului Bay if petroleum or contaminants are flushed into these areas via groundwater, storm drain/preferential pathways, or surface water flow.

Methane gas, if produced and mixed with oxygen in the right proportion, could cause explosions and/or backflashes that could lead to dermal exposure and burns of the skin.

## **8.0 ENVIRONMENTAL HAZARD MANAGEMENT PLAN**

The EHMP consists of Sections 8 through 17.

This EHMP has been developed to mitigate potential exposure of utility and construction workers, other on-site workers, and the aquatic ecosystem (Kahului Harbor and Kanaha Pond) to COCs during excavation activities in the KHID. The EHMP consists of nine individual plans presented as Sections 9 through 17 as follows, each addressing potential sources of COCs (see Section 6.1) and methods of handling contaminated media:

- Section 9 - Release Reporting Plan
- Section 10 - Health and Safety Plan (HSP)
- Section 11 - Construction Activities Release Response Plan
- Section 12 - Inactive Petroleum Pipeline and UST Management Plan
- Section 13 - Soil Management Plan
- Section 14 - Groundwater Management Plan
- Section 15 - Free Product Management Plan
- Section 16 - Vapor Management Plan
- Section 17 - Stormwater Management Plan

The plans address engineering and administrative controls, as well as requirements for personal protective equipment (PPE) and a monitoring program. Prior to initiation of construction work, on-site workers need to be informed and educated about potential hazards posed by COCs and methods used to prevent exposure.

**Construction activities** in contaminated media are to be reported by filling out appropriate form(s) in **Appendix B** and submitting the forms to the HEER Office.

## **9.0 RELEASE REPORTING PLAN**

Encounters with obvious petroleum contaminated soil, debris-contaminated soils (DCS), or other identified contaminated soil or groundwater during surface or subsurface excavation activities is considered a release discovery and must be reported to the HEER Office according to the following procedures. This includes unexpected contamination not identified in this plan, "fresh" sources of release, and large releases that cannot be managed under this plan. Releases that occur during construction activities or releases due to contingencies should also be reported by following the directions in this Section.

The contractor must immediately notify the Hawaii State Emergency Response Commission (HSERC)/HEER Office in Honolulu) at 808-586-4249 or 808-247-2191 after work hours, and the Maui County Local Emergency Planning Committee (LEPC) (808-270-7900; LEPC contact currently Jeffrey Kihune) after discovery of contaminated soil and/or groundwater.

A release of oil within the KHID would be indicated by any of the following:

- Any amount of oil that causes a sheen on the groundwater in an excavation.

- Any free product that appears on groundwater.
- Visual or olfactory (odor) evidence of oil contamination in soil or groundwater.

If free product is encountered in soil or groundwater, report the release in accordance with this section. It is not necessary to stop work if you follow the procedure specified in this document.

Note that any release of oil to Kahului Harbor falls under the Oil Pollution Act (OPA) of 1992. Releases of Reportable Quantities (RQ) of CERCLA hazardous substances or oil that cause a sheen on water (e.g., ocean, stream, storm drain leading to ocean) must be reported to the National Response Center (1-800-424-8802) as a release to surface water. The National Response Center will then notify the Coast Guard.

### **9.1 Immediate Verbal Notification**

In the event of a release that causes an imminent threat to human health or the environment, the first call shall be to 9-1-1.

Immediate verbal notification shall be provided to the HSERC/HEER Office and the Maui County LEPC either via telephone or in person. HSERC/HEER Office will not accept initial notification via fax or e-mail. In addition, unless it is specifically stated that a verbal notification is being given to a HEER Office State On- scene Coordinator (SOSC) on the scene during an incident, mere presence of a HEER Office SOSC does not constitute a notification. When in doubt, the contractor should call and speak to a HEER Office SOSC. There is no penalty for reporting a release unnecessarily, but there are large penalties for not reporting a release (up to \$10,000 per day).

Notification should occur within 20 minutes of discovery of the release. Provide the following information to the extent known at the time of notification (do not delay notification if notification information regarding the release is incomplete):

- Name and telephone number of the caller
- Name and telephone number of a contact person (if different from the caller) who can provide timely information as the incident is occurring
- Name (trade and chemical) of the hazardous substance that has been released
- Approximate quantity of the hazardous substance that has been released
- Location of the incident
- Date and time of spill, release, or threatened release
- Description of what happened (source and cause of the release)
- Immediate danger or threat posed by the release
- Name, address, and telephone number of the RP or potentially responsible party (PRP)
- Measures taken or proposed to be taken in response to the release as of the time of notification
- Any known injuries or advice regarding medical attention necessary for exposed individuals
- Names and phone numbers of other federal, state, or local government agencies that have been notified of the release

- Any other information that may help emergency personnel respond to the incident.

Once the information has been conveyed, the caller will be provided with a HEER Office Incident Case Number, which shall be referenced in any future correspondence including the follow up written notification submittal—federal requirements under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and OPA.

### **9.2 Written Follow-Up Notification Contents**

Notification, including all information provided in the verbal notification described above and any other pertinent information not previously provided, shall also be made in writing to the HSERC/HEER Office. This written notification shall be sent to HSERC/HEER Office no later than thirty (30) days after initial discovery of a release. The written notification can be sent by certified mail, fax, hand-delivery, or another means that provides proof of delivery. Photos should be included to document the incident. A copy of the Written Follow-up Notification Form B.1, is in Appendix B.1. The HSERC/HEER Office mailing address is:

Attn: EPCR Data Manager  
State of Hawai'i  
Department of Health  
Hazard Evaluation and Emergency Response Office  
2385 Waimano Home Road, Suite 100  
Pearl City, Hawaii 96782

### **9.3 Recordkeeping Requirements for Encountered Contamination**

Fill out Form B.1 for your records and send a copy to the HEER Office at the address noted above.

## **10.0 HEALTH AND SAFETY PLAN (HSP)**

Provide a HSP for workers performing excavations who will encounter or potentially encounter the COCs and hazards described in Sections 6 and 7 (EHE). The HSP should generally include the following:

- Requirements that workers be trained in dealing with petroleum compounds, whether occurring as free product, soil residues, contaminated groundwater, or as soil vapor, and protection from other chemical substances and hazards that may be encountered, including, but not limited to, use of appropriate PPE
- General site control and safety requirements such as site access controls, information on emergency medical facilities, and good worker practices.
- Description of present and potential hazards, including COCs, action levels, and applicable actions (see Appendix B, Form B.2, Table 1 for oil hazards example and lead) .
- Emergency contact information.

A HSP is not a substitute for Hawai'i Occupational Safety and Health Division (HIOSH) requirements. Employers of construction workers/utility workers must comply with all applicable OSHA/HIOSH requirements. See Appendix B, form B.2 for additional guidance.

## **11.0 CONSTRUCTION ACTIVITIES RELEASE RESPONSE PLAN**

Parties should operate under a site-specific release response plan. The sample Construction Activities Release Response Plan provided in Appendix B.3 can be used as a starting point.

On-site workers need to minimize probability of releases from excavations during construction. They should familiarize themselves with site conditions and potential presence of petroleum in the subsurface. An HSP and soil and groundwater management plans should be prepared.

If uncontrolled releases of petroleum, DCS or petroleum-impacted soil, and petroleum- and/or metals-impacted groundwater could occur, human health concerns would include possible direct contact, exposure to fire hazards, and disruptions to site activities, including possibly local traffic. Environmental impacts of concern would be discharges of metals-contaminated groundwater, petroleum contamination in soil or groundwater, or sheen to harbor waters either directly or via a storm drain or other type of surface water conveyance.

A response plan to deal with uncontrolled releases should be available to the construction workers and other parties. It should include descriptions of the types of releases, a list of names and contact information regarding the release response team and the parties that must be notified, a list of available response equipment, descriptions of response procedures, and an outline of release reporting requirements.

## **12.0 INACTIVE PETROLEUM PIPELINE AND UST MANAGEMENT PLAN**

This section provides guidance on how to prepare for and manage belowground inactive petroleum pipelines or USTs located or exposed during excavation or other subsurface activities.

### **12.1 Preparatory Work**

Prior to performing any subsurface work, parties should review Figures 4 and 5, historical documents and plans and contact the Hawaii One Call Center at 1-866-423-7287 or 811 for information on inactive pipelines, utilities, or USTs identified to date. Hawaii State Law requires that excavators provide at least 5 working days' notice prior to any subsurface excavation. However, accuracy and completeness of this information are not warranted or guaranteed because historical pipeline information has not been well documented. In some instances, previously unknown inactive pipelines or USTs may be discovered for the first time during excavation or other subsurface activities.

Notify the HEER Office if any inactive pipelines or USTs are encountered.

### **12.2 General**

Parties should manage soil from the excavation or other subsurface activities in accordance with the soil management plan Section 13. If an inactive buried suspect fuel pipeline is discovered, refer to the known/suspect fuel pipeline map in this EHE/EHMP, check with landowners/operators in the area, and contact the HEER Office to discuss status of the line (i.e. do we know if the pipeline has been previously identified, drained of any product, and may be left in place?) and, as necessary, discuss options to check or drain and remove any product (and/or the pipe segment) from the required excavation. If a UST is discovered, it

must be removed as per HEER Office or Solid and Hazardous Waste Branch requirements.

### **12.3 Pipeline Tapping, Draining, and Removal**

If a pipeline or UST is discovered, attempt to identify the nature of the pipeline or UST, and to confirm that it is not active. Prior to any excavation work, confirm that any pipeline segments to be removed are inactive by contacting the HEER Office or others, including Hawaii One Call Center and the appropriate utility company or nearby petroleum terminal operator if one can be identified. Parties undertaking their own pipeline or UST removal should prepare and use a site-specific plan that incorporates the procedures described in this section. The site-specific plan can be based on the sample Inactive Pipeline or UST Removal Plan provided in Appendix B.4.

Do not attempt to remove USTs or pipeline segments without first draining the UST or pipeline segment or determining that it is empty. To the extent practicable, any drainable fluids must be drained before cutting the pipeline or UST. Petroleum fluids recovered must be representatively sampled and tested to determine how they can be recycled or disposed of in full accordance with Title 11, 58.1 and Chapters 260-279 of HAR and any other state and federal regulation governing this activity.

Only personnel knowledgeable and trained in pipeline and UST removal should cut, drain, and remove USTs and pipelines. Remove the required pipeline segments by cutting. If an explosion hazard is possible, cutting should be with a wet saw or some other non-sparking tool. If the pipelines are suspected to be asbestos-covered, a qualified contractor must direct this work and recommend appropriate procedures and PPE, including procedures for removal. Ensure that the area below and adjacent to cutting locations is covered with plastic sheeting and absorbent material. In addition, place a catch basin directly beneath the cutting location. Because pipelines may be under pressure, a vacuum truck should be on site during cutting to recover any released fluids. Pipeline fluids collected in the catch basin should be pumped out.

Cut-off ends of remaining pipeline segments must be appropriately sealed, or otherwise closed, to prevent any potential leakage. Suitable seals include cement plugs, blind flanges, or other methods not involving hot welding. Welding is not appropriate due to the potentially explosive nature of petroleum and its associated vapors.

### **12.4 Removed UST and Pipe Handling**

In many cases, sections of removed pipeline and USTs contain heavy viscous petroleum products that appear to be immobile. However, once the pipes and product heat up on the surface, the product can liquefy and cause a release. If sections of waste pipe or USTs are stored on site prior to disposal, the area should be lined with plastic and bermed to contain any petroleum that may mobilize due to atmospheric heating. All removed pipelines and USTs should be properly disposed of or recycled.

### **12.5 Other Sub-Surface Utilities**

Other subsurface utilities such as cable, water and sewage lines, and electrical lines may also be discovered during excavations. The nature of the utilities and whether they are presently active should be determined prior to removal. The One Call Center at 1-866-423-7287 (or 811) can help identify the nature and origin of active subsurface utilities.

## **12.6 Record Keeping**

Parties should record field observations that include the location of the UST and pipeline relative to fixed landmarks (including Global Positioning System coordinates); depth, diameter, and type of pipeline and any other distinguishing features; type of petroleum; beginning and ending fluid levels; volumes of each type of fluid removed (e.g., water and petroleum); flow rates; direction of flow; and any other information pertinent to the UST or pipeline contents. Provide records of field observations with detailed photographs to the HEER Office, and, if requested, to the landowners. Major deviations from the EHE/EHMP should be approved by HDOH prior to implementation. Minor deviations from the EHE/EHMP are acceptable based on field discretion. All deviations should be explained and documented; complete Appendix B.4 for your records and send a copy to HDOH.

## **13.0 SOIL MANAGEMENT PLAN**

The purpose of the soil management plan is to ensure proper handling and management of PCS, DCS, and pesticide-related contamination in soil that could be encountered during future construction. The principal hazards posed by these contaminants in soil are direct exposure, gross contamination, leaching to groundwater, and/or vapor intrusion into existing or future buildings. Contaminated soil cannot be re-used off site prior to laboratory testing and confirmation that testing results meet the most restrictive EALs (for unrestricted use, within 150 meters of a water body over a drinking water resource), or soils are determined to be potentially contaminated and need to be handled with certain precautions.

PCS falls into two categories: (1) moderately contaminated soil with slight petroleum odors and exhibiting staining, and (2) heavily contaminated soil with a very strong petroleum odor, very dark staining, and potentially mobile free product. From an analytical standpoint, heavily contaminated soil is defined as soil with total TPH concentration exceeding 5,000 milligrams per kilogram (mg/kg) (subsurface gross contamination). Gasoline and diesel free product in soil could be mobile at concentrations as low as 5,000 mg/kg. Although somewhat arbitrary, this serves as a useful tool for distinguishing heavily contaminated soil from less contaminated soil. Test to determine if soil exceeds 5,000 mg/kg TPH include laboratory analysis and field tests such as the glove test and the paper towel test (also see HEER Office TGM ([www.hawaiidoh.org](http://www.hawaiidoh.org)) Section 8.4.2 on field screening options for petroleum contamination in soils). The glove test consists of squeezing a handful of soil in a gloved hand. If oil droplets remain on the glove, assume the soil exceeds the 5,000 mg/kg threshold and do not reuse the soil on site. The paper towel test consists of squeezing a handful of soil in a paper towel. If droplets of oil appear on the paper towel, assume the soil exceeds the 5,000 mg/kg threshold and do not reuse the soil on site. PCS exceeding 5,000 mg/kg should be excavated and disposed of in an approved landfill, when feasible. The soil used in the field tests should be representative of the soil in the trench or stockpile, meaning a multi-increment (MI) sample should be collected in accordance with the HEER TGM and fill guidance. If the soil contains free product, it should be handled as per Section 15 Free Product Management Plan. Anticipated tasks associated with managing excavated soil are summarized as follows:

- Notify the HDOH HEER Office at least 7 days prior to planned excavation activities that could disturb PCS, DCS, sewage-related, or pesticide-related contaminated soil (includes surface soils along former railroad tracks or exposed soils adjacent to building or tank foundations).
- If PCS or DCS, sewage related soil, bagasse, railroad lines or exposed soils along foundation areas are observed during excavation activities, provide field oversight to

direct the excavated soil to the appropriate stockpile, and to specify appropriate use of excavated soils as on-site backfill versus off-site disposal; and provide health and safety guidance related to potential exposure of workers to COCs.

- Oil-impacted stockpiled soils can also be placed in containers (such as 20-yard steel roll-off bins, super sacks, tri-wall boxes, or drums). Drain any liquid-phase oil or fuel product associated with the soil prior to stockpiling. Remove and properly dispose of any oil observed in the excavation.
- Soil must be stockpiled on site near the project area prior to reuse.
- Create soil stockpiles by laying down 10-millimeter (mil) black plastic (polyethylene) sheeting within a designated on-site soil stockpiling area. PCS, DCS, and surface soils from railroad rights-of-way or building and tank foundation areas should be in separate stockpiles. Underlay edges of the plastic sheeting with bermed soil. Ensure that the height of the bermed soil will be sufficient to prevent stormwater runoff from breaching it. Place excavated soil inside the bermed area on top of the plastic sheeting. At the end of each day or in the event of a significant rain event, cover the stockpiles with plastic sheeting. Secure the plastic covering with sufficient ballast (e.g., sandbags, boulders, concrete blocks) so that it will not be dislodged by strong winds.
- Segregate excavated contaminated from clean soil, and stockpile the contaminated soil on plastic sheeting. Cover both the clean soil and PCS stockpile(s) at the end of each day with plastic sheeting to mitigate potential dust concerns and to prevent contact with rainwater and stormwater runoff. See Appendix A for additional details.
- If soil is classified as moderately contaminated by petroleum compounds due to observed staining or odors (i.e., estimated TPH <5,000 mg/kg), the soil can be used as backfill on site if more than 100 feet from the Harbor wall and it is placed more than one foot above the tidally influenced high water level. Remove floating free product to the extent practicable prior to backfilling any excavation
- If PCS is classified as heavily contaminated (i.e., estimated TPH >5000 mg/kg), it must be profiled and disposed of at an appropriate landfill site.
- In determining whether excavated soil can be used for on-site backfill, consider also its structural suitability, although this is not a requirement under HDOH guidance. The soil could be considered not structurally suitable if it cannot support foundation loading of a structure intended to be placed over backfilled and compacted soil, or if it does not meet the technical specifications for backfilling of utility trenches, or if it does not meet other design or constructability requirements. If structurally suitable, DCS should be given preference for re-interment in the excavation.
- If PCS- or DCS-contaminated soil is to be used in roadways, the soil must also meet roadway design criteria of the County and Hawaii Department of Transportation (HDOT).
- Soil not structurally suitable for reuse should be reused at other areas of the site, or should be profiled and taken off site for appropriate disposal in a landfill.
- Place PCS, DCS, or surface soils from railroad rights-of-way or building and tank foundation areas used as backfill on site a minimum of 1 foot bgs above the tidally influenced high water table (to prevent leaching), cover it with clean soil, and as required, cap with asphalt or cement.
- If there is no place to stockpile PCS, DCS, or other suspect contaminated soil, profile it and haul it to a landfill for disposal. Stockpiling more than 1 cubic yard (cy) of PCS at an

off-site location requires a solid waste management permit from the Solid and Hazardous Waste Branch (see HRS, 2011).

- Decontaminate equipment used in contaminated areas before using it in non-contaminated areas. All liquid and solid waste resulting from on-site decontamination must be collected and appropriately disposed of at a certified landfill site (See TGM 5.10.)

### **13.2 Soil Sampling and Testing for Reuse or Disposal**

Sample collection procedures should follow HDOH HEER's August 2017 "Interim Final Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan" (HDOH, 2017; or as updated), and HDOH HEER's October 2017 "Guidance for Stockpile Characterization and the Evaluation of Imported and Exported Fill Material (HDOH, 2017). For unrestricted relocation, the general sample collection procedures are as follows:

- Collect one multi-increment sample for every 20 to 100 cubic yards (CY) of affected soil (staged in stockpiles of 20-100 CY ).
- Each multi-increment sample should consist of 50-100 soil increments collected in a random, stratified manner from the entire volume of soil (20-100 CY) for which the sample will represent (each sample for volatile analysis should at least contain 300 gram (g) of soil in methanol; each sample for non-volatiles should be comprised of at least 1-2 kg soil mass).
- Collect soil increments of the same relative volume/weight (for example, each increment consisting of a 50-gram soil aliquot or similar).
- Use appropriate sample collection methodology to preserve the COPCs to be tested.
- Label samples, place in designated sample container, and preserve in accordance with USEPA and HDOH TGM procedures.
- Complete chain-of-custody documentation.

If a soil is presumed to be contaminated, the testing of that soil will depend on the suspected contaminants.

Before relocation or disposal, soil must be tested to determine whether it contains COPCs above the HDOH Tier 1 EALs for unrestricted use and whether it is a hazardous waste under RCRA (Resource Conservation and Recovery Act). If a soil is presumed to be contaminated, the testing of that soil will be depend on the suspected contaminants. Collecting a representative sample of soil or bulk C&D waste is crucial to characterizing samples. If a sample is not representative, there are legal and environmental consequences (see HEER TGM Section 4.0).

**Re-Use Testing.** This testing involves field tests or laboratory tests for sewage-related, pesticide-related, PCS- and DCS-related COCs, and for other potentially relevant COCs (Section 6.1). Results of this testing are referenced to guide soil re-use, as described above. Note that this testing can occur either on stockpiled, excavated soils or on in-situ soils during pre-excavation field investigations.

**Landfill Profile Testing.** This testing involves determining suitability of the soil for use as daily cover or for disposal as a waste at a landfill. Soils not to be reused (backfilled), as described above, can generally be disposed of in a suitable landfill. Disposal of these soils would be subject to Landfill Profile Testing. Information regarding chemical analysis and disposal options (i.e., as cover or as waste) should be obtained from the relevant landfill. Soils that meet the

landfill's standards for interim/daily cover or longer term, intermediate cover should be used as such. The former typically requires that the soil meet HDOH EALs for commercial/industrial land use, while the latter typically requires that the soil meet EALs for unrestricted reuse. Costs for disposal of these soils are typically lower than for disposal of more contaminated soil that cannot be used for cover. Soils not suitable for use as cover or other uses at the landfill must be disposed of as waste. Soil testing to pre-profile the soil for off-site disposal can also occur as part of the pre-excavation field investigations.

**Stockpile Testing.** Recommendations for sampling soil stockpiles are provided in the HDOH guidance "Guidance for Stockpile Sampling and *Evaluation of Imported and Exported Fill Material* (HDOH 2017)". Qualified environmental professional should direct soil sample collection and testing methods in accordance with the most current TGM guidelines. Parties undertaking excavation are responsible for employing a qualified environmental professional and complying with the latest HEER TGM guidelines.

#### **Making a Hazardous Waste Determination.**

To determine whether soil is a hazardous waste, the generator must make a Hazardous Waste Determination in accordance with Hawai'i Administrative Rules (HAR) §11-262-11. Hazardous waste determination is a step-by-step process. First determine if the soil is considered a waste. For site under HEER oversight soil generally becomes a waste if it leaves the site and has concentrations exceeding the most restrictive Tier 1 EAL. If it is deemed a waste based on this criteria, determine if it is specifically exempted by HAR §11-261-4. Wastes that are not specifically excluded are further assessed as follows:

- Listed Wastes: Specifically listed as a hazardous waste in HAR chapter 11-261 subchapter D;
- Testing - Testing the waste for toxicity, ignitability, corrosivity, or reactivity according to the methods set forth in HAR chapter 11-261 subchapter C; and/or
- Knowledge (e.g., known flammable solvent).

The proper relocation or disposal of the soil depends on the category in which the soils fall. Soils and Fill material may fall into one of the following categories:

- 1) Unrestricted Use
- 2) Contaminated/Restricted Use
- 3) Hazardous Waste

#### **Unrestricted Use**

Unrestricted use soils are soils that do not contain COPCs above the HDOH Tier 1 EALs for unrestricted use, where sites are located within 150 meters (approximately 500 feet) from surface water and over a drinking water source (most restrictive EAL). After background information has been gathered regarding the potential for contamination in an area and testing has demonstrated that soil does not contain COPCs concentrations above the most restrictive EAL, unrestricted use soil can be reused within the Work Area or offsite.

Sampling will be required before reuse in sensitive areas. Further guidance on the use of non-regulated soil as fill is provided in "Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material" (HDOH, 2017).

#### **Contaminated/Restricted Use.**

If the soil contains any contaminants above the most restrictive Tier 1 EALs or the Tier 1 EALs for commercial/industrial use, but it is not a hazardous waste, it is considered contaminated and can be reused under specified circumstances, but only with the approval of the HEER office and the Hazardous Waste section. If the soil only exceeds the unrestricted EALs, and not the commercial/industrial EALs, it can be used within the Work Area and in some instances with prior approval, treated until the contaminant concentrations are below the Tier 1 EALs for unrestricted use within 150 meters (approximately 500 feet) from surface water and over a drinking water source, or disposed at a permitted landfill. If the contaminant concentrations exceed both unrestricted and commercial/industrial EALs, the soil can be used within the Work Area (if not grossly contaminated), treated to reduce concentrations to below Tier 1 EALs, or disposed at a permitted landfill. Mixing soils containing COPCs with soils that do not contain COPCs to reduce concentrations violates state and federal law.

Treatment of soil will require additional coordination with HDOH HEER and SHWB to identify permitting requirements, treatment methods and locations, best management practices at treatment locations, follow up testing, and other pertinent requirements.

#### **Hazardous Waste**

Hazardous waste regulations most commonly apply to soil that fails a leaching test criteria for disposal in a municipal landfill, referred to as the Toxicity Characteristics Leaching Procedure (TCLP). Material that meets the regulatory classification as "hazardous waste" must be disposed of at a permitted hazardous waste treatment, storage or disposal facility. There are currently no hazardous waste landfills in Hawai'i. Therefore, soil classifiable as hazardous waste must be disposed of at a regulated facility on the mainland. Generators of hazardous waste are subject to additional regulations and must notify the Hazardous Waste section of their status. Further information can be found at <http://health.hawaii.gov/shwb/hazwaste/> and by calling the Solid and Hazardous Waste Branch (Hazardous Waste section) at 808-586-4226.

### **13.3 Soil Contingency Plan**

The Soil Contingency Plan provides guidelines for actions to be taken when engineering controls, administrative controls, or PPE fail, and risk of exposure to contaminated soil is imminent.

#### **13.3.1 Open Excavations**

During construction activities, subsurface contaminated soil could be exposed in excavations for utility corridors or other subsurface structures. If contaminated soil is encountered, more contaminated than anticipated, and could pose a direct exposure hazard to on-site workers, the following actions may be taken:

- If site conditions warrant, PPE will be upgraded from Level D to Level C. Respiratory protection and vapor monitoring are described in the Vapor Management Plan (Section 9.4) and the Site-Specific HSP.
- If warranted, contaminated soil will be excavated and properly stockpiled prior to continuance of work. The stockpiling procedures are described in the Soil Management Plan (Section 13.1).

- If airborne dust generated from contaminated soil becomes significant, additional dust control measures will be implemented. This may require more frequent use of or an increased volume of applied water. Also, the dust screen cloth on the site boundary fence will be inspected for damage and repaired as necessary.

### **13.3.2 Soil Stockpiles**

During construction activities or long-term exposure to sunlight, the plastic sheeting used to berm and cover soil stockpiles could be damaged through long-term exposure to sunlight, by strong winds or punctured by debris or other sharp objects. Such damage could allow on-site workers to come into contact with PCS. To prevent that from occurring, the following actions may be taken:

- Damaged sections of plastic sheeting will be replaced promptly.
- Damaged sections of the berm will be repaired promptly.

### **13.4 Engineering and Administrative Controls**

Dust and vapor control methods may be necessary during construction-related work in which contaminated soil is encountered. These controls include use of plastic sheeting on soil stockpiles, vapor control using vapor suppressants, and dust suppression using applied water.

It is anticipated that Level D PPE will be appropriate for workers during future construction. Should site conditions warrant, the PPE will be upgraded to Level C. Ultimately, the contractor is responsible for monitoring site conditions and supplying site workers with appropriate training and PPE, in accordance with 29 *Code of Federal Regulations* (CFR) 1910 and 29 CFR 1926.

### **13.5 Periodic Inspections and Preventive Maintenance**

A key component of the plan is routine inspections. Accordingly, all locations where exposure of on-site workers to PCS or DCS is possible (e.g., open excavations, soil stockpiles) will be inspected at a frequency appropriate for access and activities carried out on the site (e.g., daily for sites used or accessed on a daily basis). The site should also be inspected prior to and following adverse weather conditions that could disrupt control measures (e.g., heavy winds or rains). In addition, daily inspections of the security fence, locked gates, and dust screen will occur during construction and excavation activities. Replacement and repair of damaged or inadequate chain link fences, dust screens, stormwater control measures, stockpile covers, berms, etc., will occur immediately after discovery. PPE will be inspected for damage and defects before personnel don the PPE.

### **13.6 Record Keeping and Reporting**

Detailed records will be maintained of workspace monitoring, PCS excavation, soil stockpiling and testing, soil testing, soil reuse and disposal, inspections, and maintenance and response activities. Any known or suspected contaminated soils (e.g. either PCS, DCS, metals, pesticides, or other) needs to be well documented via location on a map using GPS coordinates or physical measurements to nearby landmarks, and provided to the HEER Office. Significant issues also need to be communicated to site workers promptly. Major deviations from this EHE/EHMP should be approved by HDOH prior to implementation. Minor deviations from the EHE/EHMP are acceptable based on field discretion. All deviations should be explained and

documented; complete Appendix B.5 for your records and send a copy to HDOH.

## **14.0 GROUNDWATER MANAGEMENT PLAN**

The purpose of the groundwater management plan is to ensure proper handling and management of contaminated groundwater that could be encountered during construction. Principal hazards posed by contaminated groundwater are gross contamination and aquatic ecotoxicity.

Shallow groundwater in the area is typically encountered at approximately 2 to 7 feet bgs. Results of previous site characterizations indicate that groundwater in the area has been impacted by COCs. Groundwater contamination may be apparent through visual evidence and olfactory detection. Contaminated groundwater may have a measurable thickness of free product, emit petroleum hydrocarbon odor, or exhibit sheen. It is unlikely that residual groundwater contamination is at a level warranting extensive response actions or disposal; however and importantly, additional site characterization may be required depending on conditions encountered in the field.

### **14.1 Groundwater Management**

If contaminated groundwater is encountered during excavation activities, appropriate response actions must be taken that conform to HDOH and EPA regulatory guidelines. These response actions include ensuring that workers have the appropriate level of PPE and that free product, sheen, and groundwater are managed properly if dewatering is conducted. Anticipated tasks associated with managing groundwater are summarized as follows:

- If groundwater is encountered during construction excavation activities, provide field oversight to identify contaminated groundwater, direct appropriate dewatering if this is conducted, manage disposal of groundwater if this is necessary, and provide health and safety guidance related to potential exposure of workers to COCs.
- If free product is encountered during construction excavation activities, manage free product as described in Section 15.
- Dewatering is not generally anticipated during future utility-related work. However, if dewatering becomes necessary, water should be pumped into on-site infiltration pits or holding tanks, and should not be allowed to discharge off site.
- If off-site discharge is necessary, a Notice of Intent (NOI) for National Pollutant Discharge Elimination System (NPDES) coverage will be submitted to HDOH Clean Water Branch. The NOI will include a dewatering plan. Prior to discharge into a storm sewer or aquatic habitat, the water will be tested and, if necessary, treated to address both free product and dissolved-phase contamination. Water with contaminant concentrations exceeding EALs for chronic aquatic toxicity will not be discharged off site.
- Generation of groundwater requiring disposal is not generally anticipated during future utility-related work. However, if such disposal becomes necessary, the groundwater will be stored on site in appropriate containers (e.g., 55-gallon drums), sampled, analyzed for the appropriate COCs to determine disposal options, and disposed of properly. For additional details, see the Guidelines in Appendix A.

## **14.2 Vapor Control**

Vapor control methods (e.g., vapor suppressants) may be necessary during construction-related work in which contaminated groundwater is encountered. It is anticipated that Level D PPE will generally be appropriate for workers. Should site conditions warrant, the PPE will be upgraded to Level C. Respiratory protection and vapor monitoring are described in the Vapor Management Plan (Section 16.0).

## **14.3 Vector Control**

If groundwater is filling open excavation it has the potential to attract disease vectors that will breed in standing water. Vectors can carry viruses and propagate diseases such as Dengue Fever and the Zika virus. Vector control methods (e.g., agitating standing water, addition of larvicides) may be necessary when excavations have standing water.

## **14.4 Groundwater Contingency Plan**

The Groundwater Contingency Plan provides guidelines for actions to be taken when engineering controls, administrative controls, or PPE fail, and risk of exposure to contaminated groundwater is imminent.

### **14.4.1 Open Excavations**

During construction activities, contaminated groundwater could be exposed in excavations for utility corridors or other subsurface structures. If contaminated groundwater is encountered that could pose a direct exposure hazard to on-site workers, the following actions may be taken:

- If site conditions warrant, PPE will be upgraded from Level D to Level C. Respiratory protection and vapor monitoring are described in the Vapor Management Plan (Section 9.4) and Site-Specific HSP.
- If appropriate, the excavation will be backfilled using appropriate materials (e.g., gravel, select borrow) to a level above the groundwater prior to continuance of work.
- If it becomes necessary to remove contaminated groundwater from the excavation, the groundwater will be stored on site in appropriate containers (e.g., 55-gallon drums), sampled, analyzed for the appropriate COCs to determine disposal options, and disposed of properly.

### **14.4.2 Dewatering Pits**

Dewatering is not generally anticipated during future utility work. However, if dewatering is conducted, and contaminated dewatering water is encountered that could pose a direct exposure hazard to on-site workers, the following actions may be taken:

- If site conditions warrant, PPE will be upgraded from Level D to Level C. Respiratory protection and vapor monitoring are described in the Vapor Management Plan (Section 9.4).
- If appropriate, dewatering will be discontinued until such time that contaminants at the source of the dewatering (i.e., an open excavation) can be mitigated.
- If it becomes necessary to discharge contaminated groundwater from a dewatering pit, such discharge will fully comply with the conditions of any required NPDES permit.

### **14.5 Periodic Inspections and Preventive Maintenance**

A key component of the plan is routine inspections. Accordingly, all locations where exposure of on-site workers to contaminated groundwater is possible (e.g., open excavations, dewatering pits) will be inspected daily.

If groundwater requiring disposal is generated, the storage containers will be inspected regularly for rust and other signs of deterioration while they remain on site, pending disposal. If on-site dewatering is conducted, the infiltration pit(s) will be inspected daily to ensure that no accidental discharge occurs.

### **14.6 Record Keeping and Reporting**

Detailed records will be maintained of workspace monitoring, dewatering (if performed), groundwater disposal (if conducted), and response activities. The location of any remaining sheens on groundwater, free product, or dissolved contaminants in groundwater above applicable HDOH EALs needs to be well documented on a map using GPS coordinates or physical measurements to nearby landmarks, and provided to the HEER Office. Significant issues need to be communicated to site workers on a regular basis. Major deviations from the EHE/EHMP should be approved by HDOH prior to implementation. Minor deviations from the EHE/EHMP are acceptable based on field discretion. All deviations should be explained and documented; complete Appendix B.6 for your records and send a copy to HDOH.

## **15.0 FREE PRODUCT MANAGEMENT PLAN**

The purpose of the Free Product Management Plan is to ensure proper handling and management of free product encountered during subsurface construction activities. The principal hazards posed by free product are direct exposure and gross contamination. Additional related hazards include flammable/explosive vapors.

Free product within the KHID is likely confined to the general area of the capillary fringe of the water table, which is approximately 2 to 7 feet bgs. Free product often occurs as (1) free-flowing, black, viscous product; (2) a thin layer of black, viscous product; (3) a discontinuous layer of product; and (4) a petroleum hydrocarbon sheen. The free product is readily apparent visually and via olfactory detection.

Distribution of free product within the KHID has not been completely defined, and free product could be encountered during any subsurface activities approaching the shallow groundwater level. Free product recovery will be required where possible and practicable.

### **15.1 Free Product Management**

If excavation occurs to the depth of the capillary fringe of the water table at approximately 2 to 7 feet bgs, free product may be encountered. However, anticipated problems associated with free product can be mitigated by performing the tasks described in this plan.

If free product is encountered during excavation, appropriate response actions will be taken that conform to HDOH and EPA regulatory guidelines. These response actions include ensuring that workers have the appropriate level of PPE, and that free product is managed properly. The anticipated tasks associated with managing free product are summarized as follows:

- If free product is encountered during construction excavation activities, field oversight should be provided to identify free product; to recover the product to the extent practicable using absorbent pads/booms, oil-water separators, and/or vacuum trucks to skim free product off the water table; and to provide health and safety guidance related to potential exposure of workers to the product. Following completion of product recovery, the absorbents, PPE, and plastic sheeting will be allowed to dry prior to mandatory proper disposal.
- If dewatering becomes necessary and free product is floating on the water in the on-site infiltration pit(s), the product will be recovered to the extent practicable, and any absorbent material such as absorbent pads will be disposed of properly.
- If free product produces vapors that could adversely affect air quality during construction activities in the area, follow the Vapor Management Plan Section 16.0.

## **15.2 Engineering and Administrative Controls**

Generation of explosive vapors from free product is a slight possibility. Methane or other degradation products may be encountered near petroleum source zones. If generated, such vapors increase risk of fire and/or explosion. Accordingly, if free product is encountered, the lower explosive limit (LEL) of the workspace atmosphere will be monitored using a combustible gas indicator.

Vapor control methods (e.g., vapor suppressants) may be necessary during construction-related work in which free product is encountered. It is anticipated that Level D PPE will be appropriate for workers. If site conditions warrant, the PPE will be upgraded to Level C. Respiratory protection and vapor monitoring are described in the Vapor Management Plan (Section 16.2).

## **15.3 Periodic Inspections and Preventive Maintenance**

A key component of the plan is routine inspections. Accordingly, all locations where exposure of on-site workers to free product is possible (e.g., open excavations, dewatering pits, hoses, pumps, tanks, or spills from any of these sources) will be inspected daily or more frequently as appropriate. In addition, daily inspections of the security fence and locked gates will occur during construction activities where free product is encountered. PPE will be inspected for damage and defects before personnel don the PPE. If respiratory protection is required, a daily positive pressure respirator fit test will be conducted at the start of each day, and filter cartridges will be replaced regularly as described in the site-specific HSP.

Excavations (including infiltration pit[s] if on-site dewatering is conducted) will be inspected daily for presence of free product on the water. If free product is present, removal of it will be attempted using absorbent pads, skimming with a vacuum truck, or applying other means such as processing through an oil-water separator.

## **15.4 Record Keeping and Reporting**

Detailed records will be maintained of workspace monitoring (including LEL measurements), product recovery, and response activities. Significant issues will be communicated to site workers on a regular basis. Locations of free product discovery need to be mapped using GPS coordinates or physical measurements to nearby landmarks and reported to the HEER Office. Major deviations from the EHE/EHMP should be approved by HDOH prior to implementation. Minor deviations from the EHE/EHMP are acceptable based on field discretion. All deviations should be explained and documented; complete Appendix B.7 for your records and send a copy to HDOH.

## **15.5 Free Product Contingency Plan**

The Free Product Contingency Plan provides guidelines for actions to be taken when engineering controls, administrative controls, or PPE fail, and risk of exposure to free product is imminent.

### **15.5.1 Open Excavations**

During construction activities, free product could be encountered on groundwater in excavations used for utility corridors or other subsurface structures. Free product can pose a fire and explosion hazard when close to utility line that can produce sparks. Also, utility corridors can create preferential pathways to the ocean. If free product is encountered that could pose a direct exposure hazard, fire/explosion hazard, or ecotoxicity hazard, the following actions may be taken:

- If site conditions warrant, PPE will be upgraded from Level D to Level C. Respiratory protection and vapor monitoring are described in the Vapor Management Plan (Section 16.2).
- If the volume of free product encountered is too great for absorbent pads to handle effectively, a vacuum truck will be used to pump product out of the excavation, and the product will be disposed of properly.
- If appropriate, following removal of free product and prior to continuance of work, the excavation will be backfilled using appropriate materials (e.g., gravel, select borrow) to a level above the groundwater.
- If fire/explosion hazards, or ecotoxicity hazards due to creation of preferential pathways are identified, utility corridors should be relocated.

### **15.5.2 Dewatering Pits**

Dewatering is not anticipated during future utility work. However, if dewatering is conducted and free product is encountered that could pose a direct exposure hazard to on-site workers, the following actions may be taken:

- If site conditions warrant, PPE will be upgraded from Level D to Level C. Respiratory protection and vapor monitoring are described in the Vapor Management Plan (Section 16.2).
- If the volume of free product encountered is too great for absorbent pads to handle effectively, a vacuum truck will be used to pump product out of the dewatering pit, and the product will be disposed of properly.
- If appropriate, dewatering will be discontinued until such time that the free product can be recovered.
- Under no circumstances will water contaminated with free product be discharged from a dewatering pit.

## **16.0 VAPOR MANAGEMENT PLAN**

The purpose of the Vapor Management Plan is to identify VOC vapors that could adversely affect air quality during construction activities within the area covered by this document. The principal hazards posed by VOC vapors at levels below LELs are direct exposure and gross contamination. The areas within which these hazards potentially pose the greatest concern are where contaminated soil, contaminated groundwater, and free product have been previously encountered.

Results of past site characterizations within the KHID indicate that soil vapor across most of the area has been impacted by one or more COCs. Soil vapor contamination is readily apparent throughout much of the KHID because the vapor has a petroleum hydrocarbon odor. The principal sources of contaminated soil vapor within the KHID are PCS, contaminated groundwater, and free product.

This EHE/EHMP describes the necessary controls for minimizing exposure of on-site workers to hazardous vapors. It also describes measures for minimizing exposure of off-site human populations (i.e., the general public) to hazardous vapors created as a result of construction activities. Included are procedures for identifying and mitigating potential physical hazards posed by generation of explosive vapors. Importantly, this EHE/EHMP describes general procedures for monitoring hazardous vapors during field activities. Rather than as a stand-alone document to address vapor issues, it should be considered a companion document to the site-specific HSP, which should describe in detail procedures and equipment for monitoring hazardous vapor concentrations, as well as PPE and engineering controls.

### **16.1 Vapor Management**

If VOC vapors are encountered during excavation, appropriate response actions need to be taken that comply with HDOH and EPA regulatory guidelines. The response actions include ensuring that on-site workers have the appropriate level of PPE, and that the general public is not affected adversely. Anticipated tasks associated with managing VOC vapor exposure are summarized as follows:

- If VOC vapors below LELs are encountered during excavation activities, field oversight must be provided to identify VOC vapors and provide health and safety guidance related to potential exposure of workers to COCs.
- Air monitoring should be conducted during excavation associated with future construction activities. Air monitoring should also occur when workers are required to enter excavations regardless of whether PCS or free product is present. The monitoring should include both workspace (on site) and perimeter measurements of VOC vapors.
- If warranted by air monitoring results, on-site workers should be notified to upgrade PPE to include respiratory protection.
- Air monitoring required for confined space entry (if required) will be conducted by the contractor responsible for construction. Confined space entry and associated air monitoring requirements will be described in the site-specific HSP for construction.

## **16.2 Vapor Contingency Plan – Exposure Monitoring**

To assess potential exposure of on-site workers to hazardous VOC vapors and determine the level of PPE that might be required, a baseline exposure assessment will be required. To conduct the assessment, both total VOC concentrations and benzene concentrations must be measured during excavation of a trench. Measurements of concentrations of these COCs within the workspace atmosphere and at the perimeter (off site) are required.

Based on results of the exposure assessment, exposure limits must be established for workers performing remedial excavation. The exposure limits are based on Occupational Safety and Health Administration (OSHA) permissible exposure limits (PEL). The exposure monitoring plan is summarized as follows:

- Level D PPE will be appropriate for on-site workers under normal working conditions.
- Both workspace (on site) and perimeter (off site) air monitoring will be conducted.
- Air monitoring will proceed using a conventional photoionization detector (PID) to determine total VOC concentration, and using an Ultra-Rae PID, which is benzene-specific, to determine benzene concentration.
- If total VOC concentration in the workspace atmosphere exceeds an 8-hour, time-weighted average (TWA) of 20 parts per million (ppm) or a 15-minute, short-term exposure limit (STEL) of 100 ppm, PPE requirements will be upgraded to Level C, and it may be necessary to implement a modified work schedule. These levels are based on a maximum benzene concentration in gasoline of 5 percent by volume.
- On-site workers will be notified immediately if benzene is detected in the workspace atmosphere at a concentration exceeding 0.5 ppm, and wearing respirators with organic vapor cartridges will be recommended (i.e., recommendation will be to upgrade respiratory protection to Level C).
- If benzene concentrations in the workspace atmosphere exceed the 8-hour TWA PEL (1 ppm) or the OSHA 15-minute STEL (5 ppm), PPE requirements will be upgraded to Level C, and it may be necessary to implement a modified work schedule.
- If benzene concentrations in the workspace atmosphere exceed the TWA PEL (1 ppm), short-term exposure monitoring will be conducted. To determine short-term exposure, a minimum of five samples will be collected within a 15-minute period.
- If daily average benzene concentrations in the workspace atmosphere exceed the OSHA STEL (5 ppm), or benzene concentrations exceed the OSHA acceptable ceiling concentration (25 ppm), PPE will be upgraded to Level C, with either full-face respirators or powered air-purifying respirators and protective goggles.
- If benzene concentrations in the workspace atmosphere exceed the OSHA 8-hour TWA for a 40-hour work week (10 ppm), or benzene concentrations exceed the OSHA acceptable maximum peak for an 8-hour shift (50 ppm), work will be stopped immediately, the on-site representative will be notified, and workers will be requested to leave the work zone.
- If benzene concentrations along the site perimeter (off site) exceed the 15-minute STEL (5 ppm) or the TWA PEL (1 ppm), the exclusion zone will be extended beyond the property boundary.

- If benzene concentrations along the site perimeter (off site) exceed the OSHA acceptable ceiling concentration (25 ppm), work will be stopped immediately, and the project on-site representative will be notified.

### **16.3 Engineering and Administrative Controls**

Vapor control methods may be necessary during construction-related work in which VOC vapors are encountered. These controls include use of plastic sheeting on soil stockpiles, vapor suppressants, and supplied ventilation.

It is anticipated that Level D PPE will be appropriate for workers during future construction. If site conditions warrant, as described above, PPE will be upgraded to Level C.

In addition to respiratory protection practices, engineering controls and safe work practices will be employed. Engineering controls include barriers that prevent workers from unnecessarily entering work zones and use of recycled air conditioning in mobile equipment cabs. Safe work practices include monitoring wind direction and having workers stand upwind of VOC vapor sources whenever possible, or instituting a modified work schedule.

A natural control is that vapors originating within the KHID normally will be diluted by the prevailing northeasterly trade winds. If left undisturbed, surface soil (0 to 2 feet bgs) not impacted by VOCs provides a natural barrier, covering VOC-contaminated subsurface soil and groundwater, and thereby reducing potential for vapor emissions.

Because anaerobic degradation of petroleum products will continue in the area for many years, methane gas remains a potential problem for indoor workers within the KHID. In addition, TPH-g, TPH-d, and BTEX remain potential soil vapor COPCs in the area. HDOH therefore takes the most conservative approach when dealing with the vapor intrusion issue.

To ensure proper protection of inside workers from soil vapor intrusion, all existing buildings should be inspected for floor cracks and other areas that could allow a pathway for soil vapor. All cracks and pathways should be properly sealed with an appropriate epoxy sealant to prevent vapor intrusion.

While not under the purview of this document, modification of floors, major structural changes to existing buildings, or construction of new buildings may necessitate installation of vapor control measures such as a sub floor vapor barriers. This would necessitate proper characterization of the area and site-specific oversight by HEER.

If methane soil vapor intrusion issues have been identified, new vaults should be properly sealed to prevent soil vapor intrusion that could cause an explosion hazard during work in the vaults. Unsealed vaults should be tested for methane prior to entry.

### **16.4 Periodic Inspections and Preventive Maintenance**

A key component of the plan is routine inspections and air monitoring. Accordingly, daily or more frequent (if appropriate) air monitoring will occur at all locations where exposure of on-site workers to hazardous vapors is possible (e.g., open excavations, soil stockpiles). PPE will be inspected for damage and defects before personnel don the PPE. If respiratory protection is required, a daily positive pressure respirator fit test will be performed at the start of each day, and filter cartridges will be replaced regularly.

Both the conventional PID and the benzene-specific Ultra-Rae PID require daily calibration. The conventional PID should be calibrated using a 100 ppm isobutylene standard. The Ultra-Rae PID should be calibrated using a 5 ppm benzene standard, and measurements of the standard will occur as needed to confirm that the calibration is maintained. Records of the recalibrations will be maintained.

### **16.5 Record Keeping and Reporting**

Detailed records of workspace monitoring and changes to PPE requirements will be maintained. Daily monitoring results and sampling locations will be documented in field logs. Significant issues will be communicated to site workers on a regular basis. Major deviations from this EHE/EHMP should be approved by HDOH prior to implementation. Minor deviations from the EHE/EHMP are acceptable based on field discretion. All deviations should be explained and documented; complete Appendix B.8 for your records and send a copy to HDOH.

## **17.0 STORMWATER MANAGEMENT PLAN**

The purpose of the stormwater management plan is to provide procedures to prevent stormwater runoff from coming into contact with contaminated soil or groundwater, and to provide contingencies in the event that such contact does occur. The principal hazards posed by stormwater runoff are direct exposure, gross contamination, and aquatic eco-toxicity. If contaminated stormwater is allowed to leave the construction site, downgradient human populations (the general public) and ecological receptors (marine flora and fauna in Kahului Harbor) could be exposed to COCs. Areas where these hazards potentially pose the greatest concern are where contaminated soil, contaminated groundwater, and free product have been encountered.

This plan describes the necessary measures for controlling stormwater within the area covered by this document during construction activities. Preventing stormwater from contacting contaminated media is the principal concern during future construction activities. Construction activities could expose stormwater runoff to contaminated media as follows:

- Subsurface excavation could expose stormwater to contaminated subsurface soil and/or groundwater.
- Stormwater could be exposed to excavated PCS or DCS stored temporarily in stockpiles.
- Although not anticipated, if dewatering is conducted that utilizes an on-site infiltration pit, stormwater could be exposed to contaminated groundwater.

### **17.1 Stormwater Management**

If contaminated soil or groundwater is encountered during excavation, appropriate response actions will be taken that conform to HDOH and EPA regulatory guidelines. The response actions include ensuring that these media are not exposed to stormwater. Anticipated tasks associated with managing stormwater are summarized as follows:

- Field oversight will be provided during excavation activities associated with construction. The purpose of the oversight is to identify contaminated media that could be exposed to stormwater runoff, and to provide guidance related to controlling stormwater at the site.

In addition, weather will be monitored throughout each work day for signs of approaching storms and/or heavy rains.

- Inspections of engineering stormwater controls will occur each day to ensure that contaminated media will not be exposed to stormwater runoff, and that contaminated stormwater will not leave the construction site.
- All construction activities—including clearing, grading, and excavation—that result in disturbance of 1 or more acres of total land area will accord with the conditions of an HDOH Clean Water Branch-approved NPDES NOI permit for stormwater discharge associated with construction activity. Conditions of the permit include preparation of a Construction Site Best Management Practices (BMP) Plan. For projects involving disturbance of less than 1 acre of land, an NPDES permit is not required; however, erosion controls or BMPs required or recommended by Maui County should be used at these disturbed areas.

### **17.2 Engineering and Administrative Controls Open Excavations**

In the absence of engineering and administrative controls, PCS and/or groundwater exposed in open excavations could contact stormwater, thus potentially contaminating the stormwater with COCs. To prevent this, the following activities will occur:

1. Where possible, excavations will be backfilled as soon as practicable to limit the time they are open and potentially exposed to stormwater runoff and direct precipitation.
2. Where possible, the edges of excavations will be bermed, thus preventing stormwater runoff from entering.
3. Open excavations will be inspected each day to minimize potential for direct precipitation to cause the excavation to overflow.

**Soil Stockpiles.** In the absence of engineering and administrative controls, excavated PCS stored in stockpiles could contact stormwater, thus potentially contaminating the stormwater with COCs. To prevent this, the following activities will occur:

- Soil stockpiles will be placed on plastic sheeting, and the sheeting will be bermed at the edges, thus preventing contact with stormwater runoff.
- At the end of each day, or in the event of a storm, the soil stockpiles will be covered with plastic sheeting, thus preventing contact with direct precipitation.
- The soil stockpiles will be inspected each day to ensure that the plastic sheeting is intact.

**Dewatering Infiltration Pits.** In the absence of engineering and administrative controls, the water in infiltration pits used for on-site dewatering could contact stormwater. To prevent this, the following activities will occur:

- Where possible, infiltration pits will be backfilled as soon as practicable to limit the time they are open and potentially exposed to stormwater runoff and direct precipitation.
- Where possible, the edges of infiltration pits will be bermed, thus preventing entry of stormwater.

- Infiltration pits will be inspected each day or more frequently as appropriate to minimize potential for direct precipitation to cause the pit to overflow.

Erosion and sediment control measures will be in place and functional before construction activities commence. These measures will be maintained throughout the construction period. If stormwater discharge from the site is anticipated, the following preventive measures may be taken:

- Stormwater flowing towards active construction areas will be diverted using appropriate control measures, as practicable.
- Erosion control measures will be designed to handle the size of the disturbed or drainage area in order to detain runoff and trap sediment.
- Height of the property boundary can be increased using sandbags.
- Additional silt fencing will be added to affected property boundaries, if warranted.
- Berms surrounding soil stockpiles will be increased as necessary.
- Moveable booms will be available to contain spills.
- Absorbent pads will be employed if free product is observed in stormwater runoff.

### **17.3 Stormwater Contingency**

**Open Excavations.** During construction activities, stormwater could come into contact with contaminated soil or groundwater exposed in excavations for utility corridors or other subsurface structures. If a storm event is more severe than anticipated and could result in entry of stormwater to an excavation or overflow of water from an excavation, the following actions may be taken:

1. Height of the berm along the edges of the excavation may be increased to prevent stormwater runoff from entering the excavation.
2. If feasible, stormwater runoff may be diverted away from the excavation.
3. The excavation may be covered with plastic sheeting to prevent entry of direct precipitation or stormwater runoff.

**Soil Stockpiles.** During construction activities, stormwater could contact PCS stored in stockpiles. If a storm event is more severe than anticipated and could result in stormwater runoff coming into contact with stockpiled soil or in damage to the plastic covering the stockpile, the following actions may be taken:

- Berms surrounding soil stockpiles that are damaged by a storm will be repaired. Additional plastic sheeting may be necessary.
- Height of the berm surrounding the stockpile may be increased.
- If feasible, stormwater runoff may be diverted away from soil stockpiles.
- Plastic sheeting covering soil stockpiles that is damaged by a storm will be repaired or replaced. Additional plastic sheeting may be necessary.

**Dewatering Pits.** During construction activities, stormwater could come into contact with contaminated groundwater exposed in dewatering pits, if dewatering become necessary (not anticipated). If a storm event is more severe than anticipated (i.e., capable of overcoming engineering controls) and could result in stormwater runoff entering a dewatering pit or water overflowing a dewatering pit, the following actions may be taken.

- Height of the berm along the edges of the dewatering pit may be increased to prevent stormwater runoff from entering the excavation.
- If feasible, stormwater runoff may be diverted away from the dewatering pit.

**Stormwater Run-on.** During construction activities, stormwater run-on could enter the property and come into contact with contaminated soil or groundwater. If a storm event is more severe than anticipated and could result in stormwater run-on entering the property, the following action may be taken:

- Height of the property boundary can be increased using sandbags.

**Off-Site Discharge of Contaminated Stormwater.** If, during construction activities, stormwater comes into contact with contaminated soil or groundwater and that stormwater is not contained, contaminated stormwater could discharge off site. If a storm event is more severe than anticipated and could result in discharge of contaminated stormwater off site, the following actions may be taken:

- Height of the property boundary can be increased using sandbags.
- If feasible, stormwater runoff may be diverted away from the property boundary.
- Additional silt fencing may be added at affected property boundaries.
- Moveable, petroleum-absorbent booms may be deployed along the affected property boundary.
- Absorbent pads may be used if free product is observed on stormwater runoff.
- Moveable, petroleum-absorbent booms may be deployed in front of off-site storm drain entrances in the immediate vicinity of the property.

#### **17.4 Inspection and Preventive Maintenance**

A key component of the plan is routine inspections. Accordingly, all locations of possible contact of stormwater with contaminated media (e.g., open excavations, soil stockpiles, dewatering pits) should be inspected daily. During storm events, inspections should occur to minimize possibilities of stormwater runoff, contact of direct precipitation with soil stockpiles, and entry of stormwater runoff into open excavations or (if present) infiltration pits. If stormwater run-on occurs, accumulated water on the site should be inspected for visual and olfactory evidence of contamination (e.g., petroleum hydrocarbon sheen, discoloration, free product, petroleum hydrocarbon odors).

Storage containers, vehicles, and heavy equipment that could contact stormwater will be stored within one area and will be inspected regularly to ensure proper functioning. Signs of deterioration or leaks that could lead to an unanticipated release of petroleum-based products or hazardous substances will be reported immediately, and corrective measures will be taken.

General site inspections should occur periodically and should be documented. Engineering controls should be inspected and repaired as necessary. During prolonged rainfall, daily inspections may be necessary. Accumulated sediment at the silt fence should be removed once accumulation reaches one-third the height of the fence. If damaged, the silt fence should be repaired or replaced within 24 hours. During storm events, stormwater runoff will be inspected to assess whether it has been impacted by COCs or by contaminants associated with construction activities.

### **17.5 Record Keeping and Reporting**

Detailed records of storm events, inspections of engineering controls, and response activities need to be maintained. Significant issues also need to be communicated to site workers and the project on-site representative on a regular basis. Reporting requirements of the NPDES stormwater discharge permit need to be followed strictly. Major deviations from this EHE/EHMP should be approved by HDOH prior to implementation. Minor deviations from the EHE/EHMP are acceptable based on field discretion. All deviations should be explained and documented; complete Appendix B.9 for your records and send a copy to HDOH.

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**Area-Wide EHE/EHMP Document**  
Kahului Harbor Industrial District, Kahului, Maui

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## **Figures**

### **Environmental Hazard Management Plan**



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HARBOR LOCATION

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Kahului Harbor Industrial District



Note: This HDOH Area-Wide EHMP applies only to the areas inside the Kahului Harbor Industrial District boundary lines.

FIGURE 1  
HARBOR LOCATION



Kahului Harbor Industrial District Area-Wide EHMP  
Kahului, Maui, Hawaii



**Kahului Harbor Industrial District Area-Wide EHMP  
Kahului, Maui, Hawaii**

**FIGURE 2  
HARBOR FEATURES**

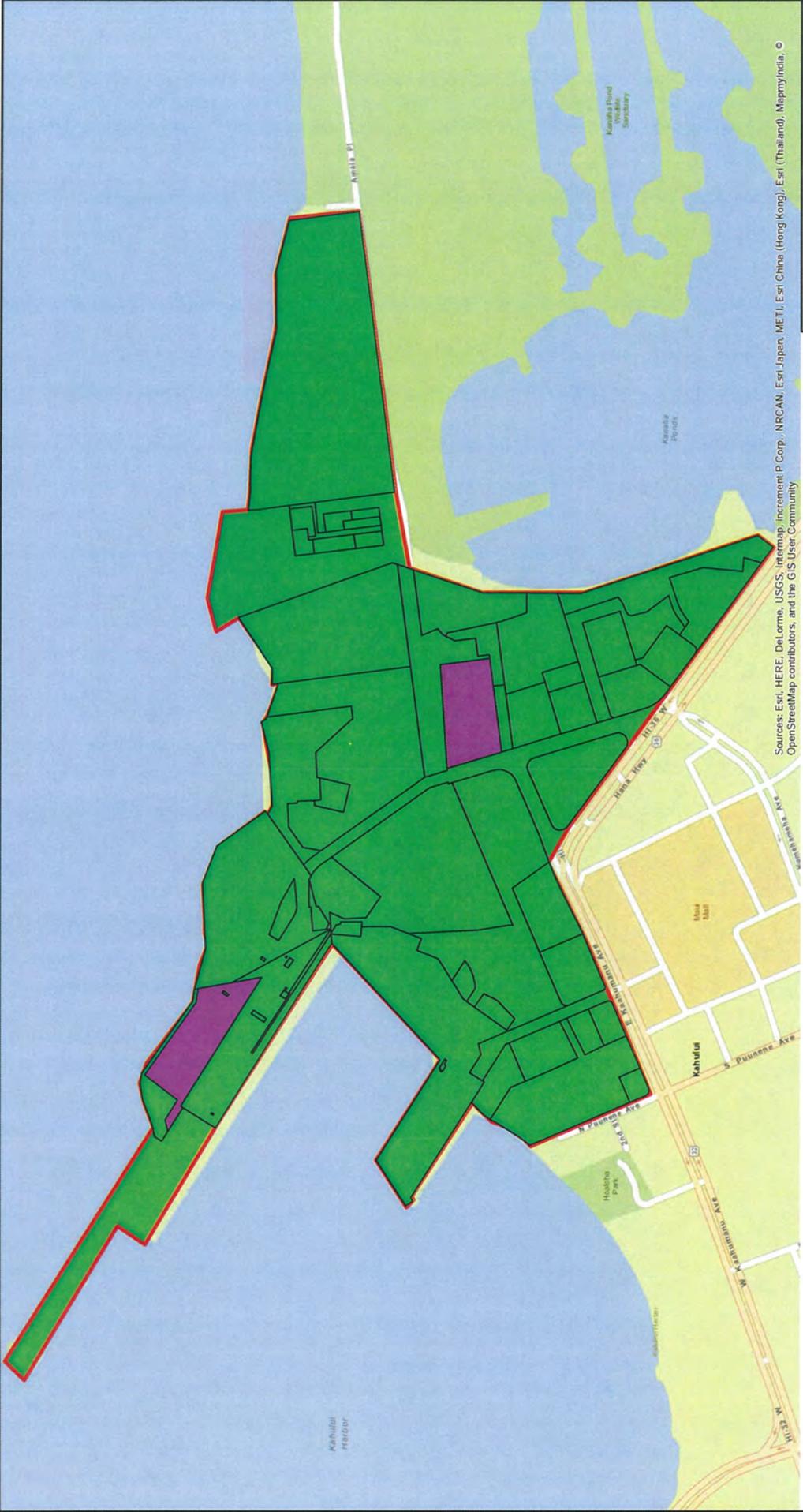


Note: This HDOH Area-Wide EHMP applies only to the areas inside the Kahului Harbor Industrial District boundary lines.



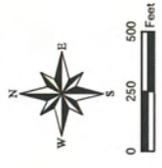
- Kahului Harbor Industrial District
- TMK Parcel Boundaries
- Railroads
- UIC Line





Sources: Esri, HERE, DeLorme, USGS, Intermap, Increment P Corp., NRCAM, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

- Kahului Harbor Industrial District
- TMK Parcel Boundaries
- Area Covered by Other Site-Specific EHMP
- Area Covered by HDOH Area-Wide EHMP



Note: This HDOH Area-Wide EHMP applies only to the areas inside the Kahului Harbor Industrial District boundary lines.

TMK Parcel Boundaries Source: County of Maui GIS

**Kahului Harbor Industrial District Area-Wide EHMP**  
Kahului, Maui, Hawaii

**FIGURE 3**  
**HARBOR PARCELS AND EHMP APPLICABILITY**



**TETRA TECH**



**Kahului Harbor Industrial District Area-Wide EHMP**  
 Kahului, Maui, Hawaii

**Figure 4**  
 Potential Areas of Termiticide, Lead, and/or Arsenic Contamination Based on 1988 Building Configuration



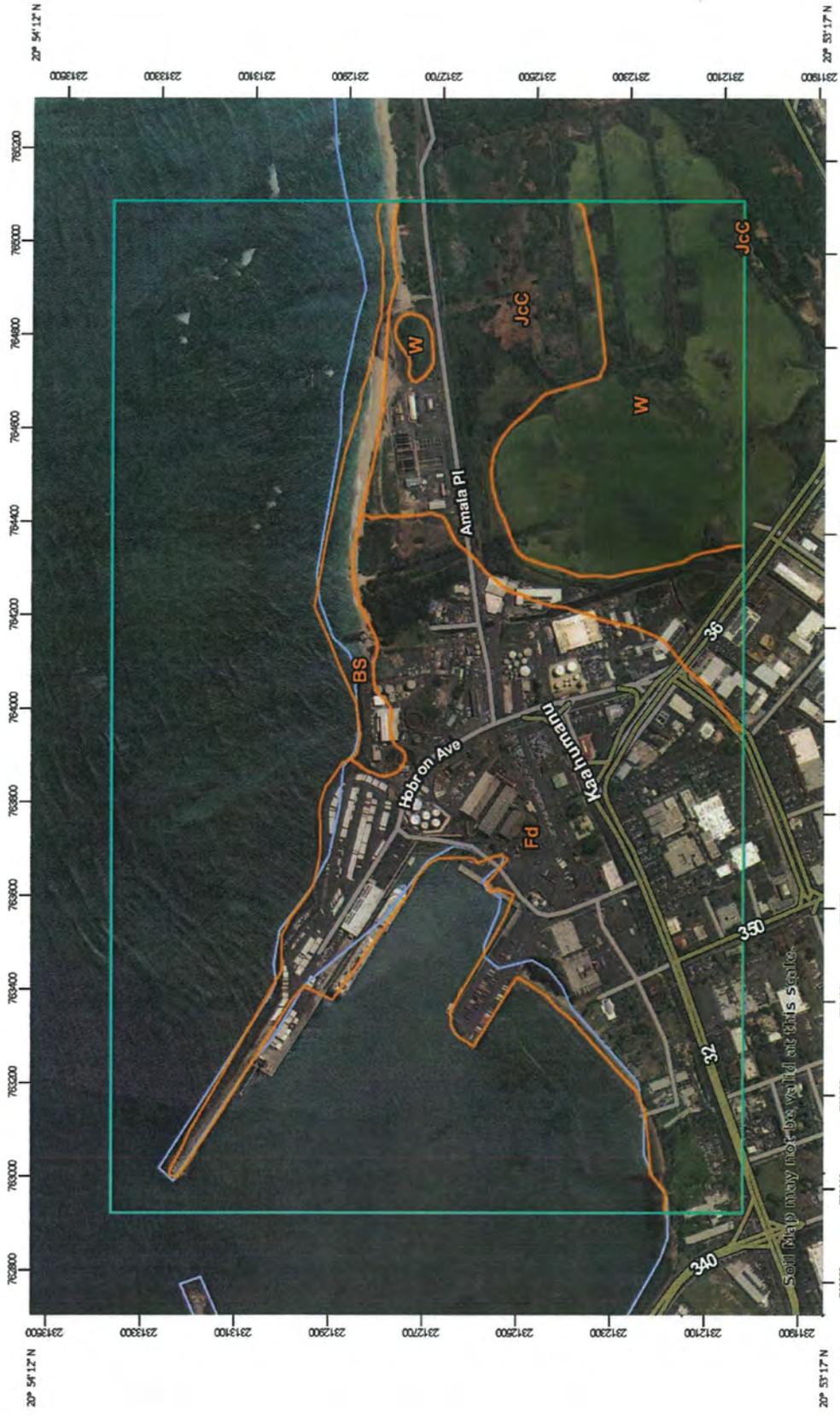
Source: Historical building and AST locations are based on 1950, 1960, 1965, 1976, and 1988 aerial imagery acquired from Environmental Data Resources, Inc. (EDR).

Note: This HDOH Area-Wide EHMP applies only to the areas inside the Kahului Harbor Industrial District boundary lines.



-  Kahului Harbor Industrial District
-  Pre-1988 AST Locations with 3-foot Buffer
-  Pre-1988 Building Locations with 3-foot Buffer





Map Unit Symbol	Map Unit Name
BS	Beaches
Fd	Fill land
JcC	Juncus sand, saline, 0 to 12 percent slopes, MLRA 163
W	Water > 40 acres

Figure 6: Soil Types within KHID (USDA, 2017)

# **Appendix A**

## **Environmental Hazard Management Plan GUIDELINES FOR LANDOWNERS, TENANTS, UTILITIES COMPANIES, AND CONSTRUCTION CONTRACTORS**

**Environmental Hazard Evaluation**  
**Environmental Hazard Management Plan**  
**Kahului Harbor Area**  
**GUIDELINES FOR LANDOWNERS, TENANTS, UTILITIES**  
**COMPANIES, AND CONSTRUCTION CONTRACTORS**

Prepared by

HDOH

Version 1

June, 2018

These guidelines are for landowners, tenants, utility companies, and construction contractors involved in construction projects within the Kahului Harbor District (KHID) of Kahului, which is described in more detail below. They describe controls that provide protection from oil, oily soil and water, debris-contaminated soil (DCS), metals and pesticide-contaminated surface soils, and soil vapors. They will guide you through three steps on how to:

1. Determine if your project is within the area covered by the guidelines (see Figure 3 in EHE/EHMP).
2. Determine if you should consider these guidelines
3. If you follow these guidelines, use them as an aid in determining the controls you need to conduct your specific project safely and protect the environment.

Soil and groundwater within the KHID have been impacted by oil released from historical tanks and buried pipelines, and from contaminated fill material. Locally, surface soils can be contaminated by sewage, metals and pesticide-impacted soil (including organochlorine pesticides, dioxins/furans, lead, and arsenic).

Remediation has been undertaken at some properties within the KHID, and many areas have not been characterized. Because remedial activities did not remove all soil and groundwater contamination and undiscovered contaminated soil or groundwater may be present, appropriate precautions must be taken so that workers involved in excavating within the area are not exposed to risks related to remaining contamination on site.

These guidelines explain how parties performing construction work within the KHID shown on the map on Figure 3 can protect those who may be exposed to contamination in soil and groundwater.

**Disclaimer:**

***The procedures, information, guidelines, and sample hazard management plans referred to herein are not intended to be a comprehensive description of all of the rules, regulations, laws, and other requirements applicable to a construction project. They are only intended to provide general information, and should not be used in place of appropriately qualified personnel. Each landowner, tenant, and construction contractor is responsible for complying with all applicable rules, regulations, laws, and other requirements, and for preparing his/her/its own hazard management plans for his/her/its own site-specific project.***

**Determine if you should consider these guidelines for work within the KHID:**

- If you are landscaping, paving, or excavating to a depth of less than 2 feet, you probably do not need to consider these guidelines for potential oil contaminants. However, be vigilant for any evidence of oil, oily soil, oily water, soil containing debris, bagasse, or sewage. Surface soils from former railroad rights-of-way (potential pesticides, arsenic, and dioxins/furans) or from directly adjacent to building or tank foundations (potential lead, arsenic, organochlorine pesticides) are also suspect for contamination and warrant evaluation or special handling. Consult with the Hazard Evaluation and Emergency Response (HEER) Office if you encounter any of these materials.
- If you are excavating within 3 feet of a current or former building or aboveground storage tank (AST) build prior to 1988 (Figure 4), be aware that the surface soil may contain termiticides such as organochlorine pesticides, rodenticides, such as arsenic, or lead from lead-based paint. Consider these guidelines when implementing proper procedures to protect construction workers, tenants, visitors, or customers from hazards related to historical uses and applications of pesticides and lead-based paint. This type of contamination is likely not apparent, although paint-chips may readily be observed in the soil. At a minimum, this would include need to place excavation material (i.e. surface soils) in a temporary stockpile on plastic adjacent to work, and replace it back into the excavation area with a soil or gravel cover. This soil may not be reused offsite as fill, but can be disposed off at an approved landfill. Alternately, these soils could be appropriately sampled (DU-MIS) and tested for contaminants to determine need for any special handling precautions.
- If you are excavating deeper than 2 feet, replacing or repairing belowground utilities, consider these guidelines when implementing proper procedures to protect construction workers, tenants, visitors, or customers from hazards related to historical releases or fire and explosion. Check with the HEER Office for information and support.
- If you are replacing floor slabs, replacing or substantially modifying foundations, or constructing new buildings, contact the HEER Office to determine whether a site-specific assessment is required.

Some potential hazards that can occur during excavation and how they can be prevented are described below.

During excavations, workers may be exposed to oil, pesticides, dioxins/furans, or metals remaining in the soil or on groundwater. **Site-Specific Health and Safety Plans (HSP)** (which require appropriate protective clothing, equipment, and training) may be needed.

Backhoe excavation



Backhoe Excavation





Oil might seep from the side of an excavation and cause an oil sheen. It may be necessary to manage the oily water.

Contaminated soil may be inadvertently spread around the work area. Also, clean and contaminated soil could be mixed, increasing the volume of soil that must be disposed of.

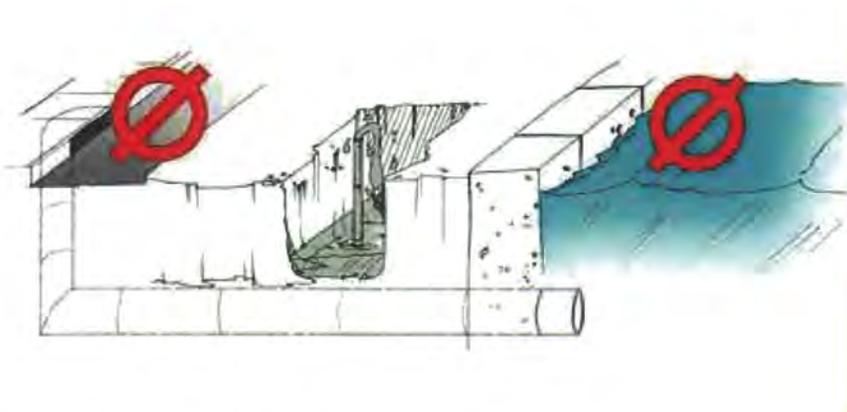
**Site-Specific Environmental Hazard Management Plans (EHMP) with a Soil Management Plan** approved by the HEER Office may be needed to prevent spreading oily soil or otherwise contaminated soil (Appendix B.5). Separate clean soil from contaminated soil. Always cover the contaminated soil stockpile with plastic sheeting and inspect sheeting for holes or degradation on a regular basis.

Oil might seep from the side of an excavation and cause oil sheen. It may be necessary to manage the oily water.

Oil or contaminated water or soil extracted from excavations could be released and reach surface waters, including the ocean. Releasing any oil to surface waters, storm drains, or the harbor or the ocean is illegal.

Avoid creating preferential pathways that would allow oil, or contaminated soil and groundwater to reach the ocean.

Do not discharge extracted groundwater unless it meets the requirements of, or is approved by the HEER Office and other applicable government agencies. Prepare and follow a **Groundwater Management Plan (Appendix B.6)** and obtain necessary permits or approvals from the HEER Office and other applicable government agencies to appropriately manage any oil and oily water that is encountered.



In some instances, oily water must be removed from excavations. **Do not discharge to the ocean or storm drains.**



Upon acquisition of applicable government approval, contaminated water can be discharged into a newly excavated pit/trench within the impacted area.



Upon acquisition of applicable government approval, oily water can be hauled for off-site disposal.

Abandoned petroleum product pipelines or underground storage tanks (UST) may be discovered in excavations. If these are discovered, contact the HEER Office. If you need to remove a segment of an abandoned pipeline, develop an Inactive Pipeline Removal Plan (Appendix B.3), and tap, drain, cut, and cap the pipeline in accordance with the plan. Obtain HEER Office approval if you undertake removal.



Exposed abandoned pipelines in the harbor area

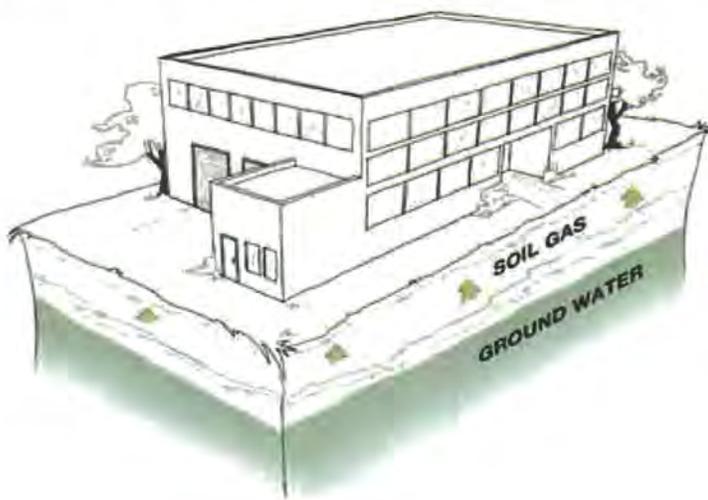


Workers tapping and draining abandoned pipelines

Methane or other soil vapors can intrude into buildings. Vapor intrusion can occur when the floors are modified or major structural changes are made to buildings, resulting in need for vapor barriers. New buildings may also need vapor barriers to meet current HEER Office requirements. Accumulation of vapors can also lead to a fire or explosion hazard when exposed to sparks. Consult the HEER office on guidance regarding identifying fire and explosion hazards.

If you are modifying floors, constructing a new building, or making major structural changes to existing buildings, you may need to conduct a soil gas investigation and if appropriate, install control measures such as floor vapor barriers. This will require site-specific oversight by the HEER Office.

When modifying floors, be alert for evidence of existing vapor barriers or vapor mitigation systems. Do not compromise systems without prior consultation with the HEER Office.



Soil Vapor Figure

Large-scale excavations may emit vapors and odors.

An **Air Monitoring Plan** may be required for excavations. Develop a Vapor Management Plan (Appendix B-8). Contact the HEER Office for site-specific oversight to determine requirements and obtain any needed approvals.



Large-scale excavation in a harbor area

Emergency responses to releases of oily soil or water.

Accidental releases of oil, oily soil, DCS, or oily water can occur during construction. Sudden releases can also occur if a water line or other utility fails. Develop a Construction Activities Release Response Plan (Appendix B-2) that describes how to deal with an accidental release of oil, oily soil, or oily water during construction.



Emergency responses to releases of oily soil or water.

## **HOW TO PROCEED**

### **Planned Projects:**

Determine whether your project falls under these guidelines. If you have any questions, contact the HEER Office. (See Contacts on page 11.) If your project does fall under these guidelines, complete the following steps:

1. Notify the HEER Office as soon as possible about your project. The HEER Office can provide information and support.
2. Determine whether you need the support of an environmental consultant.
3. You are encouraged to read the attached "Project Implementation Form" because it provides a useful checklist of the items you should consider. Filling out the form will help the HEER Office determine how to support you. If necessary, have the HEER Office assist you in completing the form.
4. Consult with the HEER Office as needed.
5. Determine what steps you should take to protect your workers and the environment during construction, and have a qualified environmental professional complete the needed hazard management plan forms. Specific types of plans are listed on pages 4 through 7. Sample plans that can be considered by your environmental professional are at the back of these guidelines.
6. Proceed with your project.
7. As appropriate, keep the HEER Office informed.

### **Unplanned Release Responses:**

If any releases associated with your project occur, you should act in accordance with your Construction Activities Release Response Plan. If you discover a release of oil, oily soil, or oily water within the property where you are working, do the following:

1. Review release reporting requirements (described in the HEER Technical Guidance Manual [TGM]), and Section 9.0 of this EHMP and if the release is determined to be reportable, notify the HEER Office immediately.
2. Notify the landowner or tenant for whom you are working.

### **HEER Office Contact:**

#### **HEER Office:**

Steve Mow

*e-mail:* [steven.mow@doh.hawaii.gov](mailto:steven.mow@doh.hawaii.gov)

*phone:* (808) 586-4249

The HEER web-site for Spill Reporting and Emergency Response is:

<http://hawaii.gov/health/environmental/hazard/spill.html>

**DISCLAIMER:**

*The procedures described herein are not intended to be a comprehensive description of all requirements (e.g., federal, state, and local) with which landowners/tenants and others must comply while undertaking a construction project.*

Filling out this form will help HEER determine what support to provide.

**PROJECT IMPLEMENTATION FORM:**

Project: \_\_\_\_\_

Project Owner: \_\_\_\_\_

Location: \_\_\_\_\_

Project Description: \_\_\_\_\_

\_\_\_\_\_

Completed By (Name): \_\_\_\_\_

Title/Company: \_\_\_\_\_

Phone Number: \_\_\_\_\_ e-mail: \_\_\_\_\_

Expected Date of Construction: \_\_\_\_\_ Date Form Completed: \_\_\_\_\_

Are you considering land use other than Commercial or Industrial?

YES: \_\_\_\_\_ NO: \_\_\_\_\_

If Yes, explain: \_\_\_\_\_

\_\_\_\_\_

Are you considering Excavation below 2 Feet? YES: \_\_\_\_\_ NO: \_\_\_\_\_

Do you need the support of an environmental company? YES: \_\_\_\_\_ NO: \_\_\_\_\_

If yes, who do you intend to use? \_\_\_\_\_

\_\_\_\_\_

Other Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Questions continued on next page**

**Area-Wide EHE/EHMP Document**  
Kahului Harbor Industrial District, Kahului, Maui

QUESTIONS	ANSWERS		Useful remarks by HEER and/or Tenant/Contractor
Have you reviewed the site background information available in the public record maintained by the HEER Office:	YES	NO	Describe reports and information sources that may be useful:
• Site Characterization Reports?	<input type="checkbox"/>	<input type="checkbox"/>	
• Environmental Hazard Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>	
• Monitoring Reports?	<input type="checkbox"/>	<input type="checkbox"/>	
• Appropriate As-built Reports describing past cleanup and construction reports?	<input type="checkbox"/>	<input type="checkbox"/>	
Have you determined if your project may result in exposure to oily soil, DCS or potentially harmful soil gases:	YES	NO	Further describe the hazards that may be encountered during construction:
• During construction?	<input type="checkbox"/>	<input type="checkbox"/>	
• At the completion of construction (of a new building for example)?	<input type="checkbox"/>	<input type="checkbox"/>	
Do you understand potential hazards to:	YES	NO	Refer to Environmental Hazard Management Plan, as necessary, for more details.
• Construction workers?	<input type="checkbox"/>	<input type="checkbox"/>	
• Building occupants?	<input type="checkbox"/>	<input type="checkbox"/>	
• Visitors or customers?	<input type="checkbox"/>	<input type="checkbox"/>	
• Ocean water, storm drains, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	
• Do you understand the requirements and your responsibilities to prevent hazards from occurring?	<input type="checkbox"/>	<input type="checkbox"/>	
• Site-specific Health and Safety Plan?	<input type="checkbox"/>	<input type="checkbox"/>	

**Area-Wide EHE/EHMP Document**  
Kahului Harbor Industrial District, Kahului, Maui

QUESTIONS	ANSWERS		Useful remarks by HEER and/or Tenant/Contractor
• Free Product Management Plan	YES <input type="checkbox"/>	NO <input type="checkbox"/>	
• Construction Activities Release Response Plan?	<input type="checkbox"/>	<input type="checkbox"/>	
• Inactive Pipeline Removal Plan?	<input type="checkbox"/>	<input type="checkbox"/>	
• Air Monitoring Plan?	<input type="checkbox"/>	<input type="checkbox"/>	
• Soil Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>	
• Groundwater Management Plan?	<input type="checkbox"/>	<input type="checkbox"/>	
Are you undertaking additional environmental investigations for the project planning or implementation purposes:	YES	NO	What HEER support do you need in undertaking investigations?
• Soil and groundwater?	<input type="checkbox"/>	<input type="checkbox"/>	
1. Soil gas?	<input type="checkbox"/>	<input type="checkbox"/>	
Based on soil gas investigation results, are you preparing designs for soil gas controls for buildings?	YES <input type="checkbox"/>	NO <input type="checkbox"/>	What HEER support do you need in preparing designs?
Are you complying with:	YES	NO	Remarks:
• Landowner's environmental requirements? (These may be included in lease agreements or other legal documents)	<input type="checkbox"/>	<input type="checkbox"/>	
Are the construction workers that may encounter contaminated soil or groundwater 40 hour HAZWOPER trained?	YES <input type="checkbox"/>	NO <input type="checkbox"/>	

<sup>1</sup> Either NO or NOT NEEDED.

<sup>2</sup> Routine air monitoring is included in the Health and Safety Plan. This plan is intended for large-scale excavations (i.e., down to five feet or deeper and over an area exceeding one half acre, or as required by the HEER Office).

<sup>3</sup>See sample plans at the back of these guidelines.

### **What is the HEER Office's role?**

For Planned Projects, the HEER Office may be able to:

- Provide oversight and technical support for dealing with oil, oily soil, or otherwise contaminated soil, water, and soil vapors, and for implementing the Environmental Hazard Management Plan (EHMP).
- Suggest possible reimbursement of reasonable incremental environmental costs from known responsible parties (RP).
- Develop guidelines for consideration when implementing the EHMP.
- Monitor effectiveness of the EHMP in properly dealing with environmental issues during subsurface construction. This may require the HEER Office to access monitoring points on your parcel.

If an accidental release of oil occurs, and oily soil, or otherwise contaminated soil and water must be addressed, the HEER Office may be able to:

- Participate as a member of the emergency response team.
- Assist in providing the appropriate method(s) for proper management of oil, oily soil, and oily water.

### **What type of HEER Office technical and logistical support can I expect?**

- The HEER Office's Project Manager is available to provide general guidance on how to comply with the EHMP, and to assist with the logistics of addressing oil, oily soil and water, or otherwise contaminated soil, groundwater, and soil vapors.
- The HEER Office will provide sample plans that can be considered by your environmental consultant in preparing plans that may be required for your project.
- The HEER Office can help identify environmental companies that can perform support services. The landowner or tenant and utilities companies are responsible for directing the work of the professional.

### **What are the responsibilities of Landowners?**

The landowner is responsible for the following:

- Complying with applicable federal, state, and local laws and regulations
- Determining whether historical activities at the site may have resulted in release of possible non-petroleum and/or petroleum contaminants of concern (COC)
- Verifying that the site has been adequately characterized by identification of the nature and extent of contamination
- Identifying any site conditions requiring appropriate protection of human health and the environment that must be added to the plan template of this EHMP
- Complying with requirements of the EHMP
- Developing/complying with a Management Plan consistent with these guidelines
- Communicating requirements of the EHMP and these guidelines to whoever is undertaking construction work (e.g., excavation, building construction, etc.)
- Notifying the HEER Office about construction project plans within the KHID, contacting the HEER Office for support to help address requirements of the EHMP, and cooperating with the HEER Office by providing timely information and site access
- Ensuring appropriate hazard management plans are prepared and implemented, and providing appropriate documentation to the HEER Office
- Keeping the HEER Office informed regarding construction work
- Notifying the HEER Office of any accidental release of oil, oily soil, or oily water or DCS.

### **What is the Tenant's responsibility?**

Any tenant undertaking excavation, building re-construction, or new construction should coordinate with the landowner; comply with applicable federal, state, and local laws and regulations; and ensure adherence to the EHMP and consideration of these guidelines.

### **What are the responsibilities of the Utilities Companies and Construction Contractor?**

The Utilities Companies and Construction Contractors undertaking excavation, building reconstruction, or new construction work should (as appropriate to the size and nature of each project) operate under the appropriate Health and Safety Plans (HSP), implement air monitoring, manage soil and groundwater in accordance with the EHMP, and consider these guidelines. Utilities Companies and Contractors must identify tasks/actions not already covered in the plan templates included in the EHMP. The Contractor should request that the landowner make appropriate changes to the plan(s) prior to commencement of site work.

**Contacts:**

**HEER Office:**

Steve Mow

*e-mail:* [steven.mow@doh.hawaii.gov](mailto:steven.mow@doh.hawaii.gov)

*phone:* (808) 586-4249

The HEER web-site for Spill Reporting and Emergency Response is:

<http://hawaii.gov/health/environmental/hazard/spill.html>

### **Environmental Statutes and Guidelines:**

The following environmental statutes, regulations, and guidance documents, or any recent updates to these, may apply:

- The Hawaii Environmental Response Law (*Hawaii Revised Statutes* [HRS] Chapter 128D) and the State Contingency Plan (*Hawaii Administrative Rules* [HAR] 11 451 1 through 11 451 24). These outline legal requirements for protecting human health and the environment from releases or threatened releases of hazardous substances, including oil.
- The Hazard Evaluation and Emergency Response Office Technical Guidance Manual (TGM) for implementation of the State Contingency Plan (Interim Final, June 21, 2009). This provides many helpful guidelines and procedures to comply with the Hawaii Environmental Response Law and the State Contingency Plan.
- Hawaii Water Quality Standards (HAR Title 11, Chapter 54). This specifies standards for water quality discharge.
- Hawaii Ambient Air Quality Standards (HAR Title 11, Chapter 59). This specifies air quality standards. Specific standards may apply during soil excavation, remediation, and construction, or during other activities.
- Hawaii Occupational Safety and Health Standards (HAR Title 12, Chapter 99). This specifies health and safety requirements during remedial work and construction.

In addition to the TGM, current technical guidance issued by the HEER Office indicating how it can enforce requirements of the EHMP includes the following:

- Screening Environmental Hazards at Sites with Contaminated Soil and Groundwater (December 2011).
- Guidance Fact Sheet For Use When Petroleum Contamination is Encountered During Subsurface Soil Excavation (Interim Final, November 2008).
- Long-term Management of Petroleum Contaminated Soil and Groundwater (June 2007).
- EAL Surfer (Fall 2011).

Contact the HEER Office if you are interested in the latest version of these documents.

## **Appendix B**

### **Reporting Forms**

- B.1 Written Follow-Up Notification Form
- B.2 Health and Safety Plan
- B.3 Construction Activities Release Response Plan
- B.4 Inactive Pipeline Removal Plan
- B.5 Soil Management Plan
- B.6 Groundwater Management Plan
- B.7 Free Product Management Plan
- B.8 Vapor Management Plan
- B.9 Stormwater Management Plan

The purpose of the reporting forms are to ensure consistency between actions taken and the associated management plans. Add notation to indicate all deviations from the management plans.

B.1

**Hawaii Hazardous Substance Written Follow-Up Notification Form**

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PLEASE PROVIDE THE FOLLOWING INFORMATION

Incident Case No.: \_\_\_\_\_

**Contact Information**

Caller's Information:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Owner's Information:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Operator's Information:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip code: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Name of contact person at the facility or vessel where the release has occurred: \_\_\_\_\_

\_\_\_\_\_

Telephone Number: \_\_\_\_\_

**Hazardous Substance Released**

Name (trade and chemical) of the hazardous substance which has been released: \_\_\_\_\_

Chemical Abstracts Service (CAS) Number (if applicable): \_\_\_\_\_

Approximate quantity of the hazardous substance released: \_\_\_\_\_

**Incident Information**

Location of the release: \_\_\_\_\_

Brief description of the release: \_\_\_\_\_

Media into which the release occurred or is likely to occur (indicate all those that apply):

- Air    Soil    Groundwater    Concrete    Asphalt    Stream    Ocean    Other

Cause of the release: \_\_\_\_\_

Date of the release: \_\_\_\_\_

Time of the release: \_\_\_\_\_

Duration of the release: \_\_\_\_\_

Time when person in charge of construction learned of release: \_\_\_\_\_

Source of the release: \_\_\_\_\_

**Response Information**

Response measures taken thus far: \_\_\_\_\_

Any appropriate information regarding ability of the owner or operator of the facility or vessel where the release has occurred to pay for or perform any proposed or required response actions:

---

---

Names of other federal, state, or local government agencies that have been notified of the release:

---

---

**Health Information**

Known or anticipated acute health risks: \_\_\_\_\_

---

Known or anticipated chronic health risks: \_\_\_\_\_

---

Advice regarding medical attention necessary for exposed individuals: \_\_\_\_\_

---

Potential impacts on public health or welfare:

---

---

Potential impacts on the environment:

---

---

**"I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the submitted information is true accurate and complete."**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

## B.2

### Health and Safety Plan

Prepared By: Organization: _____ Name: _____ Signature: _____	Health and Safety Plan
	Environmental Hazard Management Plan Kahului Harbor Industrial District
	Version: Reference: Date:

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Parties may use this sample as a basis for preparing their own site-specific plans.

**Revise this Sample Plan by:**

1. Completing Table 2 with names and telephone numbers.
2. Attaching a Figure 1 map below at conclusion of Appendix B.2 to show locations of the work site and nearest medical facilities and hospitals. Alternatively, ensuring that on-site workers know locations of closest medical facilities.
3. Reviewing the Occupational Safety and Health Administration (OSHA) regulations to ensure that hazard levels described in Table 1 are still current.
4. Including any additional specific instructions.

**Implement this Plan by:**

5. Warning on-site workers that they may encounter oil, oily water, and oil-impacted soil in belowground excavations.
6. Making the on-site workers aware of need for proper safety procedures, and familiarizing them with the contents of this plan.
7. Making sure a copy of this completed plan is present at the construction site.

**Note: If you are dealing with hazardous chemicals other than oil, oily water, and oil-impacted soil, you may need additional hazardous Chemical Response Plans and Procedures not covered in this plan.**

***Delete this box after completing this plan.***

## 2. INTRODUCTION

Soil, groundwater, and vapor impacted by contaminants (metals, TPH, BTEX, PAHs, dioxins/furans, pesticides), and oil may be encountered during excavation projects. This Health and Safety Plan (HSP) provides information regarding potential hazards that may be encountered (Table 1 below), specifies protective measures and necessary monitoring (Table 1 below), and lists emergency contact information (Table 2 below).

## 3. WORKER AWARENESS

On-site workers who may be exposed to soil, groundwater, and vapor impacted by contaminants (metals, TPH, BTEX, PAHs, dioxins/furans, pesticides), and oil should have the appropriate and current level of Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard (29 Code of Federal Regulations [CFR] 191 0.120) training.

A daily on-site tailgate safety meeting should occur. These meetings should include a discussion of the day's work and an analysis of hazards that may be encountered.

If site or work conditions change, this HSP may have to be amended accordingly. Apprise on-site workers of any change

## 4. SITE CONTROL AND GENERAL HEALTH AND SAFETY REQUIREMENTS

Minimize exposure of workers and others to potential hazards by restricting workplace access.

Do not smoke, eat, or drink during and after entering the work zone. Conduct these activities upwind and outside of the work zone after first washing hands.

Avoid skin contact with oil, contaminated soil, groundwater, and vapor, and avoid inhalation of dust particles.

## 5. WORKSPACE AIR MONITORING AND ACTION THRESHOLDS

Monitor workspace air conditions during work activities to verify that safe conditions are maintained by comparing measurements to the action levels in Table 1.

**If action levels are exceeded**, take the actions listed in Table 1 or others, if necessary.

Use the field monitoring devices listed in Table 1, or equivalent, to monitor workspace air conditions.

Acute exposure to elevated concentrations of these constituents listed in Table 1 may cause the following symptoms, among others:

### Lead:

Lead is a potent, systemic poison. Taken in large enough doses, lead can kill you in a matter of days. A condition affecting the brain called acute encephalopathy. Signs of encephalopathy are:

- Seizures
- coma
- cardiorespiratory arrest.

Short term occupational exposures of this magnitude are highly unusual, but not impossible.

Similar forms of encephalopathy may, however, arise from extended, chronic exposure to lower

doses of lead. There is no sharp dividing line between rapidly developing acute effects of lead, and chronic effects which take longer to acquire. Lead adversely affects numerous body systems, and causes forms of health impairment and disease which arise after periods of exposure as short as days or as long as several years.

#### Arsenic

- Dermatitis/hyperpigmentation of skin
- Peripheral neuropathy
- Gastrointestinal disturbances
- Respiratory irritation

#### Petroleum Hydrocarbons:

- Abnormal eye and nose irritation  
Dizziness
- Headache
- Giddiness
- Nausea
- Abnormal fatigue.

#### Dioxins/Furans

- Eye irritation
- Allergic dermatitis
- Chloracne
- 

#### Technical Chlordane

- Blurred vision
- Confusion
- Delirium
- Cough
- Abdominal pain
- Nausea
- Vomiting
- Diarrhea
- Irritability
- Tremor
- Convulsion
- Anuria
- Inability to coordinate voluntary muscular movements

If any of these symptoms are observed during or following construction work, seek help from a physician.

**Table 1: Action Levels**

Contaminant	Medium/Hazard	Monitoring Instrument (See HEER 2009 for more information)	Monitoring Instructions	Action Levels and Applicable Actions (See OSHA for more information)
Methane	Air/Flammability	Combustible gas indicator	Take readings in excavations while work is ongoing to determine if flammable vapors are present.	<5% Lower Explosive Limit (LEL): No explosive hazard. Proceed with caution. > 5% LEL: Potential explosion hazard. Exit area immediately. Contact Health and Safety Manager (Table 2) for further direction.
TPH as gasoline TPH as diesel TPH residual Benzene Toluene Xylenes Naphthalene, HVOs	Air/Inhalation	Photoionization detector (PID) with 10.6 electron volt (eV) Lamp	Monitor breathing zone while work is ongoing. Compare action thresholds to time-averaged breathing zone measurements.	<0.5 parts per million by volume (ppmv): Proceed with caution. 0.5 to 10 ppmv: Level D, use benzene-specific detector (see below).
Benzene		Draeger Benzene-specific detector tube (if necessary; see above)	Deploy benzene-specific detector tube for benzene if PID levels exceed 0.5 ppmv.	<0.5 ppmv: Level D personal protective equipment (PPE) >0.5 ppmv: Exit area and consult Health and Safety Manager (Table 2) for further direction.
TPH as gasoline TPH as diesel TPH residual Benzene Toluene Xylenes Naphthalene Metals, Dioxins/Furans	Soil(dust)/Inhalation	None (visual) – inspect workspace air for fugitive dust caused by work activities or high winds.		Evacuate area if visible fugitive dust is observed and cannot be readily mitigated. Contact Health and Safety Manager (Table 2) for further direction.

Contaminant	Medium/Hazard	Monitoring Instrument (See HEER 2009 for more information)	Monitoring Instructions	Action Levels and Applicable Actions (See OSHA for more information)
Lead	Soil(dust)/Inhalation and Ingestion	Mixed cellulose Ester (MCE) Filter cartridge 25 micron	<p>Personal MCEs and/ or area sampling in the breathing zone, sampling upwind and downwind</p> <p>inspect workspace air for fugitive dust caused by work activities or high winds.</p>	<p>Respirator use: if lead &gt; 30 <math>\mu\text{g}/\text{m}^3</math> for 8-hour TWA</p> <p>Respirator upgrade : If &gt; 0.5 <math>\text{mg}/\text{m}^3</math> half mask air-purifying respirator with high efficiency filters or half-mask supplied - air respirators operated on demand (negative pressure) mode</p> <p>PEL = 50 <math>\mu\text{g}/\text{m}^3</math></p> <p>Other protective clothing: &gt;200 <math>\mu\text{g}/\text{m}^3</math> for 8-hour TWA</p> <p>medical surveillance: If exposed to &gt; 30 <math>\mu\text{g}/\text{m}^3</math> for more than 30 days in any consecutive 12 month and if blood lead is &gt; 40 <math>\mu\text{g}/\text{dl}</math>.</p>

If workers experience any of the above symptoms while conducting work involving exposure to oil, oily water, and oil-impacted soil, they should stop work, leave the work area, and consult the Health and Safety Manager (Table 2).

## 6. PROTECTIVE CLOTHING

A minimum of Occupational Safety and Health Administration (OSHA) Level D Personal Protective Equipment (PPE) should be used for activities involving disturbance, movement, sampling, or management of oil, oily water, and oil-impacted soil. Level D PPE consists of the following:

- Safety glasses
- Hard hat
- Surgical (rubber or nitrile) gloves
- Coveralls or full-length pants
- Boots with chemical-resistant steel toe and shank.

Additional PPE, such as respirators, may be required in response to project-specific hazards or unusual conditions, such as possible close contact of workers with oil seeping from soils or floating on groundwater.

## 7. EMERGENCY CONTACTS

Table 2: Emergency Contacts

Organization	Purpose	Phone
Contractor-designated Health and Safety Manager <i>Name:</i>	Hazardous work conditions	(____) ____ - _____
For emergencies: Fire, Ambulance, or Police		911

## 8.0 REFERENCES

State of Hawaii Department of Health (HEER). 2009. Technical Guidance Manual for the Implementation of the Hawai'i State Contingency Plan, Interim Final. June 21.

Occupational Safety and Health Administration (OSHA), 29 *Code of Federal Regulations* (CFR) Sections 1910 and 1915.12 (b)(3).

**Figure 1**  
**Site and Hospital Map**  
**(Insert appropriate map)**

B.3

Construction Activities Release Response Plan

Prepared By: Organization: _____ Name: _____ Signature: _____	Construction Activities Release Response Plan
	Environmental Hazard Management Plan Kahului Harbor Industrial District
	Version: Reference: Date:

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Parties may use this sample as a basis for preparing their own site-specific plan.

**Revise this Sample Plan by:**

1. Completing Tables 1 through 3.
2. Checking to make sure the Section 9.1 notification requirements are current.
3. Including any additional specific instructions.

**Implement this Plan by:**

1. Warning on-site workers that they may encounter oil, oily water, oil-impacted soil, and debris-contaminated soil in belowground excavations.
2. Making the on-site workers aware of proper response procedures and familiarizing them with the contents of this plan.
3. Making sure a copy of the completed plan is present at the construction site.
4. Ensuring that on-site workers are familiar with surface drainage patterns, presence and flow directions of storm drains that could direct releases to harbor waters, locations of storm drain outlets to the harbor that may need to be protected with oil booms or other measures, potential locations for emergency storage tanks, etc. Obtain further information on these conditions from HEER, if necessary.

Additional details for completing this form are in Sections 9 and 11 of the EHMP.

Submit a copy of this form to HEER Office if contamination is encountered during subsurface activities.

**Note: If you are dealing with hazardous chemicals other than oil, oily water, and oil-impacted soil or DCS, you may need additional hazardous Chemical Response Plans and Procedures not covered in this plan.**

**Delete this box after completing this plan.**

## 1. INTRODUCTION

This Construction Activities Release Response Plan (Plan) describes how to proceed in the event of an unplanned discovery of, or accidental release of oil, oily water, or oil-impacted soil.

On-site workers must minimize the possibility of spills and releases of oil, oily water, and oil-impacted soil during excavation by:

- Familiarizing themselves with the site conditions
- Implementing appropriate Health and Safety, Soil and Groundwater Management Plans
- Being prepared at all times to encounter and manage oil, oily water, and oil-impacted soils.

Uncontrolled releases or spills of oil, oily water, and oil-impacted soil can occur. Such releases can pose a hazard to human health and/or the environment, and require an emergency response and/or regulatory agency notification. Human health concerns include human contact with oil, oily water, and oil-impacted soil; explosive or fire hazards; and disruptions to the normal operations in the area around the construction site, particularly disruptions to traffic flow. A major environmental impact of concern is discharge of oil or oily water to the harbor water either directly or via storm drains.

The responses described here apply to incidents that may occur during construction activities and that can be controlled by on-site workers undertaking the construction work.

## 2. TYPICAL RELEASES

The releases described below can occur during repair or replacement of deep utilities (water, sewer, electric, and fuel and communications lines) and buried utilities that require excavation and removal of oil, oily water, and oil-impacted soil and DCS.

Small incidental releases (e.g. < 1 cubic yard of soil or about three 55 gallon drums of soil) that do not spread and do not interfere with construction activities should be cleaned up as part of normal activities of the construction team.

For the following types of more significant release, respond immediately as outlined in this plan:

- Surface spillage of oil, oily water, and oil-impacted soil from excavations that actually spills, or threatens to spill, beyond the boundaries of the construction site.
- Breakages or other malfunctions of pipelines, storage facilities, groundwater treatment systems, or re- infiltration galleries/trenches used for belowground construction dewatering that continue to release oil or oily water.
- Oil-impacted soils or DCS temporarily stockpiled on the ground surface that are eroded or washed away by rain, and which continue to spread under the action of rain or other causes such as water from a water supply pipeline break.

- Spillage outside of the construction site during handling and disposal of oil, oily water, oil-impacted soils, or DCS removed from excavations.
- Release of oil from abandoned or active oil pipelines encountered and damaged during construction activities—that oil threatening to spill out of the excavation or actually doing so.

### 3. RELEASE RESPONSE TEAM

In the event of a release, the following team will determine the necessary response, make proper notifications, and conduct the response.

**Table 1: Contractor Release Response Team**

Name	Phone
<b>Internal Contacts:</b>	
Contractor-designated Release Response Coordinator Name:	(____) ____ - _____
Contractor-designated Health and Safety Manager Name:	(____) ____ - _____
On-site Construction Superintendent Name:	(____) ____ - _____
Landowner Contact Name:	(____) ____ - _____

### 4. RESPONSE PROCEDURES

#### 4.1 General

The first priority of response action is protection of human health. The second priority is to ensure no impact on harbor water or the environment. **Immediate action is required.** Do not delay prudent response action.

In the event of a release:

- Notify the response coordinator (Table 1).
- Take immediate action to contain the release (do not wait if Release Response Coordinator is unavailable).

- In dangerous circumstances, give notice to evacuate the work area and notify persons in Table 1. If no persons listed in Table 1 are available, obtain assistance as necessary by contacting appropriate persons listed in Table 3.

Other general responses include:

- Use appropriate personal protective equipment (PPE).
- Eliminate or contain the source of the release.
- Put up signs or caution tape to let other workers know of a release and need to stay away.
- Place barriers or absorbents around the release to prevent spread of contamination.
- Secure impacted soil stockpiles by covering, repairing, or constructing containment berms around the stockpile, etc.
- Remove released material and clean all surfaces.
- Dispose of the released material as appropriate (see **Soil and Groundwater Management Plan**).
- Monitor air quality at the location of the release to assess the vapor hazards as defined in the Health and Safety Plan (HSP). Take appropriate action if hazardous conditions exist as required by the HSP. Use appropriate personal protective equipment (PPE).
- Eliminate or contain the source of the release.
- Put up signs or caution tape to let other workers know of a release and need to stay away.
- Place barriers or absorbents around the release to prevent spread of contamination.
- Secure impacted soil stockpiles by covering, repairing, or constructing containment berms around the stockpile, etc.
- Remove released material and clean all surfaces.
- Dispose of the released material as appropriate (see **Soil and Groundwater Management Plan**).

If the release occurs indoors, do the following:

- Close off vents and air ducts leading from the release area to other parts of the building.
- Use appropriate personal protective equipment (PPE).
- Eliminate or contain the source of the release.
- Put up signs or caution tape to let other workers know of a release and need to stay away.
- Place barriers or absorbents around the release to prevent spread of contamination.
- Secure impacted soil stockpiles by covering, repairing, or constructing containment berms around the stockpile, etc.
- Remove released material and clean all surfaces.

- Dispose of the released material as appropriate (see **Soil and Groundwater Management Plan**).

If electrical equipment is operating in the vicinity of the release and hydrocarbon vapors are detected near the explosivity limits (see **Health and Safety Plan**), turn off the equipment, preferably at the main breaker, to avoid sparking.

If necessary, protect nearby storm drains by use of adsorbent, booms, or drain covers; and protect potentially affected harbor water and storm drain outlets to the harbor by placing floating oil booms on the water.

To deal with either the incidental or more significant releases, equipment and materials listed in Table 2 are available either at the construction site or in storage nearby.

**Table 2: Response Equipment and Materials**

Equipment and Materials	Purpose	Source of Equipment and Materials
Spill kits	Cleanup of small releases to land	
Trucks and loading equipment	Excavation and transport of oil-impacted soil	
Steel roll-off bins	Temporary storage of oil-impacted soil pending waste profiling or on-site relocation	
Pumps, piping, storage tanks	Transfer of impacted water and oil to on-site tanks or approved disposal trenches	
Plastic sheeting	Cover and security of soil stockpiles	
Hay bales, silt fences, wattles	Erosion control and containment materials	
Oil absorbent pads	Absorption and containment of oil or fluids released to land or within excavations	
Sand bags or equivalent	Construction of a small dike along areas of the release to prevent releases from spreading or entering storm drains	
Floating oil booms	Absorption and containment of oils released to harbor waters	
Sediment and oil filters	Connection to the end of an excavation dewatering hose to filter out sediment and oil	

## 5. NOTIFICATION INFORMATION

If the release meets the Section 9.1 notification requirements:

- Notify the person in the first entry in Table 3.
- If utilities are involved, notify the affected utility in Table 3.
- Notify the landowner in Table 3.

**Table 3: Other Potential Contacts**

Organization	Purpose	Phone
<b>State Agency Contacts:</b>		
Hawaii State Emergency Response Commission/the HEER Office	Any required release reporting	(808) 586-4249 (808) 247-2191 (after hours)
Fire, Ambulance, or Police	Required in the event of fire danger or injury	<b>911</b>
<b>Underground Utility Contacts:</b>		
Gas Utility Name:	Notification of any gas utility damage or break	(____) ____ - _____
Electric Utility Name:	Notification of any electric utility damage or break	(____) ____ - _____
Water Utility Name:	Notification of any water utility damage or break	(____) ____ - _____
<b>Landowner Contact:</b>		
Landowner Name:	Notification of any significant release	(____) ____ - _____
<b>Federal Contact:</b>		
U.S. Coast Guard Name:	Notification of any sheen on harbor waters	(____) ____ - _____

## 6. RELEASE COMMUNICATIONS AND AGENCY REPORTING REQUIREMENTS

### 6.1 Circumstances under which agency notification is required

Pursuant to Title II, Chapter 451, *Hawaii Administrative Rules* [HAR] § 11-451-7, releases meeting **any of the following criteria must be reported** to the first agency contact appearing in Table 3 within 24 hours of first occurrence or observance:

- Any release causing surface water to exhibit sheen.
- Any release of petroleum or hazardous substances to navigable waters (e.g. the ocean and local canals and streams).
- Any release of oil to the environment greater than 25 gallons.
- Any release of oil less than 25 gallons that is not cleaned up within 72 hours.
- In addition, any sheens or oil or oily water releases to storm drains that have open connections to the harbor, even if contained within project boundaries and not yet impacting the harbor water.
- Sheen and oil observed in the harbor or in a storm drain should be reported to the U.S. Coast Guard and HEER Office in Table 3.
- Releases to other waters of the United States require reporting to the U.S. Coast Guard.

Sheen and oil observed in the harbor or in a storm drain should be reported to the U.S. Coast Guard and HEER Office in Table 3.

Releases to other waters of the United States require reporting to the U.S. Coast Guard.

Report the following information to agencies when notifying of a reportable release:

- Name of the person making the notification
- Location of the release
- Time and date of discovery
- Characteristics of the oil observed (color, viscosity, etc.)
- How the release occurred
- Removal actions taken and volume removed
- Whether the release poses an immediate threat to human health or the environment
- Other agencies that have been notified of the spill
- Known injuries resulting from the spill.

Provide details of actions taken consistent with Section 11 to deal with Construction Activities Release Response:

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B.4

Inactive Petroleum Pipeline and UST Management Plan

Prepared By Organization: _____ Name: _____ Signature: _____	Inactive Petroleum Pipeline and UST Management Plan
	Environmental Hazard Management Plan Kahului Harbor Industrial District
	Version: Reference: Date:

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Parties may use this sample as a basis for preparing their own site-specific plan.

**Revise this Sample Plan by:**

1. Reviewing the requirements of this sample plan to ensure that construction workers can comply with its requirements, and modifying the plan, if necessary.

**Implement this Plan by:**

1. Making sure on-site workers are aware of a plan for dealing with inactive pipelines.
2. Making sure a copy of the completed plan is present at the construction site.
3. Accessing additional guidance for completing this form in Section 12 of the EHMP.
4. Keeping a copy for your records and sending a copy to the HEER Office.

**Delete this box after completing this plan.**

## **1. INTRODUCTION**

Inactive pipelines may be encountered during excavation (activities) within the Kahului Harbor Industrial District (KHID). This Plan provides procedures and guidelines for dealing with these inactive pipelines if they are encountered.

## **2. PREPARATORY WORK**

Prior to starting any belowground construction work, undertake the following:

- Contact Hawaii One Call at (866) 423-7287 to notify them of proposed excavation activities. Underground facilities owners must be notified to mark any of their underground utilities near the proposed excavation.
- Conduct an underground utility survey using geophysical surveying equipment (e.g., toning/metal detection, ground penetrating radar) before excavation begins.

In addition to the above, identify the location of any inactive pipelines that may not be included in the above-referenced information. To do this, review the most recent available reports including the Environmental Hazard Management Plan (EHMP) to determine if pipelines could be present within the work area. Contact the Hazard Evaluation and Emergency Response (HEER) Office at (808) 586-4249 for assistance in obtaining the most current pipeline information.

## **3. NOTIFICATION REQUIREMENTS**

If unanticipated inactive pipelines are discovered during construction activities, notify as follows:

- Contact the HEER Office via telephone within 24 hours after encountering the unanticipated petroleum pipelines.

## **4. PIPELINE TAPPING AND DRAINING**

Inactive piping may contain residual petroleum product and may be under pressure. This could present a possible safety and spill hazard if the line is cut prior to implementation of appropriate measures. If, through the notification process described in Section 12.3, the nature and use of the piping cannot be determined, tapping may be required to determine if fluids are present or if the piping is pressurized, and to provide a means to drain residual product.

If you are performing the work, follow the procedures in Sections 5.0 through 8.0 below.

## **5. PIPELINE CUTTING AND CAPPING**

Follow these general procedures for cutting and capping the pipelines:

1. Prior to cutting, tap the pipeline using non-sparking tools, and drain the contents of the pipeline to the extent practical and possible.
2. Cover the area below and adjacent to the cutting location with plastic sheeting and absorbent material, and place a catch basin beneath the location of the cut. Use these devices to collect residual fluid that may drain from the pipeline during and after cutting.
3. Use precautionary measures to prevent explosive hazards. For example, cut the pipeline using non-sparking tools and remove the pipeline segment.

4. Cap the cut-off ends of remaining pipeline segments to prevent any potential future leakage. Suitable capping methods include concrete plugs, blind flanges, cement plugs with rebar, or other methods that do not involve hot welding. Hot work, including welding, is not considered appropriate due to potential explosiveness of petroleum and associated vapors.

Consider the need for the presence of a vacuum truck on standby during pipeline cutting and capping.

## **6. PRODUCT SAMPLING**

Sample the residual product that has been drained and collected during this process, and have it analyzed by a laboratory to enable proper profiling and off-site disposal.

## **7. INVESTIGATION-DERIVED WASTE DISPOSAL**

Dispose of petroleum and other wastes in accordance with applicable laws and regulations.

## **8. HEALTH AND SAFETY**

Comply with the following health and safety measures whether or not these are included in the **Health and Safety Plan (HSP)**.

- Personnel conducting post-discovery work on abandoned petroleum pipelines should have current 40/24-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training and air-purifying respirator fit test certifications. At least one on-site worker potentially exposed to chemical or physical hazards should have basic first aid and cardiopulmonary resuscitation (CPR) training.
- Select air-purifying respirators based on the type of contaminant encountered (i.e., petroleum).
- Conduct air monitoring to monitor potential hazardous vapors and worker exposure. If petroleum is encountered, air monitoring typically includes use of a photoionization detector (PID) to monitor organic vapors for potential inhalation hazards, and a methane and oxygen/combustible gas indicator to monitor for potential explosive hazards.

## **9. DOCUMENTATION ACTIVITIES**

Provide HEER with the following information:

- A description of where the pipeline was encountered (Global Positioning System [GPS] coordinates or location relative to prominent landmarks), number and lineal footage of pipelines encountered, size of pipelines, depth of pipelines, condition of pipelines, and actions taken following pipeline discovery such as cutting or petroleum removal
- A location map that shows where the pipeline was encountered. The map must include a north arrow and a scale
- Photographs of the exposed portion of the pipeline in the excavation
- Analytical laboratory reports for product recovered from the pipeline.



B.5

Soil Management Plan

Prepared By	Soil Management Plan
Organization: _____	Environmental Hazard Management Plan Kahului Harbor Industrial District
Name: _____	
Signature: _____	Version: Reference: Date:

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Parties may use this sample as a basis for preparing their own site-specific plan.

**Revise this Sample Plan by:**

1. Reviewing the requirements of this sample plan to ensure that the construction worker can comply with its requirements, and modifying the plan, if necessary.

**Implement this Plan by:**

1. Making sure on-site workers are aware of this plan and that they follow this plan.
2. Making sure a copy of the completed plan is present at the construction site.
3. Accessing additional guidance for completing this form in Section 13 of the EHMP
4. Keeping a copy for your records and sending a copy to the HEER Office.

**Delete this box after completing this plan.**

## 1. INTRODUCTION

These procedures are intended to protect construction workers, the environment, and tenants in buildings from contact with oil-impacted soil where such soils are known to exist, or where people may be exposed. These procedures also comply with requirements for excavating, stockpiling, re-using, and disposing of oil-impacted soils.

## 2. SOIL EXCAVATION AND STOCKPILING

If you encounter oil or oil-impacted soils, or otherwise contaminated soil, or if you are conducting soil surface excavations around former rail line tracks (Figure 2), within 3 feet of a former AST or within 3 feet of a current or former building built prior to 1988 (Figure 4) do the following:

- Always place contaminated soil or anticipated contaminated soil on plastic sheeting.
- For surface soil in the vicinity of railway tracks or within 3 feet of an AST or building built prior to 1988, assume the soil is impacted with pesticides, arsenic, and dioxins/furans in the railway track case and termiticides, arsenic, and lead in the latter (building and AST) case. At a minimum, place excavation material (i.e. surface soils) in a temporary stockpile on plastic adjacent to work.
- If the amount of excavated soil is less than one cubic yard (equivalent to about three 55-gallon drums), it can be replaced in the excavation upon completion of the work without further evaluation.
- For excavation volumes exceeding 1 cy, segregate unimpacted soil from the oil-impacted soil, DCS, or metals or pesticide-contaminated soils, and stockpile these separately.
- Have a qualified environmental professional direct any necessary collection of soil samples, direct testing of the samples in the field or at an off-site laboratory, and direct segregation of impacted soils from non-impacted soils.
- Place contaminated stockpiled soils in containers (such as 20-yard steel roll-off bins, super sacks, tri-wall boxes, or drums) or within lined containment areas (i.e., underlain by plastic sheeting). Drain any liquid phase oil or fuel product associated with the soil prior to stockpiling. Remove and properly dispose of any oil observed in the excavation.
- Cover stockpiles of contaminated soils and containerized soil with plastic sheeting or tarps to minimize dust, stormwater, and odor concerns. Inspect cover frequently for damage.
- Stockpile soil near the project area prior to reuse.

## 3. RE-USE OF EXCAVATED SOILS

This plan provides general guidelines. For more details, consult Section 13 of this Document and the HDOH Fill Guidance (HDOH 2017). Unimpacted soils can be used as backfill.

Excavated oil-impacted soil can be used as backfill only under the following conditions:

- The oil-impacted soil is placed within areas more than 100 feet from the harbor wall and up to 1 foot below surface grade.
- The oil-impacted soil does not contain any free oil, oil sheens, oil stains, or total petroleum hydrocarbon (TPH) concentrations exceeding 5000 parts per million (ppm).

- TPH concentration is determined either by an off-site laboratory or through use of a field test such as the paper towel or glove test described in Section 13. Soils determined to be heavily contaminated should be excavated and disposed at an approved landfill.
- In the backfilling procedure, the moderately impacted soil should be placed at the bottom of the excavation above the tidally influenced high water table, and the cleanest soil at the top. If the surface is not to be paved, at least 1 foot of non-impacted soil must be placed as the final backfill at the top.
- For surface soil in the vicinity of railway tracks or within 3 feet of an AST or building built prior to 1988, assume the soil is impacted with pesticides, arsenic, and dioxins/furans in the railway track case and termiticides, arsenic, and lead in the latter (building and AST) case. At a minimum, replace excavated material back into excavation area with at least some cover soil or gravel. Untested, the soil may not be re-located into another area of these soils (except to an approved landfill) or reuse of these soils off-site. Alternately, these soils could be appropriately sampled (DU-MIS) and tested for contaminants to determine need for any special handling precautions.

- Excavated soils can be used to backfill other excavations within proximity of the excavations with approval of the HEER Office.

Oil sampling and analysis may be necessary to determine whether soils are suitable and when they can be used as backfill. Qualified environmental professionals or the HEER Office may determine if sampling is required, and the HEER Office TGM can be used for guidance on sampling options and procedures.

If necessary, the following number of samples should be collected:

Less than 20 cy of soil:	1 sample
More than 20 cy of soil:	1 sample for each 20 cy up to the first 100 cubic yards
More than 100 cy of soil:	1 sample for every additional 100 cy

For further description of soil and soil stockpile characterization, review the current HEER Office guidance in Sections 3, 4, and 5 of the TGM at [www.hawaiidoh.org/tgm.aspx](http://www.hawaiidoh.org/tgm.aspx).

#### 4. OFF-SITE DISPOSAL

If you intend to transport the excavated soil to an off-site disposal facility, confirm with the disposal facility the number of soil samples needed for laboratory testing, as well as the standards for disposal.

#### 5. EQUIPMENT DECONTAMINATION

Equipment used in contaminated areas must be decontaminated before use in non-contaminated areas. All liquid and solid waste resulting from on-site decontamination must be collected and appropriately disposed of.

#### 6. SOILS MANAGEMENT DOCUMENTATION

Any known or suspected contaminated soils backfilled on site should be mapped with GPS coordinates or physical measurements to nearby landmarks. This documentation should be provided to the HEER Office in a concise letter or project follow up report. The HEER Office should also be notified if contaminated soils are excavated and disposed of off-site. In some instances, the HEER Office may require that you obtain its approval for how you intend to excavate, manage, and backfill or dispose of soil.

Provide details of how -contaminated soil was handled consistent with Section 13 of the EHMP:

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B.6

Groundwater Management Plan

Prepared By _____	Groundwater Management Plan
Organization: _____	Environmental Hazard Management Plan Kahului Harbor Industrial District
Name: _____	Version: _____
Signature: _____	Reference: _____
	Date: _____

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

**Revise this Sample Plan by:**

- 1 If you intend to place excavated groundwater back into an excavation or trench, contacting the *Hazard Evaluation and Emergency Response (HEER) Office at (808) 586-4249 to obtain an appropriate disposal location.*
- 2 If you intend to discharge extracted water to local surfaces (including storm drains), contacting the HEER Office to obtain all applicable permits and approvals ahead of time because authorizations could take weeks or months.
- 3 If you intend to discharge extracted water to a local sanitary sewer, contacting the City and County (C&C) for approval to dispose of that water into a sanitary sewer. Water discharged to a sanitary sewer or storm drain may be required to meet Water Quality Standards. These standards are specified in the Environmental Hazard Management Plan (EHMP), and are available from the HEER Office.
- 4 Reviewing the requirements of this sample plan to ensure that construction workers can handle groundwater possibly impacted by petroleum hydrocarbons which may be encountered during soil excavation.
- 5 Consulting the HEER office for answers to any questions.
- 6 Preparing your own site-specific plan.
- 7 Accessing additional guidance for completing this form in Section 14 of the EHMP.
- 8 Keeping a copy of the completed form for your records and sending a copy to the HEER Office.

**Implement this Plan by:**

1. Ensuring that on-site workers are aware of this plan and that they follow it.

**Note: If you are dealing with hazardous chemicals other than oil, oily water, and oil-impacted soil, you may need additional hazardous Chemical Response Plans and Procedures not covered in this plan.**



B.7

Free Product Management Plan

Prepared By _____	Free Product Management Plan
Organization: _____	Environmental Hazard Management Plan Kahului Harbor Industrial District
Name: _____	Version: _____
Signature: _____	Reference: _____
	Date: _____

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Parties may use this sample as a basis for preparing their own site-specific Free Product Management Plan.

**Revise this Sample Plan by:**

1. Reviewing the requirements of this sample plan to ensure the construction worker can comply with its requirements, and modifying the plan, if necessary.

**Implement this Plan by:**

1. Making sure on-site workers are aware of this plan and the site-specific Health and Safety Plan (HSP), and that they follow both documents.
2. Making sure a copy of the completed plan is present at the construction site.
3. Accessing additional guidance for completing this form in Section 15 of the EHMP.
4. Keeping a copy of the completed form for your records and sending a copy to the HEER Office.

**Delete this box after completing this plan.**



B.8

Vapor Product Management Plan

Prepared By	Vapor Management Plan
Organization: _____	Environmental Hazard Management Plan Kahului Harbor Industrial District
Name: _____	
Signature: _____	Version: Reference: Date:

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Parties may use this sample as a basis for preparing their own site-specific Vapor Management Plan.

**Revise this Sample Plan by:**

1. Reviewing the requirements of this sample plan to ensure that the construction worker can comply with its requirements, and modifying the plan, if necessary.

**Implement this Plan by:**

- 1 Making sure on-site workers are aware of this plan and the site-specific Health and Safety Plan (HSP), and that they follow both documents.
- 2 Making sure a copy of the completed plan is present at the construction site.
- 3 Accessing additional guidance for completing this form in Section 16 of the EHMP.
- 4 Keeping a copy of the completed form for your records and sending a copy to the HEER Office.

**Delete this box after completing this plan.**

## 1. INTRODUCTION

These procedures are for handling petroleum vapors encountered during excavation activities. Soil and groundwater may be impacted by petroleum hydrocarbons and may be encountered during soil excavation. This type of contamination may produce soil vapor that must be properly handled during and after construction activities. Purposes of these procedures are to: (1) protect construction workers from contact with petroleum hydrocarbons and inhalation of associated vapors, (2) protect the quality of the surface water, and (3) provide guidance in the handling soil vapors.

## 2. VAPOR MANAGEMENT PROCEDURES

If volatile organic compound (VOC) vapors are encountered during excavation, appropriate response actions will be taken, and the actions will conform to Hawaii Department of Health (HDOH) and U.S. Environmental Protection Agency (EPA) regulatory guidelines. The response actions include ensuring that on-site workers have the appropriate level of personal protective equipment (PPE) and the general public is not affected adversely. Anticipated tasks associated with managing VOC vapor exposure are summarized as follows:

If VOC vapors are encountered during excavation activities, field oversight must be provided to identify VOC vapors and provide health and safety guidance related to the potential exposure of workers to COCs.

- Air monitoring will be conducted during excavation associated with future construction activities. Air monitoring will also be conducted when workers are required to enter excavations where PCS or free product is present. The monitoring will include both workspace (on-site) and perimeter measurements of VOC vapors.
- If warranted by the air monitoring results, on-site workers will be notified of the need to upgrade PPE to include respiratory protection.
- Air monitoring required for confined space entry (if required) will be conducted by the contractor responsible for construction. Confined space entry and associated air monitoring requirements will be described in the site specific health and safety plan for construction.

Air monitoring required for confined space entry (if required) will be conducted by the contractor responsible for construction. Confined space entry and associated air monitoring requirements will be described in the site-specific health and safety plan (HSP) for construction.

## 3. Exposure Management Procedures

- Level D PPE will be appropriate for on-site workers under normal working conditions.
- Both workspace (on site) and perimeter (off site) air monitoring will occur.
- Air monitoring will be conducted using a conventional photoionization detector (PID) to measure total VOC vapor concentrations, and an Ultra-Rae PID, which is benzene-specific, to determine benzene concentrations.
- If VOC vapor concentrations in the workspace atmosphere exceed an 8-hour time-weighted average (TWA) of 20 parts per million (ppm) or a 15-minute short-term exposure limit (STEL) of 100 ppm, PPE requirements will be upgraded to Level C, and it may be necessary to implement a modified work schedule. These levels are based on a maximum benzene concentration in gasoline of 5 percent by volume.



B.9

Stormwater Management Plan

Prepared By	Stormwater Management Plan
Organization: _____	Environmental Hazard Management Plan Kahului Harbor Industrial District
Name: _____	Version:
Signature: _____	Reference:
	Date:

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Parties may use this sample as a basis for preparing their own site-specific Stormwater Management Plan.

**Revise this Sample Plan by:**

1. Reviewing the requirements of this sample plan to ensure that the construction worker can comply with its requirements, and modifying the plan, if necessary.

**Implement this Plan by:**

1. Making sure on-site workers are aware of this plan and that they follow it.
2. Making sure a copy of the completed plan is present at the construction site.
3. Accessing additional guidance for completing this form in Section 17 of the EHMP
4. Keeping a copy of the completed form for your records and sending a copy to the HEER Office.

**Delete this box after completing this plan.**

## **1. INTRODUCTION**

If contaminated soil or groundwater is encountered during excavation, appropriate response actions will be taken, and the actions will conform to Hawaii Department of Health (HDOH) and U.S. Environmental Protection Agency (EPA) regulatory guidelines. The response actions include ensuring that these media are not exposed to stormwater. Anticipated tasks associated with managing stormwater are summarized below.

## **2. STORMWATER MANAGEMENT PROCEDURES**

Field oversight will be provided during excavation activities conducted as part of construction. Purposes of the oversight are to identify contaminated media that could be exposed to stormwater runoff and to provide guidance related to controlling stormwater on the property. In addition, the weather will be monitored throughout each work day for signs of approaching storms and/or heavy rains.

Inspections of engineering stormwater controls will occur each day to minimize potential for exposure of contaminated media to stormwater runoff and minimize potential for contaminated stormwater to leave the construction site.

All construction will accord with the conditions of an HDOH-approved National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharge associated with construction activity. Conditions of the permit include preparation of a Construction Site Best Management Practices Plan.

## **3. OPEN EXCAVATIONS**

In the absence of engineering and administrative controls, PCS and/or groundwater exposed in open excavations could come into contact with stormwater, thus potentially contaminating the stormwater with contaminants of concern (COC). To prevent this, the following activities will occur:

- Where possible, excavations will be backfilled as soon as practicable to limit the time they are open and potentially exposed to stormwater runoff and direct precipitation.
- Where possible, the edges of excavations will be bermed, thus minimizing potential for entry of stormwater runoff.
- Open excavations will be inspected each day to minimize potential for direct precipitation to cause the excavation to overflow.

## **4. SOIL STOCKPILES**

In the absence of engineering and administrative controls, excavated petroleum-contaminated soil (PCS) stored in stockpiles could come into contact with stormwater, thus potentially contaminating the stormwater with COCs. To prevent this, the following activities will occur:

- Soil stockpiles will be placed on plastic sheeting, and the sheeting will be bermed at the edges, thus minimizing potential for contact with stormwater runoff.
- At the end of each day, or in the event of a storm, the soil stockpiles will be covered with plastic sheeting, thus minimizing potential for contact with direct precipitation.
- The soil stockpiles will be inspected each day to ensure that the plastic sheeting is intact.

**5. DEWATERING INFILTRATION PITS**

In the absence of engineering and administrative controls, water in infiltration pits used for on-site dewatering could come into contact with stormwater. To prevent this, the following activities will occur:

- Where possible, infiltration pits will be backfilled as soon as practicable to limit the time they are open and potentially exposed to stormwater runoff and direct precipitation.
- Where possible, the edges of infiltration pits will be bermed, thus minimizing potential for entry of stormwater runoff.
- Infiltration pits will be inspected each day to minimize potential for direct precipitation to cause the pit to overflow.

Erosion and sediment control measures will be in place and functional before construction activities commence. These measures will be maintained throughout the construction period. If stormwater discharge from the site is anticipated, the following preventive measures may be implemented:

- Stormwater flowing toward active construction areas will be diverted using appropriate control measures, as practicable.
- Erosion control measures will be designed to handle the size of the disturbed or drainage area in order to detain runoff and trap sediment.
- Height of the property boundary can be increased using sandbags.
- Additional silt fencing will be added at affected property boundaries, if warranted.
- Berms surrounding soil stockpiles will be increased as necessary.
- Moveable booms will be available to contain spills.
- Absorbent pads will be employed if free product is observed in stormwater runoff.

Provide details of how stormwater was managed (consistent with Section 17 of the EHMP) when a significant storm event occurred during construction:

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